



---

The Nursing Council of Kenya

# **Manual of Clinical Procedures in Nursing and Midwifery**

---







# NURSING COUNCIL OF KENYA

This Manual is part of the Nursing and Midwifery Training Programs. By itself, it does not constitute complete and comprehensive training.

Any rights not expressly granted herein are reserved by the Nursing Council of Kenya. The Nursing Council of Kenya does not permit its materials to be reproduced or published without advance written permission from the Nursing Council of Kenya. To request permission to reproduce or publish Nursing Council of Kenya materials, please submit your written request to the Nursing Council of Kenya.

© 2018 Nursing Council of Kenya. ALL RIGHTS RESERVED.

The Nursing Council of Kenya logo is a trademark of The Nursing Council of Kenya and protected by national statutes.

*1st Edition: 2005*

*2nd Edition: 2008*

*3rd Edition: 2009*

*4th Edition: 2018*

# Acknowledgements

Reviewing the third edition of the Manual of Clinical Procedures in Nursing and Midwifery required great effort and commitment from many institutions, Nursing Council of Kenya staff and other individuals. The Nursing Council of Kenya Board whose members are listed provided policy direction and financial support for this activity. Several institutions gave us their employees to participate as contributors and reviewers in this activity. These institutions are: Aga Khan University Hospital; Gertrude's Children Hospital; Gilgil Hospital; Kenya Medical Training College; Kenyatta National Hospital; Kenyatta University; Kijabe Medical Centre; Machakos Level 5 Hospital; Mama Lucy Kibaki Hospital; Mathari Hospital; Maseno University; Mater Hospital; Ministry of Health-Division of Child Health; Ministry of Health-Nursing Unit; Jomo Kenyatta University College of Agriculture and Technology; Moi National Training and Referral Hospital; Moi University; The Nairobi Hospital; University of Nairobi; University of Eastern Africa, Baraton; and Ziwa Sub County Hospital.

I recognize the unwavering efforts of various stakeholders who took time to evaluate the third edition and gave critical inputs at different stages of the review process to improve the quality of this fourth edition of the manual. I am grateful to the committed nursing and midwifery experts who participated in the review of the manual as contributors or reviewers. Their dedication and commitment to excellence made the review of this manual possible. The Nursing Council of Kenya secretariat tirelessly demonstrated great and true team work. I am indebted to all departments of the Nursing Council for demonstrating such great team work spirit and personally recognize their efforts for a job well-done. The department of standards and ethics was particularly instrumental in organizing and coordinating the workshops for the review.

Many thanks to the lead consultant and all nursing and midwifery colleagues who supported us in this great process. May we, nurses and midwives, see this activity as a big step in realizing our vision of health care. Let us all be guided by our core values in the utilization of this manual of clinical procedures.

EDNA C. TALLAM - KIMAIYO

REGISTRAR/CEO,  
NURSING COUNCIL OF KENYA

# About Nursing Council of Kenya

## VISION

A world class regulatory body in nursing education and practice

## MISSION

Develop standards; enforce regulations in nursing education and practice

## CORE VALUES

These are the DNA of the Council that everything we do comes from deeply-held commitments and shared understanding of our values, what we stand for, how we treat each other and those we serve; that inform every policy and steer every action summarized as **INSPIRE**:

**I**ntegrity: We are called to act in an honest manner and promote just use of resources entrusted to us for the enhancement of human life.

**N**urture: Every person, patient or client is at the heart of everything we do; with a right to be respected, accepted and cared for.

**S**ocial Responsibility: We care for the patient, family, community and the environment to enable healing, collaboration and fulfilment of human potential.

**P**rofessionalism: We value our colleagues, our work and our accomplishments and take pride in bringing our rich tradition of hope and healing to every person in our care.

**I**nnovation: We thrive on creativity and ingenuity. We seek the innovations that are evidence-based and data-driven to bring a positive change in healthcare, nursing education and research.

**R**esponsiveness: We advocate for the patient's right to optimal and timely healthcare.

**E**xcellence: We pledge to promote quality health services that surpass the individual's and populations' desired health.

## **Overview of Nursing Council**

The Nursing Council of Kenya is a regulatory body under the Ministry of Health. The health service delivery requires strong governance, sufficient resources and an adequate well managed skilled workforce. In Kenya, the nursing and midwifery workforce plays a vital role in health service delivery, providing the bulk of direct patient care. It is for this reason that the country must ensure that its nursing and midwifery workforce is well regulated and equitably distributed at each level of care.

It is with this vision that the Council was established by the Colonial Government, under the colony and protectorate Ordinance No. 16 (1949). At that time, it had a membership of 17 nurses. In 1983, the Nursing Council of Kenya was established as a statutory body under the Nurses Act Cap 257 of the Laws of Kenya. The date of ascent and commencement are 18th May, 1983 and 10th June, 1983 respectively. In 2012, the Nurses Act was amended in accordance with principles of corporate governance, reviewing the membership of the Council, standing committees, private practice of nurses, disciplinary provisions and expansion of its mandate. By 2017, the Council has registered over 76,000 nurses and midwives.

THADDEUS MAYAKA

CHAIRMAN

NURSING COUNCIL OF KENYA

# Foreword

The Global Agenda for 2030 comprises 17 new Sustainable Development Goals (SDGs) that replaced the Millennium Development Goals (MDGs), which universally guides policy and funding. Precisely, the focus for health sector is GOAL 3 - Good Health and Well-being that seeks to ensure healthy lives and promote well-being for all at all ages. Adopting MDGs and consequently SDGs, Kenya Vision 2030 on health is anchored on the social pillar. The country seeks to improve the overall livelihoods of her people by providing an efficient and high quality health care with the best standards. This is adoption of SDGs is a quest of improving the quality of health service delivery to the highest standards across the country. Performing correct nursing procedures is a mandatory requirement for quality health care. This manual prescribes steps of clinical nursing and midwifery procedures. Complying with the prescribed steps greatly contributes to quality health care delivery and ultimately improved patient health outcomes.

Complying with the prescribed steps greatly contributes to quality health care delivery and ultimately improved patient health outcomes, given that nurses provide over 80% of all health care services. Cognizant to this, the president included universal health coverage among the four big agendas. Quality care can only be achieved if nurses have the required competencies. Undertaking the nursing procedures in the prescribed way is a high impact mechanism, which will leap frog the attainment of universal health coverage.

The Nursing Council of Kenya as a regulatory body under the Ministry of Health ensures regulation of nursing and midwifery practice for a just and cohesive society enjoying equitable social development. This is achieved through capacity building and training of nurses, registration and regulation of their conduct for improved performance of the profession. The Council envisions 'A world class regulatory body in nursing education and practice' achieved through the mission of 'developing standards; enforce regulations in nursing education and practice'.

This manual has been revised in response to the changing global, regional and local trends in the health sector. It integrates various contemporary procedures in nursing and midwifery education, research and practice.

I hope that this manual will ignite wider critical and more intellectual intercourse within nursing and midwifery education, research and practice in Kenya and beyond.

SICILY K. KARIUKI (MRS.), EGH.

CABINET SECRETARY  
MINISTRY OF HEALTH

# Contents

<b>Acknowledgements</b>	i
<b>About Nursing Council of Kenya</b>	ii
<b>Foreword</b>	iv
<b>List of Figures</b>	xii
<b>Contributors</b>	xvi
<b>Preface</b>	xix
Features of the Manual	xx
Presentation of Guidelines	xx
Organization of the Chapters	xxi
The Kenya Nursing Process (KNP)	xxii
<b>CHAPTER 1 Fundamentals of Nursing</b>	1
Chapter Outline	1
1.1: Patient Assessment	3
1.1-1: Measuring Vital Signs	3
1.1-2: History Taking	11
1.1-3: Physical Examination	15
1.1-4: Specimen Collection	25
1.1-4.1: Blood Specimen Collection	26
1.1-4.2: Urine Specimen Collection	30
1.1-4.3: Stool Specimen Collection	35
1.1-4.4: Sputum Specimen Collection	38
1.1-4.5: Swab Specimen Collection	41
1.1-5: Routine Urine Testing in the Ward/Clinic	45
1.2: Safety and Infection Prevention and Control	48
1.2-1: Hand Hygiene	48
1.2-2: Surgical Scrubbing, Gowning and Gloving	51
1.2-3: Observing Standard Precautions	56
1.2-3.1: Standard Precautions	56
1.2-3.2: Universal Precautions Guidelines	60
1.2-4: Isolation Nursing	61
1.2-5: Source (Strict) Isolation	64
1.2-6: Protective Isolation	67

1.2-7: Terminal Disinfection of an Isolation Room	69
1.3: Patient's Hygiene and Comfort	71
1.3-1: Making an Occupied Bed	71
1.3-2: Positioning a Patient in Bed	75
1.3-3: Bed Bath	79
1.3-4: Pressure Area Care	83
1.3-5: Performing Oral Care	87
1.4: Administration of Medicine	90
1.4-1: Administration of Oral, Sublingual and Buccal Medications	90
1.4-2: Administration of Parenteral Medications	94
1.4-2.1: Administering Intramuscular Injections	94
1.4-2.2: Administering Hypodermic/Subcutaneous Medications	99
1.4-2.3: Administering Intradermal Medications	104
1.4-2.4: Administering Intravenous (IV) Medications	109
1.4-3: Administering Nebulized Medications	114
1.4-4: Administering Topical Medications	119
1.4-5: Instillation of Ear Drops	122
1.4-6: Instillation of Eye Drops	125
1.4-7: Administration of Enema/Suppositories/Rectal Washout	128
1.4-8: Maintenance of Drug Registers	133
1.5: Admission, Transfer and Discharge of a Patient	136
1.5-1: Admission of a Patient	136
1.5-2: Transfer/Referral of a Patient	140
1.5-3: Discharge of a Patient	143
1.6: Conducting a Ward Round	146
1.7: Handing Over Patients	149
References	152
Chapter 1: Evaluation Checklist	153
Appendix 1: Documentation Guideline for Procedures	154
Appendix 2: Risk Assessment Tool	156
<b>CHAPTER 2 Medical - Surgical Nursing</b>	<b>159</b>
Chapter Outline	159
2.1: Nutrition and Elimination	161
2.1-1: Nasogastric Tube Insertion	161
2.1-2: Nasogastric Tube Feeding	165
2.1-3: Nasogastric Tube Suctioning	169

2.1-4: Removing a Nasogastric Tube	172
2.1-5: Gastronomy Tube Feeding	174
2.1-6: Gastric (Stomach) Washout/Lavage	177
2.1-7: Urinary Catheterization	180
2.1-8: Urinary Bladder Irrigation/Washout	186
2.1-9: Removal of Urinary Catheter	189
<b>2.2: Oxygenation</b>	<b>192</b>
2.2-1: Administration of Oxygen	192
2.2-2: Endotracheal and Tracheal Tube Suctioning	196
2.2-3: Care of a Patient on Tracheostomy	200
2.2-4: Care of a Patient on Underwater Chest Drainage System	205
2.2-5: Endotracheal Intubation (EI)	209
2.2-6: Care of a Patient on Mechanical Ventilation	213
2.2-7: Endotracheal Extubation	217
<b>2.3: Circulatory System</b>	<b>221</b>
2.3-1: Performing a Venepuncture Cannulation	221
2.3-2: Maintaining an Intravenous Insertion Site	228
2.3-3: Measuring Central Venous Pressure (CVP)	232
2.3-4: Intravenous Fluid Administration	236
2.3-5: Administration of Blood and Blood Products	240
<b>2.4: Musculoskeletal and Integumentary System</b>	<b>245</b>
2.4-1: Wound Dressing	245
2.4-2: Removing Stitches/Staples and Clips	250
2.4-3: Care and Removal of Drains	253
2.4-4: Central Venous Catheter Dressing	258
2.4-5: Wound Irrigation	261
<b>2.5: Emergency Care</b>	<b>264</b>
2.5-1: Performing Basic Life Support	264
2.5-2: Performing The Heimlich Manoeuvre	269
2.5-3: Bag Valve Mask Ventilation	274
2.5-4: Defibrillation and Cardioversion	279
2.5-5: Intraosseous Cannulation	283
<b>2.6: Ophthalmology Procedures</b>	<b>287</b>
2.6-1: Measuring Visual Acuity	287
2.6-2: Eye Swabbing	290
2.6-3: Eye Irrigation	293

2.6-4: Application of Eye Compress	296
<b>2.7: Specialized Procedures</b>	<b>299</b>
2.7-1: Pre and Post-Operative Care	299
2.7-1.1: Pre-Operative Care	299
2.7-1.2: Immediate Post-Operative Care	303
2.7-2: Care of a Patient with Abdominal Paracentesis	307
2.7-3: Caring for a Patient During a Bone Marrow Procedure	311
2.7-4: Care of a Patient for Peri-Radiological Examination	315
2.7-5: Care of a Client/Patient for Magnetic Resonance Imaging (MRI)	318
2.7-6: Care of a Patient for Computed Tomography (CT) Scan	321
2.7-7: Care of a Patient Peri-Haemodialysis	324
2.7-8: Care of a Patient on Peritoneal Dialysis	329
2.7-9: Care of a Patient Undergoing Brachytherapy (Internal Radiation Therapy)	333
2.7-10: Care of a Patient Before, During and After Lumbar Puncture	336
2.7-11: Care of a Patient with a Stoma	340
<b>2.7: Male Circumcision</b>	<b>344</b>
<b>References</b>	<b>353</b>
<b>Chapter 2: Evaluation Checklist</b>	<b>355</b>

<b>CHAPTER 3 Midwifery and Obstetric Nursing</b>	<b>356</b>
Chapter Outline	356
<b>3.1: Antenatal Care</b>	<b>358</b>
3.1-1: History Taking from Antenatal Client	358
3.1-2: Physical Examination of an Antenatal Client	363
3.1-3: Breast Examination	368
3.1-4: Abdominal Examination	372
3.1-5: Pelvic Examination	377
3.1-6: Performing Antenatal Profile Tests	380
<b>3.2: Intrapartum Care</b>	<b>383</b>
3.2-1: Admission of a Client in Labour	383
3.2-2: Vaginal Examination	387
3.2-3: Monitoring Labour using a Partograph	392
3.2-4: Care of a Client/ Patient with Antepartum Haemorrhage	397
3.2-5: Care during Second Stage of Labour	398
3.2-6: Management of Third Stage of Labour	405
3.2-7: Manual Removal of Placenta	410
3.2-8: Examination of Placenta	414

3.2-9: Epidural Care of the Client following Epidural Anaesthesia during Labour	417
3.2-10: Vacuum Extraction (Ventouse)	421
3.2-11: Episiotomy Repair	426
3.2-12: Breech Delivery	430
3.2-13: Care of a Client with Shoulder Dystocia	436
3.2-14: Care of a Client with Postpartum Haemorrhage	437
3.2-15: Manual Vacuum Aspiration	438
<b>3.3: Postnatal Care Procedures</b>	<b>442</b>
3.3-1: Expressing Breast Milk	442
3.3-2: Postnatal Examination	446
3.3-3: Perineal Care	451
<b>3.4: Newborn Care Procedures</b>	<b>454</b>
3.4-1: Assessing Agpar Score of a Newborn	454
3.4-2: Resuscitation of a Newborn	457
3.4-3: First Examination of a Newborn	464
3.4-4: Daily Examination of a Newborn	470
3.4-5: Admission of a Newborn into the Newborn Unit	474
3.4-6: Thermoregulation and Thermocare of a Newborn	478
3.4-7: Care of a Newborn on Exchange Transfusion	483
References	487
Appendix 3: Partograph	488
Chapter 3: Evaluation Checklist	489
<b>CHAPTER 4 Mental Health and Psychiatric Nursing</b>	<b>490</b>
Chapter Outline	490
4.1: Admission of Patients with Mental Disorders	491
4.2: Comprehensive Mental Health Assessment	495
4.2-1: Mental Health History Taking	495
4.2-2: Mental Status Examination/Assessment (MSE/A)	500
4.2-3: Physical Examination	505
4.3: Establishing a Therapeutic Nurse-Patient Relationship	508
4.4: Conducting Individual Psychotherapy	513
4.5: Conducting Group Psychotherapy	517
4.6: Electroconvulsive Therapy (ECT)	522
4.6-1: Pre-ECT Care	522
4.6-2: Intra-ECT Care	525
4.6-3: Post-ECT Care	529

4.7: Care in Mental Illness Emergency Situations	532
4.7-1: Care of a Patient with Suicidal Behaviour	532
4.7-2: Care of a Patient with Alcohol Withdrawal Delirium	536
Delirium (Tremens)	536
4.7-3: Care of a Patient with Acute Panic Attacks	539
4.7-4: Care of a Patient with Aggressive and Violent Behaviour	542
4.7-5: Care of a Patient Experiencing Acute Dystonia	546
4.8: Conducting a Ward Round in a Mental Health Unit	550
4.9: Giving a Report about a Psychiatric Patient	554
4.10: Discharging a Patient from a Mental Health Unit	557
4.11: Conducting Follow up Care	560
References	563
Chapter 4: Evaluation Checklist	564
Appendix 4: Guidelines for Preparing a Patient for Electroencephalogram (EEG)	565
<b>CHAPTER 5 Community Health Nursing</b>	<b>566</b>
Chapter Outline	566
5.1: Immunizations	568
5.1-1: Managing the Cold Chain	568
5.1-2: Administration of Bacillus Calmette-Guerin (BCG)	572
5.1-3: Administration of Oral Polio Vaccine (OPV)	576
5.1-4: Administration of Pentavalent Vaccine	580
5.1-5: Administration of Measles Vaccine	584
5.1-6: Administration of Tetanus Toxoid (TT) Vaccine	588
5.1-7: Administration of Yellow Fever Vaccine	591
5.1-8: Administration of Rota Virus Vaccine	595
5.1-9: Administration of Pneumococcal Conjugate Vaccine (PCV 10)	598
5.1-10: Administration of Inactivated Polio Vaccine (IPV)	602
5.2: Family Planning Preparations	606
5.2-1: Counseling for Family Planning (FP)	606
5.2-2: Performing Breast Examination	610
5.2-3: Pelvic Examination	611
5.3: Methods of Family Planning (FP)	615
5.3-1: Administration of Hormonal Injectable Contraception	615
5.3-2: Administration of Hormonal Oral Contraception	618
5.3-3: Insertion of Hormonal Implants	621
5.3-4: Removal of Hormonal Implants	625

5.3-5: Insertion of an Intrauterine Contraceptive Device (IUCD)	628
5.3-6: Insertion of a Postpartum Intrauterine Contraceptive Device (PPIUCD)	634
5.3-7: Removal of an Intrauterine Contraceptive Device (IUCD)	641
5.3-8: Barrier Methods	644
5.3-8.1: Demonstrating Application of Male Condom	644
5.3-8.2: Demonstrating Insertion of Female Condom	647
5.4: Cervical Cancer Screening Methods	651
5.4-1: Taking a Papanicolaou Smear (Pap smear)	651
5.4-2: Visual Inspection of Cervix Using Acetic Acid (VIA) and/or Lugol's Iodine (VILI)	655
5.5: Community Nursing Activities	660
5.5-1: Conducting a Community Diagnosis	660
5.5-2: Conducting a School Health Program	663
5.5-3: Conducting a Home Visit	666
5.5-4: Conducting Health Education	669
5.5-5: Conducting a Mobile Clinic Service	672
References	675
Chapter 5: Evaluation Checklist	676



# List of Figures

## CHAPTER 1 Fundamentals of Nursing

- 1.1 Taking Temperature by Rectal Method
- 1.2 Placing Diaphragm of Stethoscope over the Fifth Intercostal Space
- 1.3 Illustration of Use of Mercury Sphygmomanometer
- 1.4 Pain Assessment Tool Indicating Severity of Pain on a Scale of 1-10
- 1.5 Sites for Auscultation of Heart Valves
- 1.6 Locations for Auscultation and Percussion
- 1.7a Division of Abdomen into 4 Quadrants, Auscultating the Abdomen
- 1.7b Landmarks Commonly Used to Identify Abdominal Areas
- 1.8 Testing Urine using Reagent Test Strips
- 1.9 Requirements for Hand Hygiene
- 1.10 Lather Thoroughly and Rub Hands
- 1.11 Give Special Attention to Fingernails and Knuckles
- 1.12 Hands Held Higher than Elbows During a Hand Wash Before Aseptic Technique
- 1.13 Closing Tap using Elbow
- 1.14 Foot Pedal Faucet Control
- 1.15 Drying up to Elbow
- 1.16 Locating the Ventrogluteal Site in Upper Outer Quadrant for Injection
- 1.17 Depositing Medicine at 90° in to the Muscle
- 1.18 Subcutaneous Injection Deposits Medications at 45°-90° into the Subcutaneous Tissue
- 1.19 Inserting Needle with Bevel up at an Angle of 5°-15° until Dermis barely covers the Bevel
- 1.20 Metered Dose Inhaler with Spacer
- 1.21 Tray for Administration of Enema
- 1.22 Tray for Rectal Washout
- 1.23 Raising Enema Solution to above Rectum and Instilling Slowly Aided by Gravity

## CHAPTER 2 Medical - Surgical Nursing

- 2.1 Measuring Length of Nasogastric Tube (Adult)
- 2.2 Measuring Length of Nasogastric Tube (Infant & Child)
- 2.3 Items for Nasogastric Tube Feeding
- 2.4 Bolus Feeding
- 2.5 Spreading The Labia to Expose Urinary Meatus

- 2.6 Cleansing Urinary Meatus with a Down Ward Stroke
- 2.7 Inflating Balloon with Prefilled Syringe
- 2.8 Humidifier, Reservoir Bag Tracheostomy Mask, T-Tube and a Simple Face Mask
- 2.9 Piped System Oxygen Apparatus
- 2.10 Correct Position of a Simple Face Mask
- 2.11 Drainage System lower than Client and Tubings Have No Kink
- 2.12 Checking the IV Fluid Rate, Volume, Patency of Tubing and Additives at the Beginning of the Shift
- 2.13 Aspirate for Blood Return when Assessing for Patency
- 2.14 Check for tight Connections and Infiltration Hourly
- 2.15 Verify Blood Products with another Nurse
- 2.16 Prime the Chambers in Readiness for Transfusion
- 2.17 Using Chin Lift-Head Tilt to a Sniffing Position to Open Airway
- 2.18 Observe for Breathlessness
- 2.19 Child Position for Chest Compression
- 2.20 Back Blows between Shoulders
- 2.21 Wrap Both Arms around the Client's Waist
- 2.22 Placing a Fist Below the Xiphoid Process, above the Client's Navel
- 2.23 Proper position of Intraosseous Needle
- 2.24 Dialysis Machine
- 2.25 Patient undergoing Haemodialysis
- 2.26 Performing Skin Preparation
- 2.27 Performing Skin Preparation
- 2.28 Draping Using Centre "O" Drape
- 2.29 Administering Penile Ring Block
- 2.30 Administering a Penile Dorsal Nerve Block
- 2.31 Separation of Adhesion
- 2.32 Making Incision Line
- 2.33 Making Incision Line
- 2.34 Positioning the Artery Forceps
- 2.35 Making a Dorsal Slit
- 2.36 Performing Circumferential Incision
- 2.37 Trimming Rugged Edges of Incision Line

## CHAPTER 3 **Midwifery and Obstetric Nursing**

- 3.1 Assessing Fundal Height

- 
- 3.2a** 1<sup>st</sup> Leopold Maneuver
  - 3.2b** 2<sup>nd</sup> Leopold Maneuver
  - 3.2c** 3<sup>rd</sup> Leopold Maneuver
  - 3.2d** 4<sup>th</sup> Leopold Maneuver
  - 3.3** Partograph
  - 3.4** Delivery of the Placenta; Controlled Cord Traction
  - 3.5** Manual Removal of Placenta
  - 3.6** Manual Detachment of Placenta
  - 3.7** Insertion of Fingers into Vagina to Access Appropriate Position to Fix the Cup
  - 3.8** Proper Placement of the Cup in front of the Posterior Fontanelle
  - 3.9** Removing the Cup when the Foetal Jaw is Reachable
  - 3.10** Episiotomy Repair
  - 3.11** Digital Rectal Examination
  - 3.12** Delivery of the shoulder that is posterior
  - 3.13** Lovsets Manoeuvre
  - 3.14** Mauriceau-Smellie-Veit Manoeuvre
  - 3.15** Basic Components of an MVA Kit
  - 3.16** Basic Components of an MVA Kit
  - 3.17** Lochia Loss
  - 3.18** AGPAR Scoring Guide
  - 3.19a** Correct Position of the Head for Ventilation
  - 3.19b** Suctioning the Mouth and Nose using Mucus Extractor
  - 3.19c** Suctioning the mouth and the nose
  - 3.19d** Correct Placement of the Mask
  - 3.19e** Holding Mask Tightly Over the Newborn Nose and Mouth
  - 3.19f** Two Methods of Chest Compression

## **CHAPTER 4 Mental Health and Psychiatric Nursing**

- 4.1** An Individual Psychotherapy Session
- 4.2** Group Psychotherapy Session
- 4.3** An ECT Room

## **CHAPTER 5 Community Health Nursing**

- 5.1** BCG Injection Administered Slowly on the Dorsal Aspect Intradermally
- 5.2** Administration of OPV

- 
- 5.3 Insertion of Jadelle**
  - 5.4 Insertion of Implanon**
  - 5.5 Copper T 380A Insitu**
  - 5.6 Insertion of Speculum**
  - 5.7 Penile Model**
  - 5.8 Female Condom**
  - 5.9 Requirements for VIA/VILI**
  - 5.10 Normal Cervix**
  - 5.11 VIA Positive Cervix**
  - 5.12 Cervix Suspicious of Cancer**
  - 5.13 VILI Positive Cervix**



# Contributors

**Miriam C.A. Wagoro RN, PhD, MScN (Mental Health & Psych), BScN, RPN, RM, RCHN, DAN**  
Clinical Nurse Specialist  
National Lead Trainer Mainstreaming Kenya - Nursing Process

**Abraham Kipkoech Sirma BSN, MSN**  
Lecturer, MTRH Training Centre

**Ali Akida MPH, BScN, CEN**  
Kenyatta National Hospital

**Amos Getanda MScN (Maternal & Neonatal Health), BScN**  
Specialist Midwife and Lecturer  
Moi University

**Benard Wambua Mbithi PhD, MPH, BScN, KRCHN, KRPON**  
Lecturer School of Nursing  
Jomo Kenyatta University College of Agriculture and Technology

**Benta Adhiambo MPH, BSc (Health Education), BScN, KRN/M**  
Assistant Director Services  
Nairobi Hospital

**Beth Waweru BScN, MScN (Ed), KRCHN**  
Clinical Instructor  
Aga Khan University

**Betina Muthama MHSM, BScN, KRCHN, KRPN**  
Nursing Council of Kenya

**Betsy Cherotich KRCHN, CRH**  
Mama Lucy Kibaki Hospital

**Charles Ndegwa KRCCN/KRN**  
Nairobi Hospital

**Cresentia Gati DAN, KRCHN (Post Basic), KRN/M**  
Deputy Chief Nurse  
Kenyatta National Hospital

**Daniel Gai MPH (Reproductive Health) BScN**  
Gertrudes Children Hospital

**Diviner K. Nyarera BScN, KRN, KRM, KRNN**  
Renal Unit  
Kenyatta National Hospital

**Dominic Ndombi MSc, BN, KRN, KRM, KRCHN**  
KMTC Busia

**Edith Muthui KRN, KRM, KRCCN**  
Nairobi Hospital

**Eunice (Kahiga) Tole MHSM, BScN, KRCHN**  
Quality Director  
Aga khan University Hospital, Nairobi

**Edna C. Tallam - Kimaiyo MSc (Public Health), BScN**  
Registrar/CEO  
Nursing Council of Kenya

**Eunice Keiza MScN(Paeds), BScN, KRCHN**  
Clinical Nurse Specialist  
Paediatrics Department

**Felister Kamau BScN, KRCHN**  
Nursing Council of Kenya

**Francis Muvea BScN, KRPN, CCN, KRN**  
KMTC Mathari

**Fredrick Ochieng MSc, BScN**  
KMTC Nairobi

**Gladys Seroney MScN, BScN**  
Lecturer  
Maseno University

<b>Grace Mbuthia BScN, MPH</b> Moi University	<b>Kinoti Fred MScN (Reproductive Health), BScN</b> Mater School of Nursing
<b>Grace Wangari Njoroge KRCHN, RAEN</b> Kijabe Medical Centre	<b>Lister Onsongo PhD, MSc (Community Health Education) BSN, KRN</b> Kenyatta University
<b>Hannah W. Komu KRCHN, MCHD</b> DPHN Gilgil hospital	<b>Lucy W. Menganyi MScN (Critical Care), BScN</b> Clinical Nurse Specialist Clinical Care Unit Kenyatta National Hospital
<b>Isaiah Mose MScN(Psychiatry), BScN</b> Kenyatta University	<b>Margaret Odidi MScN (Mental Health and Psych), BN, KRN, KRPN, KRM, KRCHN, DAN</b> Clinical Nurse Specialist KMTC Kisumu
<b>Jane Githiga RN, CCN</b> Mater Hospital	<b>Martha Maingi KRCHN</b> Aga Khan University Hospital
<b>Joseph Mirereh KRN, KRM, RCHN, HSM</b> MOH-Nursing Services Unit National Coordinator Mainstreaming Kenya Nursing Process	<b>Miriam W. Wanyoike BSc, HSM, KRPN, KRCHN</b> KMTC Nairobi
<b>Joseph Ngutiku MScN, BScN, KRCHN</b> Nursing Council of Kenya	<b>Paul Mwave BScN, KRPN, KRCHN</b> Mathari Hospital
<b>Joyce Jebet Cheptum MSc (Public R.H), BScN, KRCHN</b> University of Nairobi	<b>Perez Obonyo MScN, BScN</b> Gertrudes Children Hospital
<b>Joyce Muriithi BSc(Med), KRCHN, KRNA</b> Lecturer KMTC Kisumu	<b>Peris Kiarie Kariuki DNP, MScN, BScN, KRCHN, Nursing Leadership</b> Kijabe Hospital School of Nursing
<b>Judith Kudoyi BSc(M.edu), CC, RN, RM</b> Nursing Council of Kenya	<b>Priscilla Kaili KRN, KRM, KRCHN (PB)</b> Machakos Level 5 Hospital
<b>Kaka Nargis KRCHN(PB), Emonc trainer</b> Nursing Council of Kenya	<b>Priscilla Najoli MBA (Strategic Management), BA (Psychology), KRN, KRM</b> Nursing Council of Kenya
<b>Kamau Susan M. MSN(ED), BSN</b> Nurse Educator Department of Nursing Research, Education Management and Leadership School of Nursing University of Eastern Africa, Baraton	<b>Rose K. Miriti BScN, KRCHN, KRPN</b> Mathari National Teaching and Referral Hospital

---

**Ruth M. Makau BCHD, RPN, RCHN, MNTRH**

KMTC Mathari

**Samson Kipkosgei Cheruiyot MScN, BScN/KRCHN**

Board Member & Chair Education, Examination &  
Research Committee

**Sarah Burje MSc(Ed), BN, RPHN, RN/M**

Ag. Deputy Registrar  
Nursing Council of Kenya

**Sophie Ngugi MPH, BScN**

Division of Child Health  
Ministry of Health

**Sudi William Galo, MPH, BScN**

Kakamega County Referral and Training Hospital  
National co-trainer mainstreaming KNP in clinical settings

**Sylvia Kimtai BScN, KRCHN, CRH**

Ziwa Sub County Hospital

**Teckla Ngotie MScN (Midwifery and Obstetric Nursing), BScN, KRCHN**

Kenyatta University



# Preface

Nurses and midwives provide over 80% of all health care services in a variety of health care settings in Kenya. Therefore, quality of nursing procedures is critical to patient health outcomes and improved health care services. This manual guides nurses by stipulating the steps of the procedures for quality nursing care

This 4<sup>th</sup> Edition of the Manual of Clinical Nursing and Midwifery Procedures has been revised with the recognition that nursing profession is dynamic. Nursing profession needs to respond to its expanded roles, advancement in technology, emerging and re-emerging diseases as well as empirical knowledge. With the expanding roles and advanced technology, the nurse requires both highly specialized psychomotor skills and a strong foundation in biomedical and social sciences to enable him/her perform clinical procedures effectively and efficiently. The manual has been designed as a text and a procedure guide for nurses in clinical practice and students in nursing schools. The term clinical procedures as used in this manual refers to all procedures that a nurse or midwife performs at a health care facility whether in acute care setting or the community as provided for in the Nursing Council of Kenya scope of practice.

The manual enables the nurse whether a student or qualified, to master and /or retain, procedure steps, psychomotor skills and the underlying scientific rationale. This 4<sup>th</sup> edition addresses the needs of today's changing health care environment by providing a framework of practice. In line with the strategic direction of the Unit of nursing in the Ministry of health headquarters, KNP framework is the approach used in the procedures. Use of KNP approach stimulates the user to learn rationale for each step, evaluate effectiveness of each implementation and develop critical thinking skills required by the nurse in the 21<sup>st</sup> century and beyond.

This 4<sup>th</sup> edition, revised with updated nursing procedures in every chapter, enables nurses to deliver effective patient-focused care. This manual contains one hundred and seventy-six clinical nursing and midwifery procedures arranged in five chapters according to major areas of nursing thematic areas. Within these chapters, procedures have been grouped according to functional health patterns, systems or specialties and from simple to complex.

Clinical procedures are a fundamental aspect of nursing care so it is essential that they are evidence based. This 4<sup>th</sup> edition provides that evidence while remaining firmly grounded in current day-to-day nursing practice. The clinical skills procedures have been updated based on empirical evidence and advice from clinical experts to ensure that current practice is reflected and nurses deliver relevant care.

However, it is important to note that there are more than one hundred and seventy-five procedures taught in the schools of nursing, but NOT all of them could be included in this manual. In the same vein, each specialized nursing thematic area has many procedures that could not be included in the manual. The Nursing Council of Kenya therefore recommends that the nurse or midwife seeks other procedure guides and respective institutional protocols for the procedures not included in this manual.

The procedures in this manual are presented using the KNP framework that stimulates critical thinking. This is why "The Nursing Council of Kenya Manual of Clinical Nursing and Midwifery Procedures, 4<sup>th</sup> Edition", should now be the manual of choice for nurses and midwives at all stages and levels of their career, giving them the confidence they need as safe, informed and skilled professional practitioners.

## Features of the Manual

Features of the 4<sup>th</sup> edition that support student learning include an interactive writing style; a completely new art program; and an open page design.

**Organization of Procedures:** The clinical procedures have been arranged in five chapters that reflect the thematic areas of nursing and midwifery. Within the chapters, procedures are grouped according to functional health patterns, body systems or specialties and from simple to complex.

**Kenya Nursing Process Approach:** The procedures in this manual are described using the Kenya Nursing Process (KNP) approach. In this regard, all procedures start with assessment and end with Documentation. The only step not included for fear of confusion is Diagnosis.

## Presentation of Guidelines

Standard guidelines that are critical to performing procedures but could not fit within the definition of a procedure have been appended to this manual. Nurses using this manual are asked to pay attention to the appendices as they provide supplementary information that is essential to the clinical skills described in the manual.

**Evaluation Tool:** To improve the quality of subsequent manuals, an evaluation form has been placed in duplicate for feedback on the quality of each chapter and the overall manual. This feature was first included in the third edition. Users of the manual are encouraged to set aside some time to objectively complete them and send a copy to the Registrar, Nursing Council of Kenya.

# Organization of the Chapters

## **Chapter One: Fundamentals of Nursing:**

This chapter contains forty-seven basic procedures for the practice of comprehensive nursing care. The procedures are basic to all nurses irrespective of their area of specialization. The broad classification of procedures under fundamentals of nursing include patient assessment, safety and infection prevention and control, patient's hygiene and comfort; administration of medicine, admission of a patient, conducting a ward round, handing over patients and bereavement care.

## **Chapter Two: Medical-Surgical Nursing**

In this chapter, general and specialized medical-surgical nursing procedures are described. The total number of procedures under this chapter are forty-eight. They are categorized according to body systems, body functions, special senses and emergency care as follows: Nutrition and elimination; oxygenation; circulatory system; musculoskeletal and integumentary systems; emergency care; ophthalmic care; special procedures and male circumcision. New procedures introduced in this edition include preparing a patient for endotracheal tube insertion and changing CVP dressing.

## **Chapter Three: Midwifery and Obstetrics Nursing**

In this chapter, thirty-one procedures are described. These are procedures that are performed on a client before, during and after delivery. Procedures for the newborn are also described. Newborn procedures have been described under this chapter because often times they are performed in the newborn unit. In Kenya, newborn units are within maternity wards. The procedures under this chapter are mainly classified into antenatal, intrapartum postnatal and newborn.

## **Chapter Four: Mental Health and Psychiatric Nursing**

In this chapter, twenty procedures for clients that experience mental disorders are described .They include admission of patients with mental disorders; comprehensive mental health assessment; establishing a therapeutic nurse-patient relationship; conducting individual psychotherapy, conducting a group psychotherapy, Peri-electroconvulsive therapy care , procedures for psychiatric emergency situations; conducting nurses' ward round in a mental health unit, giving a report about a patient, discharging and transferring a patient; and conducting follow up care.

## **Chapter Five: Community Health Nursing**

This is the final chapter in the manual. It contains twenty-nine procedures Its nursing procedures have been broadly classified under immunizations; family planning, cervical cancer screening methods and community health nursing activities.

# The Kenya Nursing Process (KNP)

## Overview

The KNP is the foundation and organizational framework that guides professional nursing practice for improved patient health outcomes (Department of nursing [DON, 2009], Rivas, Garcia, Arenas, et al, 2012; Wagoro & Rakuom, 2015) for clients as individuals, families and communities. The KNP is recognized as a model on which professional nursing standards are based and remains the nationally accepted method of scientific nursing practice. The nursing process involves scientific reasoning that allows the nurse to identify, organize and manage the health problems of clients in a systematic and conceptual practice. Nursing process promotes critical thinking which is central to all nursing care. Critical thinking is summarized in the words of Martha Rogers; Nurse Theorist – “*When an apple is cut, others see seeds in the apple. We, as nurses, see apples in the seeds.*”

Each procedure has been described using the Kenya Nursing process approach since it is regarded as a framework for providing nursing care in Kenya.

## The Benefits of KNP:

The nursing process is a systematic problem solving approach to holistic nursing care in that it:

- Stresses the independent and collaborative care function of the nurse
- Promotes accountability.
- Provides an orderly and systematic method for planning and providing evidence informed individualized care.
- Enhances nursing efficiency and effectiveness thus increasing quality of care.
- Facilitates standardization of nursing practice.
- Facilitates documentation of care thereby promoting continuity and preventing duplication of care as well as generating data for research.
- Emphasizes only two types of nursing diagnoses that are easier for nurses to conceptualize

Summary of Steps/phases in the Kenya Nursing Process: The 5 steps of the global nursing process are often remembered by the acronym **ADPIE** or the mnemonic "**A Delicious PIE**"

- 1) **A**sessment (of patient's needs)
- 2) **D**iagnosis (of human response needs that nursing can treat)
- 3) **P**lanning (of patient's care)
- 4) **I**mplementation (of care)
- 5) **E**valuation (of the success of the implemented care)

The Nursing Council of Kenya manual of clinical procedures uses **ADPIE+D** to include Documentation which is an integral step in the nursing process for the nurses in Kenya. The steps phases of the Kenya nursing process are briefly explained below:

**Phase 1: Assessment:** The systematic process of collecting, analyzing, and verifying holistic data from primary and secondary sources using various methods.

**Phase 2: Diagnosis:** This is the second phase and involves holistic analysis and interpretation of data and subsequently formulating diagnosis. Nursing diagnosis is defined by NANDA-I as a clinical judgment about individual, family, or community responses to actual or potential health problems/life processes that the nurse is authorized to treat.

**Phase 3: Planning:** This is the third phase of the KNP during which the identified nursing diagnoses in phase two are prioritized, client-centered goals and expected outcomes are determined and interventions with the respective scientific rationales are planned. The outcome of the planning phase is the nursing care plan.

**Phase 4: Implementation:** This is the fourth phase and involves the actual execution of the nursing care plan. The skills required for implementation phase are Cognitive or intellectual, Interpersonal, humanistic and Psychomotor skills.

**Phase 5: Evaluation:** This involves the measurement of the client's response to nursing interventions and progress towards achieving goals. It requires the nurse's ability to interpret and summarize the findings. The nurse compares findings with the goals and outcome criteria in the nursing care plan. The nurse indicates the extent to which the outcome criteria are met and subsequently concludes whether the goals are met or not met with evidence.

**Phase 6: Documentation:** In the context of KNP, this is the last phase or step of the nursing process. It involves documenting the nursing care plan, recording all patient data obtained from assessment, or data relating to interventions and evaluations. Documentation is dependent on the hospital policy but should be accurate, reflect all phases of the nursing process and adhere to approved principles.



# CHAPTER 1

# Fundamentals of Nursing

## Chapter Outline

### 1.1: Patient Assessment

- 1.1-1: Measuring Vital Signs
- 1.1-2: History Taking
- 1.1-3: Physical Examination
- 1.1-4: Specimen Collection
  - 1.1-4.1: Blood Specimen Collection
  - 1.1-4.2: Urine Specimen Collection
  - 1.1-4.3: Stool Specimen Collection
  - 1.1-4.4: Sputum Specimen Collection
  - 1.1-4.5: Swab Specimen Collection
- 1.1-5: Routine Urine Testing in Ward/Clinic

### 1.2: Safety and Infection Prevention and Control

- 1.2-1: Hand hygiene
- 1.2-2: Surgical Scrub, Gowning and Gloving
- 1.2-3: Observing Standard Precautions
  - 1.2-3.1: Standard Precautions
  - 1.2-3.2: Universal Precautions Guidelines
- 1.2-4: Isolation Nursing
- 1.2-5: Source (Strict) Isolation
- 1.2-6: Protective Isolation
- 1.2-7: Terminal Decontamination of Isolation Room

### 1.3: Patient's Hygiene and Comfort

- 1.3-1: Making an Occupied Bed
- 1.3-2: Positioning a Patient in Bed
- 1.3-3: Bed bath
- 1.3-4: Pressure Area Care
- 1.3-5: Performing Oral Care

### 1.4: Administration of Medicine

- 1.4-1: Administration of Oral, Sublingual and Buccal Medications

## **1.4-2: Administration of Parenteral Medications**

**1.4-2.1: Intramuscular Injections**

**1.4-2.2: Subcutaneous Medications**

**1.4-2.3: Intradermal Medications**

**1.4-2.4: Intravenous Medications**

**1.4-3: Administering Nebulized Medications**

**1.4-4: Administration of Topical Medications**

**1.4-5: Instillation of Eardrops**

**1.4-6: Administration of Enema and Rectal Wash Out**

**1.4-7: Maintaining Medication Registers**

## **1.5: Admission, Transfer and Discharge of a Patient**

**1.5-1: Admission of a Patient**

**1.5-2: Transfer/ Referral of a Patient**

**1.5-3: Discharge of a Patient**

## **1.6: Conducting a Ward Round**

## **1.7: Handing Over Patients**

## **1.8: Bereavement Care**

## 1.1: Patient Assessment

### 1.1-1: Measuring Vital Signs

#### Definition:

It is the process of measuring temperature, pulse, respiration, blood pressure and pain of a client/patient in order to detect any deviations.

- **Temperature assessment:** involves measuring the balance between heat production and heat loss by the body.
- **Pulse assessment:** is the measurement of pressure pulsation created when the heart contracts and ejects blood into the aorta creating a wave of expansion and recoil in the arteries which can be felt by palpation on a point where an artery crosses a bone close to the surface.
- **Pulse oximetry:** is the measurement of arterial oxygen saturation using non-invasive light.
- **Respirations assessment:** is the measurement of the breathing pattern and rate.
- **Blood pressure assessment:** is measurement of pressure exerted by blood on the walls of its vessels.
- **Pain assessment:** is evaluation of reported pain and the factors that alleviate or exacerbate it, as well as response to treatment of pain.

#### Purpose:

To collect data on the body's response to physical or psychological stress or changes in physiological function in order to determine patient's health status.

#### Indications:

- Clients/Patients seeking health services

## A. Assessment

Assess	Rationale
1. Appropriateness of working environment	1. To determine its ability to provide comfort, privacy and enhance efficiency
2. Equipment required	2. To determine equipment availability and functioning status
3. Client's/Patient's physical and mental status	3. To determine assistance required and if the patient is able to give consent
4. Client's/Patient's understanding of the procedure	4. To determine teaching needs of the client and gain their cooperation, minimize anxiety

Assess	Rationale
5. Site to be used for measurements	5. To determine suitability as some conditions affecting these sites can interfere with accurate readings
6. Foods/drinks taken in the last 15-30 minutes	6. To establish if hot or cold foods/drinks have been taken that would influence accuracy of temperature
7. Activities performed in the last 15-30 minutes	7. Hyperactivity may increase sympathetic nervous system activity and interfere with accuracy of data
8. Presence of skin lesions	8. To institute correct interventions

## B. Planning



### Self

- Hand hygiene
- Review procedure
- Review factors that influence vital signs



### Patient

1. Explain the procedures to the patient and obtain consent
2. Ask the client/patient if he/she has taken hot or very cold drinks/food within the last 30 minutes
3. Ask the client/patient to rest for at least 5 minutes before the procedure where applicable
4. Explain to the client/patient that he/she will be required to relax and breathe normally when vital signs are being measured



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



### Requirements

A clean trolley with;

#### Top shelf;

- A clean tray containing;
  - A thermometer (as per institutional policy)
  - A pack of clean and dry cotton wool balls

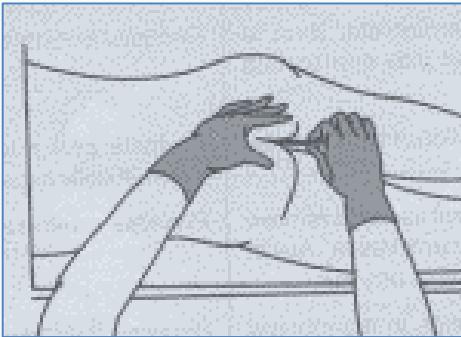
- A gallipot
- Surgical spirit /antiseptic solution
- Lubricant (for rectal temperature)
- A watch with a second hand
- Pulse Oximeter
- Sphygmomanometer and Stethoscope
- Clean gloves where necessary
- Observation charts/pain assessment chart
- Paper to record findings for reporting

**Bottom shelf;**

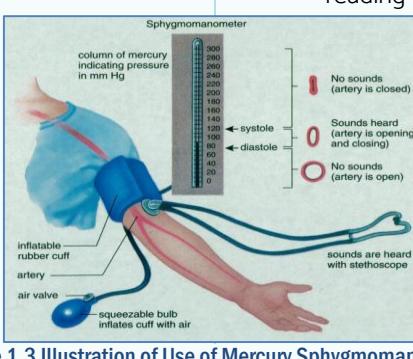
- Decontaminant in a container
- A receiver for used cotton wool swabs

## C. Implementation

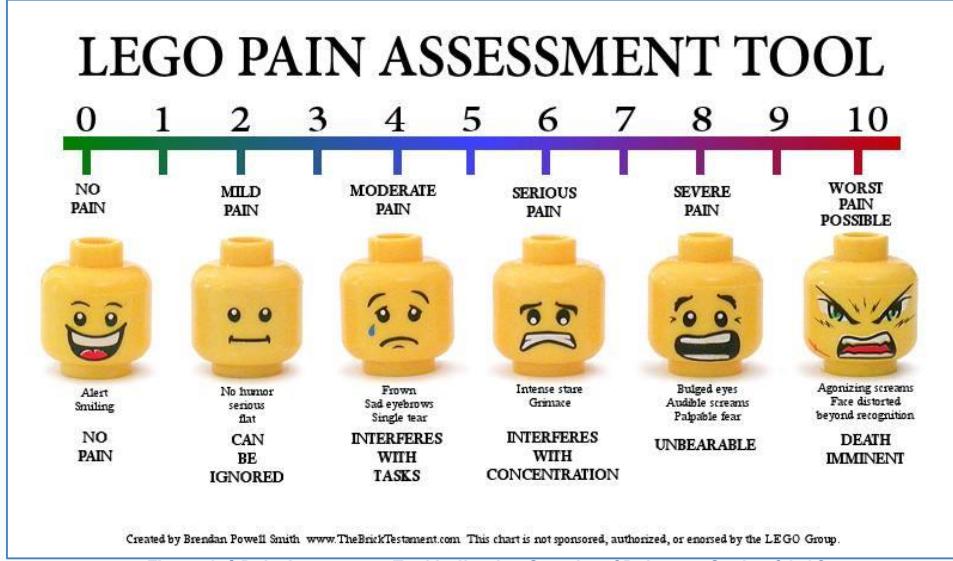
Steps	Rationale
<b>I. Temperature</b>	
1. Take equipment to the bedside/next to the patient	1. For ease of accessibility
2. Identify the patient	2. To ensure right procedure to the right patient
3. Explain procedure to the patient	3. To allay anxiety and gain co-operation
4. Wash and dry hands	4. For infection prevention and control
<b>Axillary and groin</b>	
5. Dry axilla/groin with a clean cotton wool swab	5. To ensure sweat and moisture do not interfere with the reading of the thermometer
6. Place thermometer in axilla/groin making sure that the thermometer bulb is fully covered by the skin folds	6. Allows for close contact of the bulb with the superficial blood vessels for accurate temperature registration
7. Switch on the thermometer and position it while the arm or thigh is held firmly by patient or nurse	7. To prevent the thermometer from dislodging from the axilla during the procedure
8. Gently remove thermometer, when it alarms or after 4-7 minutes (for non-digital thermometers) and read	8. Thermometer alarm alerts that the reading is complete, and the nurse should read, interpret and record the findings  4-7 minutes allows for adequate time for contact between the bulb and the superficial blood vessel for accurate temperature recording
<b>Rectal</b>	
1. Wash hands and wear gloves	1. For infection prevention and control.

Steps	Rationale
2. Explain the procedure	2. To allay anxiety and gain cooperation
3. Position child in left lateral position	3. To promote ease of access and insertion of the thermometer
4. Lubricate thermometer and insert 1-2 cm depending on age of the child	4. To prevent injury to the anal and rectal tissues and allow the bulb to be covered by rectal mucosa
5. Hold the thermometer in position as shown in (Fig 1.1) until it alarms while talking to the mother or child	5. To prevent dislodging of the thermometer and ensure accuracy of the reading and reduce the child's/mother's anxiety through engagement
 <b>Figure 1.1 Taking Temperature by Rectal Method</b> (Adapted from Prakash, 2007)	
6. Gently remove thermometer, wipe with a clean dry swab from the stem to the bulb using rotating movement and taking care not to touch the bulb	6. To reduce transfer of micro-organisms and tampering with the mercury level
7. Ensure the child's buttocks are cleaned and dry.	7. To promote patient's hygiene and comfort
8. <b>NB:</b> For any other thermometer follow manufacturer's instructions	8. To ensure accuracy of reading
<b>II. Pulse</b>	
<b>Radial Pulse</b>	
1. Flex patient's elbow and place lower part of the arm across the chest	1. Relaxed position of forearm and slight flexion of wrist facilitates accessibility of artery for palpation
2. Place the tips of the index and middle fingers over the radial artery applying light but firm pressure	2. To facilitate palpation since fingertips are sensitive and better able to feel the pulse. Light pressure prevents occlusion of blood flow
3. N/B: do not use your thumb to palpate the pulse	3. To avoid feeling of the strong pulse of thumb
4. Palpate for pulsation and count the pulse rate for a full minute. (Note rate, rhythm and volume)	4. To detect any deviation from normal and plan for appropriate intervention

Steps	Rationale
5. Record findings on the appropriate chart	5. To communicate findings
<b>Apical Pulse (Apex Beat)</b>	
1. Position patient on left side and expose patient's sternum and left side of the chest	1. To allow access to patient's chest for proper placement of stethoscope and selection auscultatory site
2. Palpate for apical pulse. Auscultate for apical pulse over the fifth intercostal space, left of the mid clavicular line and mark the site where you feel it	2. To ensure that point of maximum impulse is identified for accurate measurement
3. Clean the earpiece and diaphragm of stethoscope with antiseptic cotton wool swabs.	3. For infection prevention and control
4. Warm the diaphragm of the stethoscope by holding in the palm of own hands for 5 to 10 seconds.	4. To prevent startling the patient and altering pulse rate
5. Insert earpieces of stethoscope into own ears and place the diaphragm over the fifth intercostal space, left of the mid clavicular line as shown in (Fig. 1.2)	5. Point of maximal impulse is anatomically located at this position, hence promoting accuracy of heart beat measurement
 <p>Figure 1.2 Placing Diaphragm of Stethoscope over the Fifth Intercostal Space</p>	
6. Listen to the beats for rhythm, strength and rate	6. To detect any irregularities, which may indicate inadequate cardiac perfusion and output
7. Inform the client/patient when procedure is over, cover the patient and leave him/her comfortable	7. To ensure comfort and for cooperation
<b>III. Respiration</b>	
1. With the fingers still in the pulse position, observe the patient's chest movements without drawing the patient's attention to the activity	1. To avoid causing alterations in breathing patterns that occurs when the client is aware respiration is being assessed

Steps	Rationale
2. Observe one complete cycle of respirations; count the respirations for one full minute	2. To avoid inaccurate data
3. Note chest expansion, depth and rate of respiration	3. Alterations in rate, depth and rhythmic chest movements would be an indication of respiratory, renal and other systems abnormalities
4. Record findings	4. To communicate findings and for subsequent comparison of progress
<b>IV. Blood Pressure</b>	
1. Assist client/patient to a comfortable position with forearm supported at heart level and arm supinated	1. To ensure accurate reading. Stress may affect the blood pressure measurement
2. Expose the upper arm completely and ensure no tight clothing	2. To allow accurate placement of the cuff and stethoscope and ensure the reading is accurate
3. Place the sphygmomanometer on the bed or locker at the same level as patient's heart	3. To ensure accuracy of reading
4. Deflate the bladder cuff fully and test pump to ensure it moves freely	4. To confirm the functional status of the machine for effectiveness of the procedure
5. Palpate brachial artery in the antecubital space and place the cuff so that the midline of the bladder is over the arterial pulsation. Then wrap the deflated cuff snugly and evenly round the bare upper arm ensuring that its lower edge is 2 cm above the antecubital fossa where the stethoscope head is to be placed	5. To allow for positive identification of the artery
6. For mercury sphygmomanometer, ensure it is vertical and at eye level	6. To prevent distortion and promote accurate reading of mercury level
	
<b>Figure 1.3 Illustration of Use of Mercury Sphygmomanometer</b> <a href="http://homepage.smc.edu/wissmann_paul/anatomy1/bloodpressuremeasurement.jpg">http://homepage.smc.edu/wissmann_paul/anatomy1/bloodpressuremeasurement.jpg</a>	

Steps	Rationale
7. With non-dominant hand, palpate the brachial artery with fingertips, the dominant hand closes pressure bulb valve and inflates cuff until pulse disappears. Continue to inflate the cuff 30 mmHg above. Slowly release cuff and while still palpating, note when pulse reappears	7. To prevent air leak
8. Fully deflate cuff and wait for 1-2 minutes	8. To allow recirculation of blood trapped in the vein
9. With the dominant hand close the pressure bulb valve, place the stethoscope earpiece in own ears to fit snugly, re-palpate the brachial artery as in step 7 and place the stethoscope bell or diaphragm over brachial artery located site	9. For audibility of the heart sounds
10. Re-inflate the cuff as in step 7 and slowly release the valve to deflate the cuff at 2 mmHg/sec while listening to identify the 5 phases of korotkoff sounds and the mercury levels at which they appear	10. For accurate reading
11. Deflate cuff completely and remove from patient's arm and assist patient to a comfortable position as appropriate	11. To complete the procedure and release patient for other activities
12. Clean the earpiece, bell and diaphragm with appropriate antiseptic	12. For infection prevention and control
13. Store equipment appropriately	13. For safety and in readiness for next use
14. Record findings, noting abnormalities	14. For baseline data, comparison and continuity of care
<b>V. Pain Assessment</b>	
1. Ask the client/patient if they are in pain and if he/she cannot communicate, use the appropriate nonverbal pain assessment tools	1. To ascertain presence and level of pain

Steps	Rationale																					
2. If they are in pain, use a validated pain assessment tool	2. For correct rating and quantifying pain																					
 <p><b>LEGO PAIN ASSESSMENT TOOL</b></p> <p>The chart shows a horizontal scale from 0 to 10. Each number is accompanied by a yellow LEGO head icon with a specific facial expression. Below each icon are descriptive words indicating the level of pain.</p> <table border="1"> <thead> <tr> <th>Pain Level</th> <th>Facial Expression</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>0 NO PAIN</td> <td>Alert Smiling</td> <td>No humor serious flat</td> </tr> <tr> <td>1 MILD PAIN</td> <td>No humor serious flat</td> <td>CAN BE IGNORED</td> </tr> <tr> <td>2 MODERATE PAIN</td> <td>Frown Sad eyebrows Single tear</td> <td>INTERFERES WITH TASKS</td> </tr> <tr> <td>3 SERIOUS PAIN</td> <td>Intense stare Grimace</td> <td>INTERFERES WITH CONCENTRATION</td> </tr> <tr> <td>4 SEVERE PAIN</td> <td>Bulged eyes Audible screams Palpable fear</td> <td>UNBEARABLE</td> </tr> <tr> <td>5 WORST PAIN POSSIBLE</td> <td>Agonizing screams Face distorted beyond recognition</td> <td>DEATH IMMINENT</td> </tr> </tbody> </table> <p>Created by Brendan Powell Smith <a href="http://www.TheBrickTestament.com">www.TheBrickTestament.com</a> This chart is not sponsored, authorized, or endorsed by the LEGO Group.</p>		Pain Level	Facial Expression	Description	0 NO PAIN	Alert Smiling	No humor serious flat	1 MILD PAIN	No humor serious flat	CAN BE IGNORED	2 MODERATE PAIN	Frown Sad eyebrows Single tear	INTERFERES WITH TASKS	3 SERIOUS PAIN	Intense stare Grimace	INTERFERES WITH CONCENTRATION	4 SEVERE PAIN	Bulged eyes Audible screams Palpable fear	UNBEARABLE	5 WORST PAIN POSSIBLE	Agonizing screams Face distorted beyond recognition	DEATH IMMINENT
Pain Level	Facial Expression	Description																				
0 NO PAIN	Alert Smiling	No humor serious flat																				
1 MILD PAIN	No humor serious flat	CAN BE IGNORED																				
2 MODERATE PAIN	Frown Sad eyebrows Single tear	INTERFERES WITH TASKS																				
3 SERIOUS PAIN	Intense stare Grimace	INTERFERES WITH CONCENTRATION																				
4 SEVERE PAIN	Bulged eyes Audible screams Palpable fear	UNBEARABLE																				
5 WORST PAIN POSSIBLE	Agonizing screams Face distorted beyond recognition	DEATH IMMINENT																				
3. Document findings and take appropriate action	3. To communicate data, and use it to evaluate effectiveness, of actions taken relieve pain																					

## D. Evaluation

Evaluate	Rationale
1. If the vital signs were assessed appropriately and if deviations from normal were noted	1. For completeness, detection of abnormalities, comparison with future readings and planning of appropriate interventions

## E. Documentation

### Record:

- The date and time procedure was done
- The vital signs: Pulse, Respiration rate, Blood Pressure, Oxygen saturation, Temperature and pain score on the appropriate chart
- Time and frequency of measurement
- Action taken
- Patient's response during the procedures
- Your name and append your signature



## 1.1-2: History Taking

### **Definition:**

It is the systematic procedure of gathering subjective and objective data about the client's/ patient's health status from the client/patient and/or guardian/companion and previous records through interview and records review.

### **Purpose:**

To establish baseline data, make clinical judgments on a client's/patient's health status and plan for therapeutic interventions.

### **Indications:**

- Client/patient family, guardian seeking health care services
- To obtain baseline data for purposes of assessment

## A. Assessment

Assess	Rationale
1. Appropriateness of the environment	1. To promote efficiency and effectiveness in history taking
2. Client's general physical and mental state	2. To influence decision on whether client goes through the whole procedure or priority interventions are required. To determine explanation needed for allaying anxiety and promoting cooperation
3. Availability of appropriate tools	3. For efficiency and effectiveness

## B. Planning



### **Self**

- Establish any communication barriers
- Review procedure



### **Patient**

- Establish rapport
- Involve the patient



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

Assemble and arrange the following items neatly on the table within easy access:

- Patient's file
- Nursing notes and continuation sheets
- Pens
- Risk assessment tool

# C. Implementation

Steps	Rationale
<b>I. Introductory Phase</b>	
1. Assume a relaxed and open sitting position and ask the client/patient and companion if they are comfortable. Inform them the approximate time history taking is likely to take and what is required of them	1. To make the client/patient and companion feel accepted and relaxed and encourage free communication and disclosure of the required information
2. Establish the language of communication	2. To encourage self-expression and facilitate ability to provide information in the language they understand
3. Enquire from the companion(s) the relationship with the client/patient	3. To build confidence with the client and promote disclosure of information
4. Start with non-threatening, specific questions and proceed to open ended questions	4. To allow the client/patient to be acquainted with the service provider
<b>II. Working Phase</b>	
1. Observe guidelines on interviewing techniques	1. For purposes of collecting complete and relevant data.
2. Observe the client/patient for nonverbal communication and validate them	2. To reveal information that the client/patient may not express verbally and may provide a clue on the accuracy and reliability of the information provided
3. Ask open ended questions and use simple language	3. To enable the patient to gradually open up and give the relevant information

Steps	Rationale
<p>4. Obtain, interpret and record information on the following;</p> <ul style="list-style-type: none"> <li>• Identifying data/Biodata</li> <li>• Chief complaint</li> <li>• History of present illness (onset, location, duration, character, aggravating factors, relieving factors, severity, any treatments received and meaning of symptoms to the patient)</li> <li>• Ask patient questions about current health status systematically as follows; general health, cardiovascular system, respiratory system, gastrointestinal system, reproductive system, urinary system, nervous system and musculoskeletal system</li> <li>• History of past illness (psychiatric, medical, surgical, obstetrics for women)</li> <li>• Personal history (prenatal, infancy, childhood, adolescence, adulthood, education, religious, occupation/work record, socio-cultural, sexual and marital relationships)</li> <li>• Family history</li> <li>• Social history e.g. alcohol use etc</li> </ul> <p><b>NB:</b> The user of this manual is advised to appropriately refer to the Health Assessment textbooks for additional guidance on History taking and physical assessment</p>	<p>4. To determine baseline data; determine actual and potential problems, as well as their causes; To facilitate focused physical examination, diagnostic investigations and subsequent evaluations</p>
<p>5. Conduct risk assessment using the tool in appendix 2</p>	<p>5. To promote vigilance in identifying risks and ways in which risks can be minimized</p>
<b>III. Termination Phase</b>	
<p>1. Explain that the information required for the time being has been obtained, however if more is required then the client/patient may be informed</p>	<p>1. To communicate to the patient and companion the end of the history taking session</p>
<p>2. Enquire if the client/patient and companion(s) have questions to ask</p>	<p>2. To encourage the patient/companion to clarify their issues of concern</p>
<p>3. Thank the client/patient and companion(s) and release them</p>	<p>3. To acknowledge cooperation</p>
<p>4. Keep the patient's notes and files in respective cabinets</p>	<p>4. For safe custody, confidentiality and easy access of patient's notes</p>
<p>5. Store unused stationery in the right place</p>	<p>5. For safety and subsequent use</p>

## D. Evaluation

Evaluate	Rationale
1. Quality of history obtained	1. To determine its adequacy for interventions
2. Patient's reaction during the procedure	2. To determine adequacy of the patient's preparation and if the patient's state may have influenced quality of data
3. Consistency of subjective with objective data	3. for the procedure and validation of data for accurate diagnosis
4. Consistency of the risk indicators with risk assessment findings.	4. To validate existence of the risk

## E. Documentation

**Record:**

- Date and time history was obtained
- Full history obtained
- Specific issues of concern to the patient and companion
- Areas of history that require further clarification
- Risk assessment findings
- Name and signature

■ ■ ■

## 1.1-3: Physical Examination

### Definition:

The systematic review of the body systems and structures by use of inspection, palpation, percussion and auscultation techniques.

### Purpose:

- To establish database for the patient's normal abilities, determine risk factors for dysfunction and current pathology.
- Formulate nursing diagnosis on current health state and plan for appropriate interventions

### Indications:

- Any client /patient on routine health assessment
- On admission
- Pre-requisite for planning patient care

## A. Assessment

Assess	Rationale
1. Client's/ patient's understanding of the procedure	1. To determine client's readiness and teaching needs to allay anxiety
2. Patient's readiness to undergo physical examination	2. To determine psychological preparedness, and identify needs that require immediate interventions
3. Ability to follow instructions and change positions as required	3. To determine if assistance may be required
4. Equipment required for the examination	4. To determine their availability and functioning state
5. Patient's socio-cultural, religious beliefs regarding physical examination	5. To establish rapport and prepare the patient for the procedure; prevents infringing on patient's autonomy and right to choices

## B. Planning



### Self

- Review knowledge of anatomy and physiology of the various systems so as to be able to detect abnormalities
- Review patient's history
- Review procedure and diverse socio-cultural awareness

- Familiarize self with the operation of the equipment/instruments to be used in the examination
- Wash and dry hands



## Patient

- Establish rapport
- Explain the need, risks and benefits of the procedure to the client/patient and obtain consent
- Explain the role of the client/patient during and after the procedure
- Ask the client/patient to empty the bladder and bowels as necessary



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space
- Ensure all required equipment is clean and within reach in the room.
- Ensure that the examination couch is neatly made and the gown is on a stool by the coach



## Requirements

Assemble and arrange the following items:

### Adults;

- Sphygmomanometer (age appropriate)
- Stethoscope
- Torch with dry cells
- Spatula in a receiver
- Tendon hammer
- Pins
- Tape measure
- Weighing scale (age appropriate)
- Thermometer
- Watch
- Record charts and cards
- Examination couch
- Blanket or draw sheets
- Cotton wool / gauze swabs in a receiver
- Examination gown
- Ophthalmoscope
- Otoscope
- Examination gloves

### Child/Infant;

In addition to the above requirements:

- Child health card
- Child friendly environment
- Secure parental involvement

**NB:** In infants and children, head to toe examination does not apply. There is need to begin with less intrusive (threatening) examination and end with the threatening ones. Allow children to familiarize with examination equipment and explain each step, using age appropriate communication skills to enhance cooperation.

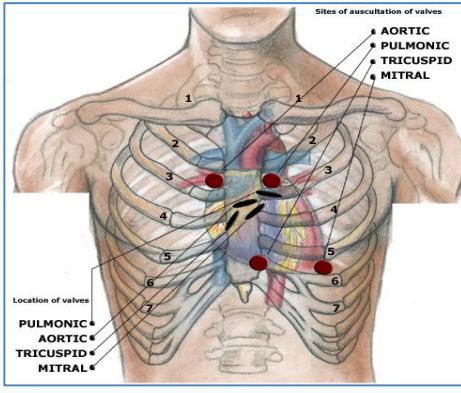
**NB:** For both children and adults, only expose the part being examined to maintain the patient's dignity and prevent loss of heat.

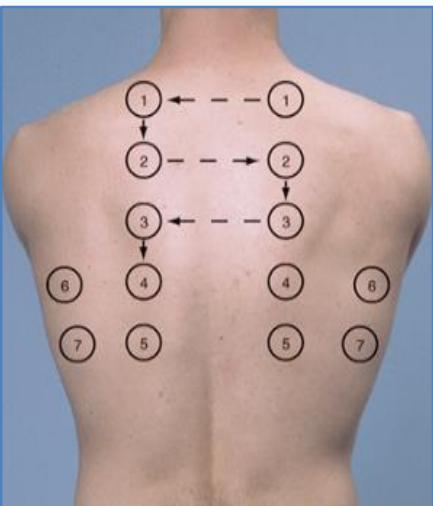
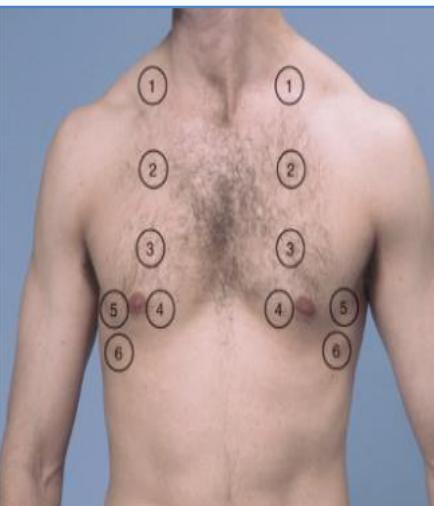
## C. Implementation

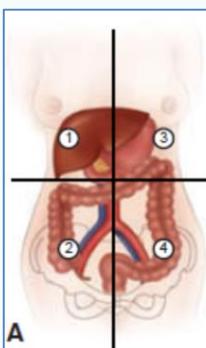
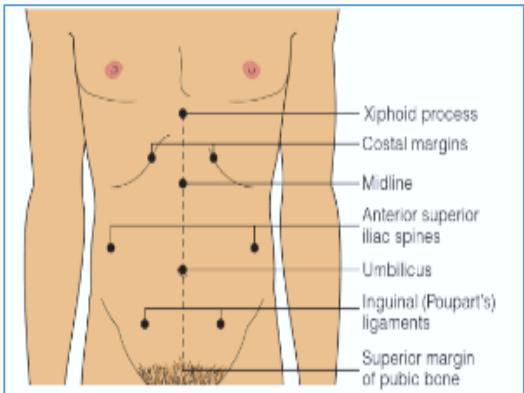
Steps	Rationale
1. Assist the patient to change into a gown and position the client/patient appropriately	1. To facilitate accessibility to parts being examined
2. Wash and dry hands and put on clean gloves	2. For infection prevention and control
3. Cover the client's/patient's body parts not included in the specific examination	3. To ensure privacy and maintain dignity of the patient
4. Examine the client's/patient's general appearance to include <ul style="list-style-type: none"> <li>• State of health</li> <li>• Nutritional status</li> <li>• Behavior</li> <li>• Mental state – alertness</li> <li>• Speech</li> <li>• Gait</li> <li>• Hygiene</li> </ul>	4. To provide a general impression about the client/patient
5. Take the weight of the client/patient	5. To obtain baseline data
6. Carry out head to toe assessment as follows  <b>NB:</b> For more information, readers are advised to refer to health assessment textbooks. Method of assessment follows; inspection, palpation, percussion and auscultation, variance occurs during abdominal examination	6. Rationale for examination is <ul style="list-style-type: none"> <li>• To obtain baseline data on the surface integumentary system, and underlying organs</li> <li>• To corroborate findings with subjective and diagnostic data</li> <li>• To compare findings against standard anatomical, biochemical and physiological parameters</li> <li>• Determine existence of existing and potential problems</li> <li>• Make diagnosis and plan for interventions</li> </ul>

Steps	Rationale
<b>Head and Neck</b>	
<b>1. Hair and scalp</b> <ul style="list-style-type: none"> <li>• Inspect the hair for color, texture, growth, distribution, scales, lumps, nevi or other lesions</li> </ul>	1. To identify any abnormalities and institute appropriate interventions
<b>2. Skull</b> <ul style="list-style-type: none"> <li>• Inspect <ul style="list-style-type: none"> <li><input type="checkbox"/> For size, shape, and symmetry</li> <li><input type="checkbox"/> Rash and scars</li> <li><input type="checkbox"/> Bruises</li> <li><input type="checkbox"/> nits and other signs of infestations, cleanliness</li> <li><input type="checkbox"/> For children (below 5 years) measure head circumference and check the state of fontanelles (<math>\leq 18</math> months old). Palpate for: <ul style="list-style-type: none"> <li><input type="checkbox"/> Any deformities</li> <li><input type="checkbox"/> depressions</li> <li><input type="checkbox"/> Mass/lumps</li> <li><input type="checkbox"/> Tenderness</li> </ul> </li> </ul> </li> </ul>	2. To identify any abnormalities, bruises or infestation and take intervention measures
<b>3. Face</b> <ul style="list-style-type: none"> <li>• Facial expression, involuntary muscle movements, shape, swellings and symmetry</li> </ul>	3. To establish general physical and mental status
<b>4. Eyes</b> <ul style="list-style-type: none"> <li>• Inspect for position, alignment and symmetry</li> <li>• Conjunctiva – colour</li> <li>• Sclera, cornea</li> </ul>	4. To detect presence of anomalies like squints, determine underlying condition such as anaemia if palor is present or liver conditions in yellow colouration
<input type="checkbox"/> <b>Eyebrows:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Inspect for noting their quantity, distribution and any scaliness</li> </ul>	<input type="checkbox"/> To identify any abnormalities and institute appropriate interventions
<input type="checkbox"/> <b>Eyelids:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Inspect for position, presence of edema, lesions,</li> <li><input type="checkbox"/> condition and direction of the eyelashes</li> <li><input type="checkbox"/> adequacy with eyelids close</li> </ul>	<input type="checkbox"/> Oedema of the eyelids may be a sign of other underlying conditions of the kidneys. Conditions such as epiblepharon (inverted eyelashes) may be a sign of down syndrome.
<input type="checkbox"/> <b>Lacrimal apparatus:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Inspect the region of the lacrimal gland and lacrimal sac for swelling</li> <li><input type="checkbox"/> Inspect for excessive tearing or dryness of the eye</li> </ul>	<input type="checkbox"/> Dryness or excessive tearing may lead to eye problems
<input type="checkbox"/> <b>Cornea and lens:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> inspect for opacities in the lens</li> </ul>	<input type="checkbox"/> Opacity of the lens can cause trouble with vision
<input type="checkbox"/> <b>Pupils:</b> Inspect for: <ul style="list-style-type: none"> <li><input type="checkbox"/> Pupillary size, shape, and accommodation</li> <li><input type="checkbox"/> intracranial pressure</li> <li><input type="checkbox"/> Symmetry</li> </ul>	<input type="checkbox"/> Irregular constricted pupils may be due to inflammation of the iris

Steps	Rationale
<ul style="list-style-type: none"> <li><input type="checkbox"/> Reaction to light</li> <li><input type="checkbox"/> Coordination of eye movements</li> <li><input type="checkbox"/> Convergence test</li> <li>• Screen visual acuity</li> </ul>	<ul style="list-style-type: none"> <li>• To determine visual inabilities</li> </ul>
<p><b>5. Nose</b></p> <ul style="list-style-type: none"> <li>• Anterior and inferior surface: Use speculum/otoscope appropriately to inspect:           <ul style="list-style-type: none"> <li><input type="checkbox"/> Nasal septum (position and perforation)</li> <li><input type="checkbox"/> Symmetry</li> <li><input type="checkbox"/> Deformity</li> <li><input type="checkbox"/> Size</li> <li><input type="checkbox"/> Flaring</li> <li><input type="checkbox"/> Discharge</li> <li><input type="checkbox"/> Nasal cavity obstruction</li> <li><input type="checkbox"/> Mucous membrane for moisture and colour</li> </ul> </li> <li>• Palpate frontal and maxillary sinuses for tenderness</li> </ul>	<p>5. To detect any defect, inabilities like anosmia or infections and take appropriate action</p>
<p><b>6. Ears</b></p> <ul style="list-style-type: none"> <li>• Inspect Location and Symmetry</li> <li>• Inspect shape and size</li> <li>• Assess for Hearing</li> <li>• Inspect external meatus for redness, discharge, bleeding, swelling foreign body</li> <li>• Inspect whether the tympanic membranes are intact</li> <li>• Palpate for tenderness</li> </ul>	<p>6. To detect any infections, anomalies or hearing inabilities and take appropriate intervention measures</p>
<p><b>7. The Mouth</b></p> <ul style="list-style-type: none"> <li>• Check colour condition, lesions oduor</li> <li>• Inspect the lips for colour and moisture</li> <li>• Inspect for state of the teeth alignment complete dental formula and dental caries</li> </ul>	<p>7. To detect any abnormalities and determine plan of care</p>
<p><b>8. Neck - anterior, lateral and posterior aspects</b></p> <ul style="list-style-type: none"> <li>• Location</li> <li>• Thyroid/parathyroid gland</li> <li>• Cervical lymph nodes</li> <li>• Nuchal rigidity</li> <li>• Symmetry, swellings, scars</li> <li>• Enlargement of glands</li> <li>• Range of Motion (ROM)</li> <li>• Trachea</li> </ul>	<p>8. To establish presence of any masses or scars and determine patient's need for intervention</p>
<b>Chest</b>	

Steps	Rationale
<p>1. <b>Inspect Chest - anterior, lateral and posterior aspects for posture, shape and symmetry of expansion</b></p> <ul style="list-style-type: none"> <li>• Inspect and palpate breast</li> <li>• Auscultate lungs</li> <li>• Apical pulse with stethoscope –rate rhythm clarity of sound</li> <li>• No bruits</li> </ul>	<ul style="list-style-type: none"> <li>1. To identify any abnormalities that may lead to respiratory comprise</li> <li>• For early diagnosis of breast problems and taking of appropriate measures</li> <li>• To detect abnormal breath sounds such as rales, tinkling or rhonchi and determine interventions</li> </ul>
<b>Heart</b>	
1. Auscultate heart	1. To determine the heart's ability and efficiency to function as a pump
2. Palpate all peripheral pulses	2. To establish the functionality of the cardiac activity, determine their presence/absence
3. With the patient in supine position at 45 degrees or higher, inspect jugular veins bilaterally	3. To rule out distension and any other abnormalities
4. Palpate and auscultate the carotid arteries one after another	4. To rule out carotid bruits
5. Auscultate the heart sounds. Summation gallop, opening snap, murmur, ventricular arrhythmias, ejection click, mid systolic click, mediastinal crunch and pericardial friction rub	5. To provide useful clues on underlying cardiac and vulvular diseases
6. Auscultate client's/patient's blood pressure ( <b>Refer to Procedure 1.1-1, Measuring Vital Signs</b> )	6. To determine patient's condition and helps in planning of care
	
<p><b>Respiratory</b></p>	
<p>1. Inspect thoracic cage, note shape and configuration e.g. barrel, funnel and pigeon chest, shape, movement of the posterior chest, symmetry, deformities, retraction of the lower interspaces, impairment in respiratory</p>	<ul style="list-style-type: none"> <li>1. To identify presence of factors that would alter respirations and ensure correct interpretation of data</li> </ul>

Steps	Rationale
movement, skin for colour and condition	
2. Assess if patient is using accessory muscles of breathing	2. To rule out signs of tissue hypoxia
3. Perform light and deep palpation of the anterior, lateral and posterior chest: perform tactile palpation	3. To determine the existence of masses or tenderness or deformities
4. Assess for anxiety, irritability and restlessness	4. To establish the patient's pressure, determine baseline data upon which further evaluations shall be compared
5. Percuss anterior and posterior chest wall	5. To establish changes in the lung air space structure
<b>6. Auscultate;</b> <ul style="list-style-type: none"> <li>• Instruct the patient to breathe through the mouth a little deeper than usual as you auscultate</li> <li>• The lung fields over the anterior chest from the apices in the supraclavicular down to the 6th rib</li> </ul>	6. To evaluate the presence and quality of breath sounds
<ul style="list-style-type: none"> <li>• Then the lung fields over the posterior chest from the apices along the 7th cervical bone down to the 6th rib</li> <li>• Progress from side to side as you move downwards and listen to one full respiration in each location</li> </ul>	<ul style="list-style-type: none"> <li>• To determine whether the underlying tissues are filled with air, fluid or solid material</li> <li>• To identify the location of any pathological process</li> </ul>
7. Auscultate comparing symmetrical points on each side of the anterior and posterior chest	7. To establish whether both lungs are functioning normally or identify abnormalities on either sides
	
Figure 1.6 Locations for Auscultation and Percussion (Adapted from Ome, 2014)	

Steps	Rationale
<b>Abdominal Exam</b>	
<p>1. Inspect the abdomen for contour, Symmetry masses, colour, pigmentation, Striae scars, moisture, scaliness, position and state of umbilicus, pulsation, movements</p>	<p>1. To determine signs of starvation, ascites, umbilical hernia, abdominal tumours, inflammation, liver diseases, and dehydration</p>
<p>2. Auscultate the abdomen for Bowel sounds and Vascular sounds</p>	<p>2. To determine the presence of hyper or hypo or absence of peristaltic movements</p>
 <p><b>Four quadrants</b></p> <ul style="list-style-type: none"> <li>1 - right upper quadrant (RUQ)</li> <li>2 - right lower quadrant (RLQ)</li> <li>3 - left upper quadrant (LUQ)</li> <li>4 - left lower quadrant (LLQ)</li> </ul>	
<p>Figure 1.7a A) Division of the Abdomen into 4 Quadrants Adapted from Pocket guide for Nursing Health Assessment (2011)</p>	
	<p>To determine the presence of asystolic bruit which is indicative of stenosis or occlusion of an artery, Friction rubs in liver tumor or abscess, gonococcal infection around liver or splenic infection</p>
<p>3. Palpate surface and deep areas(light and deep palpation)</p>	<p>3. To determine the amount and distribution of gas, identify possible masses that are solid or liquid filled, estimate the size of the liver and spleen, and determine ascites</p>
<p>4. Palpate surface and deep areas(light and deep palpation)</p> 	<p>4. To determine presence of or rule out Muscle guarding, mass, tenderness, Involuntary rigidity indicates acute peritoneal inflammation</p> <p>To determine the state of the normally palpable structure: xiphoid process, normal liver edge, right kidney, pulsatile aorta, rectus muscles, sacral promontory, cecum ascending colon, sigmoid colon, uterus, full bladder</p>
<p>Figure 1.7b Landmarks Commonly Used to Identify Abdominal Areas Adapted from The Nursing Health Assessment (2016)</p>	

Steps	Rationale
<b>Female genitalia</b>	
1. Inspect for scars, colour, discharge, abnormal growths, swellings	1. To determine any irritation, signs of infection cracks, fissure or enlarged vessels
2. Palpate the inguinal glands for tenderness, swelling and enlargement	
<b>Male genitalia</b>	
1. Inspect the scrotum, penis and urethral opening for lesions, discharge, growths, urethral meatus	1. To determine any irritation, signs of infection cracks, fissure, enlarged vessels, undescended testis
2. Palpate scrotum and penis for tenderness, lymph node enlargement, status of testes	
<b>Lower limbs</b>	
1. Equality, deformities, oedema, varicose veins, reflexes, joint movements, muscle power, tone, function sensation	1. To determine any signs of asymmetry, muscle wasting, fasciculations, clonus, neuropathies and other abnormalities
<b>Clearing</b>	
1. Help patient to dress up	1. To promote comfort
2. Remove gloves and wash hands	2. For infection prevention and control
3. Give a detailed feed back to the patient or child and parent and involve them in the plan of care	3. To secure the patient's involvement in their care
4. Thank the client/patient for his/her role in the examination and leave him/her comfortable	4. To acknowledge cooperation

## D. Evaluation

Evaluate	Rationale
1. Quality of baseline data obtained about the health status of the client/patient	1. To determine appropriate interventions and if further examination is necessary
2. Whether the physical examination supplements, confirms or contradicts the findings of the nursing history	2. To confirm success of the physical examination
3. Planned nursing/clinical interventions based on the information provided	3. To establish appropriateness of the nursing interventions in resolving the patient's identified pathophysiology problems

## E. Documentation

### Record:

- Date and time when examination was done
- Detailed patient demographic data
- Findings and plan of action
- Name and signature

■ ■ ■

## 1.1-4: Specimen Collection

### **Definition:**

The procedure of obtaining the required amount of body fluids/tissue for laboratory examination.

### **Purpose:**

To provide a specimen for laboratory analysis so as to: confirm clinical diagnosis, monitor therapeutic levels of medications, monitor progress of a client/patient and plan interventions.

### **Indications:**

For diagnostic purposes

- Blood disorders e.g. anaemia
- Patients requiring close monitoring of medication levels
- Septicemia
- In patients suspected to have cancer
- When culture and sensitivity is required
- Patients suffering from infections in which the causative organism needs to be identified
- Patients in whom endocrine disorders are suspected
- Any other systemic disorder

### **Types of Sample Specimen:**

- Blood
- Urine
- Stool
- Pus
- Sputum
- Vomitus
- Skin scrapes
- Cerebral spinal Fluid

## 1.1-4.1: Blood Specimen Collection

### Definition:

The process of obtaining a sample of blood from an artery or vein for diagnostic tests.

### Purpose:

- For diagnosis of blood disorders and other diseases
- To establish blood compatibility prior to transfusion
- For toxicology tests

### Indications:

- Blood disorders
- Pre and post-operative preparation
- When investigations are required for any systemic disorders
- For forensic studies

## A. Assessment

Assess	Rationale
1. General condition of client/patient	1. To establish suitability for the procedure and any assistance needed
2. Client's understanding of the need for blood collection	2. To determine education needs, allay anxiety and promote cooperation
3. Client's/patient's possible risk associated with venous/arterial puncture	3. To plan for anticipated untoward reactions and identify contraindications to the procedure
4. Equipment required	4. To ascertain availability and promote efficiency and effectiveness in specimen collection
5. Appropriateness of the working environment	5. For the client's/patient's and nurse's comfort and safety

## B. Planning



### Self

- Wash hands
- Assemble equipment and label the specimen container/bottle
- Identify correct sample specimen bottles



■ ■ ■

### Patient

- Explain the procedure to the client/patient and obtain consent



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



### Requirements

A tray containing the following:

- Antiseptic solution according to institution policy
- Sterile pack
- Receiver for the used swabs
- A tourniquet
- Assorted specimen bottles (depending on the investigation required)
- A pair of scissors
- Laboratory request forms
- Clean gloves
- 2 blood slides
- Sterile lancet /needle
- Syringes (5ml, 10ml, 20ml)
- A vacutainer
- Labels
- Sharps container
- Adhesive tape

## C. Implementation

Steps	Rationale
1. Identify the client/patient and explain procedure	1. To ensure right procedure to the right client/patient, allay anxiety and promote understanding and cooperation
2. Take equipment to the bedside/procedure room	2. For easy accessibility; to facilitate efficiency and effectiveness in performing the procedure
3. Screen/draw curtains	3. To provide privacy
4. Position and reassure the client/patient	4. To allow easy access /visualization and for co-operation
5. Wash dry hands and don gloves	5. For infection prevention and control

Steps	Rationale
6. Clean the venous/artery puncture site with an antiseptic solution using a circular motion and allow drying	6. To avoid introducing microorganism into the blood system during venipuncture
7. Apply the tourniquet firmly, 2-3 inches above the site selected and then locate the vein/artery	7. For adequate filling and easier visibility of the selected vein/artery
8. Ask the client/patient to keep the fist clenched	8. To facilitate distension of the selected blood vessel
9. Mount the syringe with an appropriately sized needle	9. To prevent injury, haemolysis and avoid dislodging during the procedure
10. Access the site with a needle and prick the vein/artery, then withdraw required amount of blood (if using vacutainer, continue until it fills)	10. For adequate sample collection
11. For arterial blood sample; access the artery between 45 to 90 degrees, heparinize the syringe prior to specimen collection	11. To allow adequate blood flow into the syringe
12. Release tourniquet	12. To prevent bleeding and restore tissue perfusion
13. Remove the needle, then apply pressure on the site using sterile swab for approximately 2-5 minutes	13. To prevent bleeding after the procedure
14. Dispose the needle and syringe in the sharp container	14. To prevent needle prick injuries and promote safety for clients/ patients and staff
15. Label blood specimen container at collection site	15. To ensure right identification
16. Remove gloves and dispose appropriately, wash hands	16. For infection prevention and control
17. Position the client/patient comfortably and unscreen the bed	17. To promote comfort of the client/patient
18. Send the specimen sample to the laboratory immediately	18. To ensure timely processing and delivery of results
19. Inform the client when the result will be ready/is to be collected	19. To prepare the client/patient on waiting period and allow for planning to collect results

## D. Evaluation

Evaluate	Rationale
1. Client's cooperation during the procedure	1. To determine effectiveness of procedure

Evaluate	Rationale
2. For any bleeding	2. To identify injury /blood disorders and intervene appropriately
3. Characteristics of the blood sample	3. To confirm adequacy of specimen collected

## E. Documentation

### Record:

- Date and time sample obtained
- Identification data on the sample
- Characteristics of the sample
- Whether or not the blood sample was obtained and sent to laboratory
- Any undesirable event related to the procedure

■ ■ ■

## 1.1-4.2: Urine Specimen Collection

### Definition:

The process of obtaining a urine sample from the urinary bladder either directly from the urethra or by use of urinary catheterization.

### Purpose:

To analyse urine sample for clinical judgement and monitor therapeutic interventions.

### Indications:

- For routine medical examination
- Renal failure
- Diabetes mellitus
- Infections e.g. Sexually transmitted infections and Urinary Tract Infection
- Dehydration
- When pregnancy is suspected
- Analysis of substances of abuse
- And others depending on the patient's condition demands

## A. Assessment

Assess	Rationale
1. General condition of the client/patient	1. To establish suitability for the procedure and any assistance needed
2. Client's understanding of the need for urine collection	2. To determine education needs, allay anxiety and promote cooperation
3. Client's/patient's possible risk associated with urine collection/catheterization	3. To plan for anticipated untoward reactions and identify contraindications to the procedure
4. Equipment required	4. To ascertain availability and promote efficiency and effectiveness in specimen collection
5. Appropriateness of the working environment	5. For the client's/patient's and nurse's comfort and safety

## B. Planning



### Self

- Wash hands
- Assemble equipment and label the specimen container/bottle
- Assistance needed



## Patient

- Identify the client/patient
- Explain the procedure to the client/patient and obtain informed consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space
- Safe and conducive for the procedure



## Requirements

A tray containing the following:

- Appropriate specimen bottles/containers
- Laboratory request forms
- Urine measuring jug
- Syringes/needles
- Antiseptic solution according to institutional policy
- Dry swabs
- 24-hour urine collection bottle
- Gloves
- Labels
- Toilet paper
- Soap/ hand sanitizer
- Funnel
- Urine collection bag (for children)
- Sharps container
- Receiver for the dirty swabs
- Clamps (artery forceps)
- Bedpan

## C. Implementation

Steps	Rationale
<b>I. Routine Urine Collection</b>	
1. If the client is able to give the specimen independently , then instruct him/her to: <ol style="list-style-type: none"> <li>a. Pass approximately 30mls of urine directly into the specimen container provided</li> <li>b. Pass the remaining into the toilet or bedpan</li> </ol>	1. To ensure right procedure to the right client/patient, allay anxiety and promote understanding and cooperation <ol style="list-style-type: none"> <li>a. To obtain adequate sample</li> <li>b. For comfort of client and to promote personal hygiene</li> </ol>

Steps	Rationale
c. Wipe vulva/ penis with toilet paper then wash and dry hands	c. For infection prevention and control
<p>2. If the client/patient requires assistance:</p> <ul style="list-style-type: none"> <li>a. Wash, dry hands and don gloves.</li> <li>b. Hold bottle/urine bag for the client/patient to pass urine directly into it</li> <li>c. Allow the rest of the urine to go into a bedpan</li> <li>d. Dry the vulva/penis with toilet paper</li> <li>e. Properly dispose urine from the bedpan</li> </ul>	<ul style="list-style-type: none"> <li>a. For infection prevention and control</li> <li>b. To allow flow of urine into the container and facilitate collection of specimen</li> <li>c. To empty the bladder and for client's/patient's comfort</li> <li>d. For comfort of the client/patient and to promote personal hygiene</li> <li>e. To prevent environmental contamination</li> </ul>
<p>3. If the client/patient has indwelling catheter:</p> <ul style="list-style-type: none"> <li>a. Wash, dry hands and don gloves</li> <li>b. Mount needle to syringe</li> <li>c. Clamp drainage tube</li> <li>d. Using antiseptic swab, clean the entire port</li> <li>e. Insert the needle at about 45 degrees just above where catheter is attached to drainage port. (Open method may also be used)</li> </ul>	<ul style="list-style-type: none"> <li>a. For infection prevention and control</li> <li>b. To prepare for the procedure</li> <li>c. To stop urine flow</li> <li>d. For infection prevention and control</li> <li>e. To prevent accidental balloon puncture and reduce contamination</li> </ul>
<ul style="list-style-type: none"> <li>f. Draw urine 3mls for culture or 20mls for routine urinalysis</li> <li>g. Transfer urine into the appropriate container and close lid</li> <li>h. Discard needle and syringe into sharp container</li> <li>i. Unclamp the catheter</li> <li>j. Remove and discard gloves carefully and wash hands</li> </ul>	<ul style="list-style-type: none"> <li>f. To obtain adequate and required sample</li> <li>g. To prevent sample contamination and spillage</li> <li>h. To minimize needle prick injury and for environmental safety</li> <li>i. To facilitate urine drainage</li> <li>j. For infection prevention and control</li> </ul>
<b>II. Mid-stream Specimen</b>	
1. If the client/patient is able to give specimen independently, instruct the patient to:	2. To facilitate collection of quality specimen

Steps	Rationale
a. Open specimen bottle without touching inside of lid	a. To prevent contamination of specimen
b. Initiate urine stream and allow first flow into toilet /bedpan	b. To allow first flow of urine that may be contaminated to drain
c. Pass the mid-stream urine into the specimen bottle/container	c. To ensure collection of non-contaminated midstream specimen into the container
d. Pass the rest of urine into toilet /bedpan	d. To ensure the residual urine is emptied without contaminating the specimen
e. Wipe and dry vulva/penis with toilet paper	e. To promote comfort and personal hygiene of the client/patient
2. If the client/patient needs assistance, follow the above steps, with nurse collecting the specimen	3. To obtain the required sample specimen
3. If the client/patient has an indwelling catheter, clamp catheter for 30minutes. Follow instruction as for routine urine collection of specimen.  <b>NB:</b> If catheterization is required to obtain specimen, follow the steps in catheterization procedure.	4. To allow fresh urine to collect in the bladder
<b>III. 12/24 hour Urine Specimen collection</b>	
1. Explain procedure to the client/patient and provide specimen bottle/container	1. To allay anxiety and promote client/patient cooperation
2. Instruct the client/patient to void initial urine into toilet	2. To empty the urinary bladder and ensure that only urine formed after the commencement of collection time is obtained
3. All subsequent specimen collected should be passed into urine jug before emptying into specimen bottle/container	3. To prevent spilling of urine
4. The last specimen after 12/24 hours should be collected	4. For accuracy of specimen collection and ensure accurate results
5. Label, send urine specimen to laboratory within 15-20 minutes of collection	5. For proper identification of the sample and accuracy of results

## D. Evaluation

Evaluate	Rationale
1. Client's/patient's compliance with the instructions	1. To ensure accuracy of specimen collection
2. Characteristic of specimen	2. To facilitate interventions before laboratory results are available
3. Appropriateness of the collecting container and storage temperatures	3. To ensure specimens are well preserved

## E. Documentation

**Record:**

- Date and time sample obtained
- Amount and characteristics of urine obtained
- Identification data on the sample
- Whether or not urine sample was obtained and sent to laboratory
- Any undesirable events during the procedure

■ ■ ■

### 1.1-4.3: Stool Specimen Collection

**Definition:**

The process of obtaining a stool sample from the rectum or colostomy.

**Purpose:**

To analyse/test the specimen for diagnostic purposes.

**Indications:**

- Gastrointestinal disorders e.g. Infective conditions, Worm infestations, Peptic Ulcer disease

## A. Assessment

Assess	Rationale
1. The client's/patient's general condition	1. To establish suitability for the procedure and any assistance needed
2. The client's/patient's understanding of the need for stool collection	2. To determine education needs, allay anxiety and promote cooperation
3. The client's/patient's possible risk associated with obtaining stool	3. To plan for anticipated untoward reactions and identify contraindications to the procedure
4. The equipment required/if any assistance is needed	4. To ascertain availability and promote efficiency and effectiveness in specimen collection
5. Appropriateness of the working environment	5. For client's/patient's and nurse's comfort and safety

## B. Planning



**Self**

- Wash hands
- Assemble equipment and label the specimen container/bottle



**Patient**

- Explain the procedure to the client/patient and obtain consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space
- Safe and conducive for the procedure



## Requirements

A tray containing the following:

- Stool specimen container
- Wooden spatula
- Laboratory request forms
- Clean Gloves
- Air freshener
- Toilet paper
- Bedpan (if required)

## C. Implementation

Steps	Rationale
1. Explain procedure to the client/patient and obtain consent	1. To allay anxiety and gain cooperation; prevents medical-legal litigations
2. For the independent client, give the stool container and the following instructions	2. To facilitate collection of quality specimen
a. Pass urine first into the toilet /bedpan	a. To avoid stool contamination with urine
b. Place tissue paper on toilet seat /floor and pass stool	b. For easy collection of sample
c. Using spatula, scoop stool (approximately 1 teaspoonful or to fill 1/3 of specimen container)	c. To achieve the adequate amount of specimen required for investigation
d. Cover the specimen container	d. To avoid specimen and environmental contamination
3. For a client requiring assistance, wash dry hands and don gloves. Follow the steps mentioned above	3. For infection prevention and control
4. If a client has loose motion, hold the bed pan directly below the anus to obtain the stool then transfer required sample to specimen container	4. For specimen collection; prevent environmental contamination and spillage

Steps	Rationale
5. Discard the remaining stool into the toilet, spatula into pedal bin then clear the bedpan according to procedure. Remove gloves and wash hands	5. For proper disposal, prevent environmental contamination and for infection prevention and control
6. Label and send the specimen to the laboratory immediately	6. For accurate identification and timely results

## D. Evaluation

Evaluate	Rationale
1. Client's/patient's cooperation with stool collection	1. To determine effectiveness of the procedure
2. Characteristics of specimen	2. To facilitate interventions before laboratory results are available

## E. Documentation

### Record:

- Date and time sample obtained
  - Identification data on the sample
  - Characteristics of the sample
  - Whether or not stool sample was obtained and sent to laboratory
- ■ ■

## 1.1-4.4: Sputum Specimen Collection

### Definition:

Process of obtaining a sample of sputum from the respiratory tract.

### Purpose:

To facilitate the analysis of the specimen for diagnosis and treatment of respiratory conditions.

### Indications:

- Respiratory infections e.g. pneumonia, Pulmonary tuberculosis.

## A. Assessment

Assess	Rationale
1. The client's/patient's general condition	1. To determine any assistance needed
2. Client's/patient's understanding of the need for sputum collection	2. To fill in any knowledge gaps and promote cooperation
3. Client's/patient's possible risks associated with sputum collection/deep breathing exercise	3. To identify contraindications to the procedure
4. Client/patient's ability to cough and expectorate	4. To ensure adequate coughing which is essential for expectoration and aids in specimen collection
5. Time of last meal taken by client/patient (Specimen will be collected 2 hours post feeds)	5. To avoid regurgitation and vomiting therefore contamination of the specimen
6. Appropriateness of the working environment	6. For privacy, safety and comfort to both the nurse and the client

## B. Planning



### Self

- Wash and dry hands
- Assemble equipment and label the specimen container/bottle
- Assistance needed



### Patient

- Identify client/patient
- Explain the procedure to the client/patient and obtain consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A tray containing the following:

- Sputum mug
- Specimen container
- Laboratory request forms
- Clean Gloves
- Face Mask/ Face shield
- Paper towel
- Nasogastric tube
- Syringes, 20cc/50cc

## C. Implementation

Steps	Rationale
1. Take equipment to the bedside	1. For easy accessibility to the equipment
2. Screen the bed /draw curtains	2. To promote physical privacy
3. Explain procedure to the client/patient	3. To allay anxiety and gain co-operation
4. Wash, dry hands and don gloves and face mask/shield	4. For infection prevention and control
5. Instruct client to: <ol style="list-style-type: none"> <li>Take 3-4 deep breaths</li> </ol>	5. To help: <ol style="list-style-type: none"> <li>Open airway, loosen secretions and stimulate cough reflexes</li> </ol>
6. Cough and expectorate after full inhalation	b. Promote coughing up of secretions
c. Spit directly into the specimen container and cover it	c. Avoid contamination
d. If a child, perform gastric lavage early in the morning	d. To obtain sample because the child may not follow instruction. Overnight allows collection of adequate sputum. (Collected in the stomach)
6. Give tissue paper for wiping the mouth	6. To promote hygiene and comfort of the client/patient
7. Remove gloves, dispose appropriately and wash and dry hands	7. For infection prevention and control

<b>Steps</b>	<b>Rationale</b>
8. Position client/patient and remove screens from the bed	8. For comfort and to allow free air circulation
9. Transport/send the specimen sample to the laboratory immediately	9. To avoid delays and ensure timely reporting of results

## D. Evaluation

<b>Evaluate</b>	<b>Rationale</b>
1. Client's cooperation with sputum collection	1. To determine effectiveness of the procedure
2. Characteristics of specimen	2. To facilitate interventions before laboratory results are available

## E. Documentation

**Record:**

- Date and time sample obtained
- Identification data on the sample
- Characteristics of the sample
- Whether or not sputum sample was obtained and sent to laboratory



## 1.1-4.5: Swab Specimen Collection

### Definition:

Process of obtaining a specimen of pus/tissue fluid using a sterile swab/pad.

### Purpose:

To facilitate the analysis of the specimen for diagnostic purposes.

### Indications:

- Infected wounds
- Suppuration of throat
- Infections of the genital tract e.g. Suspected pelvic inflammatory disease
- Infections of the Gastrointestinal Tract: Rectal swab e.g. for Cholera
- Ear/eye infections

## A. Assessment

Assess	Rationale
1. General condition of client/patient.	1. To establish suitability of the procedure
2. Client's/patient's understanding of the need for swab collection	2. To allay anxiety and promote cooperation
3. Client/patient's possible risks associated with obtaining the swab specimen	3. To identify problems/contraindications to the procedure
4. Appropriateness of the working environment	4. For both client's and nurse's safety, privacy and comfort

## B. Planning



### Self

- Wash and dry hands
- Assemble equipment and label the specimen container/bottle
- Assistance needed



### Patient

- Identify client/patient
- Explain the procedure to the client/patient and obtain consent



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation

- Availability of standard operating procedures
- Adequate working space
- Safe and conducive for the procedure



### Requirements

A tray containing the following:

- Sterile swab
- Wooden spatula
- Torch/angle poise lamp
- Surgical mask if necessary
- Sterile speculum for cervix examination
- Sterile dressing pack (if required)
- Warm sterile water
- Gauze swabs
- Specimen container
- Laboratory request forms
- Sterile Gloves
- Trolley for wound dressing (if required)
- Culture media labels
- Water based lubricant e.g. KY Jelly

## C. Implementation

Steps	Rationale
1. Take equipment to the bedside	1. For easy accessibility to the equipment
2. Screen the bed /draw curtains	2. To promote privacy
3. Explain procedure to the client/patient	3. To allay anxiety and gain co-operation
4. Position the client/patient	4. For easy access of the patient during the procedure
5. Wash dry hands and don gloves	5. For infection prevention and control
<b>I. Wound Swab</b>	
1. Follow procedure for wound dressing till exposure of wound ( <b>Refer to Procedure 2.4-1, Wound Dressing</b> )	1. To ensure sterility during exposure of the surface for specimen collection
2. Remove sterile swab and rotate swab on the wound	2. To obtain sufficient sample
3. Replace swab into its container and cover	3. To minimize contamination of the specimen
4. Continue procedure of wound dressing	4. For completeness of the aseptic procedure
<b>II. Throat Swab</b>	
1. Ask the client/patient to open mouth wide and put tongue out	1. To allow visualization of throat
2. Depress tongue slightly with spatula	2. To prevent retraction of the tongue during the procedure

<b>Steps</b>	<b>Rationale</b>
3. Direct light to back of throat and ask the client to say “aaaa”	3. For visualization and elevation of pharynx
4. Gently and firmly sweep over the inflamed throat area with swab taking care not to touch tongue with swab	4. To obtain specimen without contamination.
5. Replace swab into container and cover	5. To minimize contamination of specimen and prevent cross infection
6. Remove gloves, wash and dry hands	6. For infection prevention and control
<b>III. Ear Swab</b>	
1. Gently pull the pinna upward and backwards (for adults) and for children down wards and backwards	1. To straighten external auditory meatus for easy access
2. Insert swab and rotate gently into the extended canal	2. To obtain adequate sample for analysis
3. Replace swab into container	3. To minimize contamination
4. Clean the ear	4. To promote hygiene, comfort and minimize cross infection
5. Remove gloves, dispose appropriately, wash and dry hands	5. For infection prevention and control
6. Position the client/patient and unscreen the bed	6. To enhance the client's comfort after the procedure
7. Transport/send the specimen sample to the laboratory immediately	7. For timely reporting of results
<b>IV. Nose Swab</b>	
1. Moisten the swab with sterile water before inserting into nose	1. For prevention of irritation and facilitates comfort
2. Insert the swab gently into nose and rotate it towards tip of mucosa	2. For accurate and right sample collection
3. Replace swab into container and cover	3. For preservation of specimen for quality analysis
4. Remove gloves, wash and dry hands	4. For infection prevention and control
5. Position and leave the client/patient comfortable	5. For demonstration of respect and promotion of self-esteem
<b>V. High Vaginal Swab</b>	
1. Position the client/patient in lithotomy position	1. For easy visualization and accessibility
2. Direct light source into perineum	2. For visibility of the fornices
3. Wash, dry hands and don gloves	3. For infection prevention and control
4. Warm speculum in sterile water and lubricate	4. For the client's comfort and prevention of traumatic insertion

Steps	Rationale
5. Using non-dominant hand separate labia	5. To expose the vaginal orifice
6. Gently introduce speculum into the vagina	6. For expansion and visualization of the fornix
7. Take swab as high as possible around the fornices	7. To obtain correct sample
8. Replace swab into container and cover	8. To preserve specimen and prevent contamination
9. Remove speculum noting characteristic of discharge	9. To facilitate intervention before laboratory results are available
10. Decontaminate speculum	10. For infection prevention and control
11. Clean the client/patient using the gauze and assist her to a comfortable position	11. To promote client hygiene and comfort
12. Remove gloves, wash and dry hands	12. For infection prevention and control
13. Label and send specimen to laboratory immediately	13. To ensure identification and analysis of quality specimen

## D. Evaluation

Evaluate	Rationale
1. Proper hand washing before and after procedure	1. For prevention of cross infection
2. Client cooperation with high vaginal swab collection	2. To determine effectiveness of procedure
3. Characteristic of discharge/swab specimen	3. To facilitate intervention before laboratory results are available

## E. Documentation

### Record:

- Date and time sample obtained
- Identification data on the sample
- Characteristics of the sample
- Whether or not swab sample was obtained and sent to the laboratory

■ ■ ■

## 1.1-5: Routine Urine Testing in the Ward/Clinic

### **Definition:**

Basic test by the nurse to determine characteristics of urine.

### **Purpose:**

To aid in diagnosis and management of the client/patient.

### **Indications:**

Examples;

- When admitting patients
- Patients suffering from diabetes mellitus
- Suspected renal dysfunction
- Suspected pregnancy
- Suspected urinary tract infections
- During first stage of labour
- During routine antenatal examination

## A. Assessment

Assess	Rationale
1. General condition of the client/patient	1. To establish suitability of the procedure and any assistance needed
2. Client's/patient's understanding of the need for performing urinalysis/urine test	2. To determine education needed, allay anxiety and promote cooperation
3. Client's/patient's possible risk associated with urine test	3. To identify contraindications to the procedure

## B. Planning



### **Self**

- Wash and dry hands
- Assemble equipment and establish assistance needed



### **Patient**

- Explain the procedure to the client/patient to obtain consent



### **Environment**

- Privacy of the room
- Cleanliness of the room

- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space
- Safe and conducive for the procedure



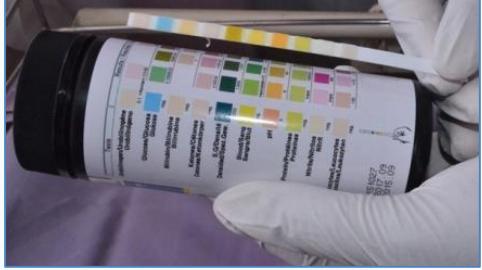
### Requirements

Tray containing:

- Urine jug
- Reagents e.g. dipsticks (urine testing strips)
- Esbach measure and reagent
- Rack with clean test tubes
- Watch with second hand
- Urinometer
- Pen and paper
- Gloves

## C. Implementation

Steps	Rationale
1. Explain procedure to the patient	1. Understanding procedure encourages co-operation
2. Screen bed	2. To provide privacy
3. Wash, dry hands and put on gloves	3. To facilitate infection prevention and control
4. Offer the client a urine jug and ask him/her to pass urine into jug	4. For adequate specimen collection
5. Take the freshly passed specimen to the sluice room	5. To avoid spilling the urine on the floor
6. Reconfirm expiry date of the reagent and follow the manufacturer's instruction	6. To ensure validity and reliability of the results
7. Open the container, remove one strip and immediately close	7. To prevent accidental contaminations of the rest of the strips
8. Note the colour and amount of urine	8. To detect any abnormality
9. Dip the uristrip or urinometer into the urine, tap on the side of the container to remove excess urine and hold the strip horizontally for 60 seconds or according to manufacturer's instructions	9. To allow time for chemical reaction so as to obtain correct readings
10. Compare the strip against the container reference colour codes for the reading.(Fig. 1.8)	10. To interpret the readings

Steps	Rationale
	
<p>Figure 1.8 Testing Urine using Reagent Test Strips (Dipstick)</p>	
<p>11. Discard the strip into clinical waste bin, urine into the sluice basin and decontaminate the jug and clean the surface</p> <p>12. Remove gloves, wash and dry hands</p>	<p>11. To promote ward hygiene, minimize cross infection and ensure the patient's safety</p> <p>12. For infection prevention and control</p>

If the client/patient needs assistance, the nurse obtains the urine specimen from him/her. (**Refer to Procedure 1.1-4.2, Urine Specimen Collection**)

## D. Evaluation

Evaluate	Rationale
<p>1. If the client was able to produce sufficient urine</p>	<p>1. To determine effectiveness of procedure</p>
<p>2. The characteristics of the urine</p>	<p>2. To facilitate clinical judgement and planning for interventions</p>

## E. Documentation

### Record:

- Date and time procedure done
- Characteristics observed
- Findings
- Action taken
- Report on any need for additional consultation for the high risk client



## 1.2: Safety and Infection Prevention and Control

### 1.2-1: Hand Hygiene

**Definition:**

A basic technique by which vigorous brief rubbing together of all surfaces of hands lathered in soap is followed by rinsing under a stream of running water; or use of hand sanitizer without the need of exogenous source of water or hand towel.

**Purpose:**

To remove /reduce dirt, resident and transient microorganisms from hands and prevent transfer of microorganisms from the environment thereby preventing and controlling cross infections.

**Indications:**

Five moments of hand hygiene

- Before touching a patient
- Before a clean/ aseptic procedure
- After body fluid exposure risk
- After touching a patient
- After touching patient surrounding

## A. Assessment

Assess	Rationale
1. Hands for breaks in the skin or cuticles	1. To prevent harboring of microorganisms
2. Appropriate time for washing hands	2. To ensure sufficient time to wash hands and reduce microorganisms
3. The amount of soiling on the hands	3. To determine the method of hand hygiene

## B. Planning



**Self**

- Review hand hygiene procedure
- Remove wrist watch, bracelets and ensure nails are short
- Review your dressing. Push sleeves of the uniform or shirt up above the wrist at mid-forearm level



## Environment

- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Safe and conducive for the procedure



## Requirements

- Running water and liquid soap or hand sanitizer
- Paper/disposable hand towels
- A large sink with non-touch tap at appropriate height with adequate space between the sink and the tap.
- Receptacle for disposing used hand towels



Figure 1.9 Requirements for Hand Hygiene

## C. Implementation

Steps	Rationale
1. Turn on the tap with running water	1. To facilitate hand washing
2. Wet hands and lower forearms by holding under running water. Keep hand and forearms in the down position with elbows straight (if washing after a procedure and vice versa). Avoid splashing water and touching the sides of the sink	2. To allow flow from the least contaminated to the most contaminated areas of the skin. Splashing of water facilitates transfer of microorganisms. Touching of any surface during cleaning contaminates the skin
3. Apply about 5ml (1 teaspoon) of liquid soap. Lather thoroughly. (Fig. 1.10)	3. To facilitate removal of microorganisms. Liquid soap harbors fewer bacteria than bar soap



Figure 1.10 Lather Thoroughly and Rub Hands



Figure 1.11 Give Special Attention to Fingernails and Knuckles

Steps	Rationale
4. Wet hands, apply soap and thoroughly rub hands together for about 20-30 seconds. <ol style="list-style-type: none"> <li>a. Rub palm to palm</li> <li>b. Rub back of both hands</li> <li>c. Rub palm to palm with fingers interlaced</li> <li>d. Interlace fingers and thumbs and move the hands back and forth</li> <li>e. Rub all parts of both hands</li> <li>f. Rub both palms with finger tips</li> </ol>	4. To enhance mechanical friction that removes microorganisms from the skin surface
5. Rinse hands under running water	5. To remove excess soap as well as the loosened dirt and microorganisms
6. Dry the hands thoroughly by blotting with paper towels starting with the hand going up to the arms  <b>NB:</b> Use hand sanitizer if hands are not visibly soiled and observe the above steps. Continuous use of hand sanitizer is limited to three times	6. To reduce chapping of the skin. Drying from cleanest (hand) to least clean area (arms) prevents transfer of microorganisms to the cleanest area  To remove microorganisms if hands are not visibly soiled. If used for more than three times the hands become greasy

## D. Evaluation

Evaluate	Rationale
1. Inspect hand surfaces for signs of soiling or other contamination	1. To determine if hand washing was adequate or if there is need to repeat hand washing or repeat any step

## E. Documentation

### Record:

- Document when necessary if the procedure was done appropriately



## 1.2-2: Surgical Scrubbing, Gowning and Gloving

### Definition:

- **Surgical scrubbing:** This is the process of removing as many microorganisms as possible from the hands and arms by mechanical washing and chemical antisepsis before participating in a surgical procedure.
- **Gowning:** This is the process of putting on a sterile gown after drying hands and arms with a sterile towel, immediately after the surgical scrubbing, hand and arm cleansing.

### Purpose:

- **Scrubbing:** To decrease the number of resident microorganisms on the skin to minimum during surgical procedure by suppression of growth so as to reduce the hazard of microbial contamination of the surgical wound by skin flora.
- **Gowning and gloving:** To control spread of pathogens by establishing aseptic barrier around the nurse and client/patient and between sterile and non-sterile areas.

### Indications:

- Five moments of hand hygiene
- Before performing a sterile procedure
- Before participating in a surgical operation procedure
- Before participating in an invasive procedure

## A. Assessment

Assess	Rationale
1. Scrub environment	<ol style="list-style-type: none"> <li>1. To ensure cleanliness and minimize microorganisms           <ul style="list-style-type: none"> <li>• Ensure suitability for performing aseptic procedure</li> </ul> </li> </ol>
2. Requirements needed to carry out the procedure	<ol style="list-style-type: none"> <li>2. To ensure their availability and functioning state</li> </ol>
3. Procedures that will require scrubbing, gowning and gloving	<ol style="list-style-type: none"> <li>3. To facilitate planning and minimize cost</li> </ol>
4. Level of preparation, length of nails and hands for jewelry that need to be removed	<ol style="list-style-type: none"> <li>4. To reduce the risk of recontamination after the scrub. Long nails, polish and jewelry harbor microorganisms</li> </ol>

## B. Planning

### Self and Staff

- Knowledge and skills regarding surgical scrubbing, gowning and gloving
- Ensure skin on the nurse's hands and arms is intact
- Ensure that nails are short, clean and free from nail polish
- Remove rings, bracelets and wrist watches
- Instruct the circulating nurse about her roles during the procedure

### Environment

- Adequacy of lighting and ventilation
- Adequate space that facilitates movement of hands
- Foot controls for dispensing water
- Availability of standard operating procedures
- Adequate working space
- Ensure clean scrub area and well organized supplies
- Deep sink with elbow/foot controls for dispensing water
- Ensure there is antimicrobial soap in a dispenser and receiver for used hand towels
- Safe and conducive for the procedure

### Requirements

- Running water and liquid soap or hand sanitizer
- Paper/disposable hand towels
- A large sink with non-touch tap at appropriate height with adequate space between the sink and the tap.
- Receptacle for disposing used hand towels
- Clock
- Surgical shoe covers(boots)
- Cap, face mask, sterile gown, sterile towel
- Running water (hot and cold)
- Scrub sink with elbow/foot controlled taps
- Sterile and disposable gloves (assorted sizes)
- Sterile hand towel/disposable towels
- Mackintosh apron

## C. Implementation

Steps	Rationale
I. Scrubbing	
1. Put on a disposable plastic apron over the clothes	1. To prevent wetting clothes as this attracts and retains microorganisms
2. Adjust water to a warm temperature	2. Hot water causes chapping of the skin
3. Moisten hands and arms and do a social wash	3. To facilitate removal of microorganisms. Liquid soap harbors fewer bacteria than bar soap

Steps	Rationale
<p>4. Keeping hands up as shown in Fig. 1.12, take 5 mls of scrubbing solution, lather and wash both palms, between the fingers, washing each finger separately, the back of hands and then scrub each hand using circular motions without touching the elbow</p> <p><b>NB:</b> Repeat this three times</p> 	<p>4. To facilitate thorough removal of oils from hands and arms hence reduce microorganisms</p>
<p>5. Take 5mls of scrub solution and scrub the hands between the fingers only, rinse arms and hands and repeat it twice</p>	<p>5. To facilitate and ensure maximum removal of microorganisms</p>
<p>6. Close the taps using elbow/foot pedal faucet control (Figs. 1.13 &amp; 1.14)</p> 	<p>6. To remove microorganisms if hands are not visibly soiled. If used for more than three times the hands become greasy</p> 
<p>7. Ask the circulating nurse to remove the plastic apron if not required during surgery</p>	<p>7. To maintain sterility</p>

Steps	Rationale
<ul style="list-style-type: none"> <li>a. Move to wiping hands and arms, gowning and gloving</li> <li>b. After scrubbing, pick one folded towel, open half-way and drop on the palm of one hand leaning forward</li> </ul>	
8. Dry in between the fingers one by one, palm and base of the hand, then using circular motions dry the arm, drying the elbow last as shown in Fig. 1.15	8. To prevent dampness and ease gloving
	
Figure 1.15 Drying up to Elbow	
9. Drop towel for circulating nurse to dry the apron	9. To ensure own hands remain uncontaminated
<b>II. Gowning</b>	
1. Ensure all gowns are packed and dry	1. Dry gowns affirms sterility
2. The first covering of the sterile gown pack is opened by the circulating nurse	2. To prevent contaminating the hands
3. Pick the gown, move backward and open gown holding the neckline, drop the rest of the gown  <b>NB:</b> Gowns are folded inside out	3. To expose the gown in readiness for wearing with minimal risk of contamination
4. Holding the arm holes at the shoulder level slip both hands into the gowns simultaneously	4. To facilitate wearing of gown without contaminating the outer part
5. Stretch hands but leave the fingers covered inside the gown	5. To shield the hands from getting contaminated
6. Pick gloves with fingers inside the gown and use the closed method for gloving	6. To maintain sterility during gloving
<b>III. Gloving</b>	
1. Pinch above thumb with first hand, supporting gloves with second hand	1. To pick the glove from inside and not touch the outside
2. Flip glove over the first hand	2. To facilitate wearing of gloves with ease

Steps	Rationale
3. Use second hand to stretch glove and flip in the fingers of the first hand	3. To align/fit the glove properly in the hand
4. Repeat same process for the second hand	4. To wear the glove on the other hand in a sterile manner
5. If the glove paper is not touched by bare fingers, rub front gown strap and give circulating nurse to help you, tie in front or give the front strap to the scrubbed team member to help tie the strap	5. To avoid contaminating the sterile gloved hands
6. Tie both straps in front	6. To ensure the gown is secured and cannot loosen during the surgical procedure
7. Once gloves have been put on, put hands together in front and above the waist	7. To ensure own hands remain sterile in preparation for the procedure
IV. Clearing	
Circulating nurse should leave the scrub area tidy	To prepare for subsequent procedures

## D. Evaluation

Evaluate	Rationale
1. If scrubbing, gowning and gloving were done effectively	1. For assurance that the procedure sterility will be maintained

## E. Documentation

### Record:

- Document when necessary if the procedure was done appropriately
- Any occurrences during the procedure



## 1.2-3: Observing Standard Precautions

### 1.2-3.1: Standard Precautions

#### **Definition:**

These are precautions intended to prevent contact of the skin and mucous membranes of health care worker from recognized and non-recognized sources of infection.

#### **Purpose:**

To prevent and control infections when dealing with contaminated items/environment and minimize contact with microorganisms.

#### **Indications:**

Examples;

When contact with the following is anticipated:

- Blood
- Non-intact skin
- Mucous membrane
- All secretions and excretions regardless of whether they contain blood

## A. Assessment

Assess	Rationale
1. Possible sources of infections	1. For infection prevention and control
2. Requirements and equipment to be used	2. To confirm availability and functional status
3. Knowledge of the health care workers on standard precautions.	3. To ascertain need for education

## B. Planning



#### **Self**

- Review current knowledge and skill on standard precautions and policies



#### **Staff**

- Update on current standard precautions and policies



#### **Environment**

- Safe and conducive to support requirements for Universal Standard Precautions

- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space

### ■ ■ ■ Requirements

A tray containing the following:

- Gloves and Aprons (Plastic/disposable)
- Face mask and Eye wear/goggles
- Shoe covers
- Liquid soap and running water
- Disinfectants/hand rubs/sanitizers
- Gowns
- Specimen containers
- Sharps container
- Coded bins and plastic bags
- Incinerator
- Mops, dusters
- Linen bags
- Colour coded bins

### ■ ■ ■ Key Principles

A tray containing the following:

- Hand washing before and after contact with patient
- Wearing protective clothing to avoid contamination of the skin or mucosal surfaces (gloves, caps, aprons, face protection as appropriate)
- Safer handling and disposal of sharps and needles
- Safe disposal of clinical waste.
- Safe disposal of all infected linen
- safe handling of and transportation of specimens
- Maintaining a clean environment
- Regular maintenance and appropriate cleaning, disinfection or sterilization and proper storage of equipment

## C. Implementation

Steps	Rationale
<b>Hand Hygiene</b>	
(Refer to procedure 1.2-1, Hand Hygiene)	
<b>Disposable Gloves</b>	
<ul style="list-style-type: none"> <li>■ Must be worn for direct contact with blood or body fluids on intact skin and mucous membrane</li> <li>■ Gloves should be disposable and discarded between patients or contaminated body sites</li> <li>■ Hands can become contaminated while wearing gloves hence hand</li> </ul>	<ul style="list-style-type: none"> <li>■ To protect self and patient from contaminated agents</li> <li>■ To prevent cross infection to the other people</li> <li>■ For infection prevention and control</li> </ul>

Steps	Rationale
hygiene is recommended after removal of gloves	
<b>Plastic Aprons</b>	
<ul style="list-style-type: none"> <li>▪ Should be changed between clean and dirty tasks and should be worn for:           <ul style="list-style-type: none"> <li>• All patient care</li> <li>• Aseptic techniques</li> <li>• Serving meals and bed making</li> <li>• Performing dirty tasks</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ For creation of barrier between the nurse's uniform and contaminated materials and thus help prevent transfer of microorganisms</li> </ul>
<b>Facial Protection (masks, goggles)</b>	
<ul style="list-style-type: none"> <li>▪ Should be worn when performing procedures which may generate splashes of sprays of blood or body fluid secretions and where there is a risk of contaminating the mucosal surfaces of the nose, eyes and mouth</li> </ul>	<ul style="list-style-type: none"> <li>▪ To protect the mucous membranes of the eyes, nose and mouth from accidental splashes from contaminated secretions and contact with microorganisms transmitted by inoculation</li> </ul>
<b>Protective gowns (Head wear, Fluid Resistant Material)</b>	
<ul style="list-style-type: none"> <li>▪ Should be available in operating theatre, intensive care and accident and emergency units</li> </ul>	<ul style="list-style-type: none"> <li>▪ To protect the health worker from splash or sprays with body fluids</li> </ul>
<b>Foot Protection</b>	
<ul style="list-style-type: none"> <li>▪ Wear boots or shoe covers when contamination on the floor is anticipated</li> </ul>	<ul style="list-style-type: none"> <li>▪ To minimize contamination of feet with blood and body fluids in high risk areas i.e. operating theatre, intensive care and accident and emergency</li> </ul>
<b>Waste Disposal</b>	
<ol style="list-style-type: none"> <li>1. All contaminated wastes must be placed in yellow clinical plastic bags</li> </ol>	<ol style="list-style-type: none"> <li>1. To ensure adherence to set universal standard precautions on waste segregation for identification of this type of waste</li> </ol>
<ol style="list-style-type: none"> <li>2. Must be secured and source area identified</li> </ol>	<ol style="list-style-type: none"> <li>2. To promote safety for patients, nurse and other staff</li> </ol>
<ol style="list-style-type: none"> <li>3. Sharps (needles and blades) and other sharp instruments must be placed in a rigid puncture proof sharps container immediately after use</li> </ol>	<ol style="list-style-type: none"> <li>3. For infection prevention and control and avoidance of accidental needle prick injury</li> </ol>
<ol style="list-style-type: none"> <li>4. Discard needles and syringes as one unit into the sharps box; Do not re-sheath/re-cap contaminated needles</li> </ol>	<ol style="list-style-type: none"> <li>4. To promote safety for the nurse, patient and other staff</li> </ol>
<ol style="list-style-type: none"> <li>5. Never fill the container more than <math>\frac{2}{3}</math> and ensure it is securely closed and labelled before disposal and incineration</li> </ol>	<ol style="list-style-type: none"> <li>5. To minimize chances of injuries thus promoting safety</li> </ol>
<ol style="list-style-type: none"> <li>6. Uncontaminated paper and other household wastes should be placed in</li> </ol>	<ol style="list-style-type: none"> <li>6. To ensure proper segregation and disposal of waste at source</li> </ol>

Steps	Rationale
a black bag and secured in readiness for collection and disposal	
<b>Waste Disposal</b>	
1. Foul and infected linen must be segregated and placed in a red water soluble bag and contained in an outer bag labeled <b>Danger of infection</b>	1. For adherence to universal standards for highly infected materials
2. Place soiled linen in a separate laundry container	2. Soiled linen may also be contaminated with pathogenic micro-organism and must be placed directly into appropriate laundry containers
3. Baby clothes, blankets etc. should be washed separately from others	3. To prevent contamination from other infectious materials
4. Blood, suctioned fluids may be safely poured down a drain that is connected to a sanitary sewer	4. To promote flow of the excess blood from the materials
5. Blood spills – Use institutional recommended decontaminant before cleaning	5. To promote safety of patients and staff
6. All instruments must be decontaminated and cleaned before sterilization	6. To ensure that instruments are safe for handling by staff
7. In case of accidental sharp injuries, wash site with soap and running water	7. To facilitate removal of microorganisms
8. <b>Do Not Squeeze!!!!!!</b>	8. To avoid sucking the microorganisms into the system and prevent further injury of tissues
9. Report incident to infection control department	9. For appropriate action and follow up

## D. Evaluation

Evaluate	Rationale
1. Any incidences of exposure	1. To confirm if standard precautions were strictly and effectively followed

## E. Documentation

### Record:

- Document the level of achievement of universal standard precautions

■ ■ ■

## 1.2-3.2: Universal Precautions Guidelines

### Hand Hygiene

- Personal Protective Equipment
- Policies for Patient-Care Equipment
- Safe Handling of Sharps

### Additional (Transmission – Based) Precautions

- Precautions
- Droplet Precautions
- Contact Precautions

### Isolation

- Roles of Health Care Providers
- National Infection Prevention and Control Guidelines for Health Care Services in Kenya
- Rules Pertaining to Isolation of Patients
- Handling Medical Equipment
- Handling Utensils
- Housekeeping
- Requirements for Isolation
- Establishing Priorities for Single Rooms
- Isolation Categories

**Refer to National Infection Prevention and Control Guidelines for Health Care Services in Kenya**

## 1.2-4: Isolation Nursing

### **Definition:**

This is a nursing intervention aimed at preventing the spread of highly contagious infections.

### **Purpose:**

To contain and prevent spread of infectious disease to other patients, health workers and community.

### **Indications:**

Examples; Highly infectious diseases such as:

- Ebola, Pulmonary tuberculosis, Yellow fever, Cholera
- Any other disease as may be stipulated in the public health act. Cap 244 laws of Kenya

## A. Assessment

Assess	Rationale
1. Suspected diagnosis	1. For infection prevention and control pending confirmation of diagnosis
2. Confirmed diagnosis	2. To avoid unnecessary isolation of the patient
3. Patient's knowledge on isolation	3. To identify the need for education

## B. Planning



### **Self**

- Review current knowledge and skill on standard precautions and policies



### **Staff**

- Identify the patient
- Explain the need, benefits and risks of isolation
- Provide detailed information about the condition, its management, plan of care, the patient's role and confirm understanding



### **Environment**

- Safe and conducive to support the Universal Standard Precaution Measures
- Cleanliness of the room
- Adequacy of lighting
- Availability of standard operating procedures

## Requirements

- Identify a separate room with a door, proper ventilation and place a clear coded notice on the door of cubicle. "Isolation room".
- Hand washing equipment – disposable hand towels, liquid soap or alcoholic hand rub.
- Disposal Protective gear such as disposable gloves, plastic aprons, facial protection (mask, goggles) and cap.
- Foot operated pedal bin with yellow clinical waste bag with ties.
- Sharps container
- Individual examination kits e.g. (Ophthalmoscope, patella hammer, thermometer, BP machine with washable cuff and tongue depressors,
- Suction equipment, easy to access in case required
- All required equipment should be accessible and not shared
- Bell or intercommunication systems like telephone.
- Televisions, radio, reading materials, recreational materials that are age appropriate.
- Buckets for soaking utensils, linen and other instruments, which must be well labeled, decontaminated after use.

## Key Principles

A tray containing the following:

- Hand washing before and after contact with patient
- Wearing protective clothing to avoid contamination of the skin or mucosal surfaces (gloves, caps, aprons, face protection as appropriate)
- Safer handling and disposal of sharps and needles
- Safe disposal of clinical waste.
- Safe disposal of all infected linen
- safe handling of and transportation of specimens
- Maintaining a clean environment
- Regular maintenance and appropriate cleaning, disinfection or sterilization and proper storage of equipment

## C. Implementation

Steps	Rationale
1. Assemble all equipment needed before entering the room	1. For infection prevention and control
2. Put on a disposable plastic apron	2. To protect self from the contaminants
3. Keep the door closed when attending to the patient	3. To reduce exposure of microorganisms to outside environment
4. Observe standard precautions while handling the patients and various wastes	4. For infection prevention and control
5. Remove all protective wear and observe standard precautions before leaving the room	5. To remove pathogenic organisms acquired during contact with the patient
6. Supportive staff and relatives/visitors must understand and observe the standard precautions	6. To prevent them from acquiring infectious disease

<b>Steps</b>	<b>Rationale</b>
7. Inform microbiologist/public health officer when the patient is due for discharge	7. For microbiologist/public health officer to advice on any special precautions

## D. Evaluation

<b>Evaluate</b>	<b>Rationale</b>
1. The level of adherence to isolation nursing precaution measures	1. To confirm effectiveness of isolation procedure

## E. Documentation

### Record:

- Document the level of adherence to isolation measures

■ ■ ■

## 1.2-5: Source (Strict) Isolation

### **Definition:**

Source isolation are procedures taken by nurses when looking after client with infectious and communicable diseases.

### **Purpose:**

To prevent spread of diseases to other patients, health care workers and the community from the infected person.

### **Indications:**

- Typhoid and paratyphoid
- Cholera
- Amoebic and bacillary dysentery
- Gastro-intestinal anthrax
- Hepatitis A
- Pulmonary tuberculosis
- Measles
- Ebola
- Any other highly infectious disease indicated by the Public Health Act Cap 244

## A. Assessment

Assess	Rationale
1. Suspected diagnosis	1. To determine if the diagnosis is one of the communicable and infectious diseases
2. The confirmed diagnosis	2. To prevent unnecessary isolation of the patients
3. Patient's understanding of the need for isolation	3. To determine information to be shared with the patient for co-operation and compliance

## B. Planning



### **Self**

#### Review:

- Knowledge about the communicable disease and its management
- Knowledge about infection prevention measures, standard precautions and institutional policies



## Patient

- Explain the need, benefit and risk of strict isolation to the patient, relatives and other patients and confirm understanding



## Environment

- Safe and conducive to support strict isolation procedure
- Cleanliness of the room
- Availability of standard operating procedure
- Adequate lighting and ventilation



## Requirements

- A separate room or a corner bed nearest to water sink, toilet or sluice room.
- Screens
- A notice "**Strict Isolation**"
- Utensils – all labelled with the patient's names.
- Single use gowns
- Gloves
- Toiletries to be used by the patient e.g. bed pan, urinal, sputum mug, vomitus bowl; all labeled with the patient's names.
- Wash basins and soap
- Plastic aprons (disposable)
- Observation equipment in a tray
- Antiseptic solution in a bucket
- Hand towels (disposable)/single use towels

## C. Implementation

Steps	Rationale
<b>Environment</b>	
1. Select suitable area preferably a separate room or a corner bed nearest to the sink, toilet or sluice room	1. To minimize movements in the ward and therefore prevent spread of infection
2. Ensure adequate ventilation and space	2. To prevent progressive spread of infection
<b>Equipment</b>	
1. Screen the bed/area	1. To avoid contact of the patient with other patients, relatives and other health care providers
2. Assemble all equipment to be used by the patient, nurses and label them with the patient's name	2. To protect self from contamination with infective material from the patient
3. Place a notice strict isolation outside the screened area	3. To minimize unnecessary movement into the room which may promote cross infection

Steps	Rationale
<b>Method</b>	
1. Before entering the area, wash hands, wear disposable protective gear	1. For infection prevention and control
2. Attend to the patient's needs	2. To ensure that the patient receives required nursing care
3. Handle used items appropriately	3. To minimize contamination and cross infection
4. Remove the gown using the correct procedure	4. To minimize contamination
5. For children, play toys should be decontaminated and disinfected appropriately and not shared	5. For infection prevention and control
6. For adults, provide radios, TV and reading materials	6. For recreational purposes

## D. Evaluation

Evaluate	Rationale
1. If the procedure was followed effectively	1. To ascertain that the spread of infection is minimized
2. Level of adherence to the isolation measures	2. To determine the effectiveness of the IPC measures

## E. Documentation

### Record:

- Document the level of adherence to the procedure

■ ■ ■

## 1.2-6: Protective Isolation

### Definition:

This is a nursing intervention aimed at protecting patients susceptible to infection.

### Purpose:

To protect immune compromised patients from acquiring nosocomial infections.

### Indications:

- Extensive burns
- Cardiothoracic surgery, renal transplant surgery
- Patient with low white blood cell count

## A. Assessment

Assess	Rationale
1. The confirmed diagnosis	1. To confirm the need for protective isolation and prevent acquisition of hospital acquired infections

## B. Planning



### Self

- Review knowledge on the principles of protective isolation



### Patient

- Identify the patient
- Explain the need for protective isolation to the patient, health care providers, relatives and confirm understanding



### Environment

- Safe and conducive to support the Universal Standard Precaution measures
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures



### Requirements

- Suitable room
- Adequate ventilation
- Protective gear.
- A notice “**Protective Isolation**”

- Toiletries to be used by the patient e.g. bed pan, urinal, sputum mug, vomits bowl, all labelled with the patient's names
- Wash basins and soap
- Observation equipment in a tray
- Hand towels (disposable)

## C. Implementation

Steps	Rationale
1. Select suitable area. Ensure adequate ventilation and space	1. To minimize movements in the ward and therefore prevent spread of infection
2. Assemble all equipment to be used by the patient or the nurses and label them with the patient's name	2. To ensure readiness to undertake protective nursing
3. Place a notice protective isolation outside the screened area	3. To protect the patient from infection
4. Before entering and leaving the area, wash hands, wear disposable plastic gown, masks	4. To avoid contaminating the patient
5. Attend to the patient's needs	5. To ensure the patient's needs are addressed holistically
6. Handle used items appropriately	6. To ensure the patient and staff safety and for infection prevention and control
7. Remove the gown using the correct procedure	7. To prevent self-contamination
8. For children, play toys should be decontaminated, disinfected appropriately and should not be shared	8. For infection prevention and control
9. For adults provide recreational materials	9. For occupational therapy

## D. Evaluation

Evaluate	Rationale
1. If the procedure was followed effectively	1. To ascertain the level of compliance and adherence to the procedure

## E. Documentation

### Record:

- Document the level of adherence to the procedure

■ ■ ■

## 1.2-7: Terminal Disinfection of an Isolation Room

### **Definition:**

This is the final cleaning, clearing and disinfection of the isolation room.

### **Purpose:**

To minimize the spread of micro- organisms.

### **Indications:**

- Isolation discontinuation
- Patient transfer /discharge/ death

## A. Assessment

Assess	Rationale
1. The pathogenicity and infectivity of the organisms	1. To determine the mode of decontamination to be used
2. Nurses' and other health care workers' knowledge on terminal disinfection procedure	2. To determine the need for education

## B. Planning



### **Self**

#### Review:

- Knowledge on various decontamination methods
- Knowledge on universal standard precautions



### **Patient**

- Prepare the patient for discharge and transfer appropriately



### **Environment**

- Safe and conducive to support the Universal Standard Precaution measures
- Availability of standard operating procedure
- Adequacy of lighting and ventilation



### **Requirements**

- Linen bag for dirty linen
- Bucket with mop

- Broom and dust pan
- Basin
- Appropriate disinfectant solution
- Dusters
- Heavy duty gloves
- Disposable plastic aprons, masks, boots, goggles and caps
- Waste receiver (Pedal bin with foot levers that allow opening and closing of the cover)
- Multidisciplinary team (domestic staff) public health officer/nurse to supervise and declare room safety

## C. Implementation

Steps	Rationale
1. Ensure all personnel involved have protective gear	1. To protect them from acquiring infections
2. Divide roles and supervise the decontamination and cleaning process	2. To avoid duplication of duties and ensure effectiveness of the process
3. Keep windows and doors closed	3. To contain the pathogens within the room
4. Remove all linen including window curtains, carpets, utensils and other equipment and soak them in decontaminant	4. To facilitate removal of microorganisms from the surface of all contaminated materials
5. Open windows and doors when the procedure is finished for 24 hours or as appropriate	5. To allow adequate ventilation
<b>Clearing</b>	
1. Process used equipment in accordance with waste disposal guidelines	1. For infection prevention and control and staff and patient safety
2. Ensure the linen is taken to laundry	2. For cleaning and sterilization in readiness for subsequent use

## D. Evaluation

Evaluate	Rationale
1. The level of adherence to decontamination procedure	1. To ascertain the effectiveness of the procedure

## E. Documentation

### Record:

- Document the level of adherence to measures of terminal disinfection of isolation room



## 1.3: Patient's Hygiene and Comfort

### 1.3-1: Making an Occupied Bed

**Definition:**

Procedure used to prepare or change linen on a patient's bed when the patient is in bed.

**Purpose:**

- To promote patient's comfort, minimize sources of wrinkle and skin irritation while conserving his /her energy

**Indications:**

- Patients who are too weak to come out of bed, unconscious patients, critically ill patients.
- Patients restricted in bed by traction or either forms of treatment

## A. Assessment

Assess	Rationale
1. Patient's condition and need for special bed appliances	1. To confirm availability and functional state
2. Whether the patient has had a bath and the linen is soiled	2. For planning for additional requirements and if a bath will be needed
3. The physiological and mental state of the patient	3. To determine assistance needed

## B. Planning



**Self**

- Wash hands and arrange the linen in the order in which it will be used
- Ensure there is an assistant
- Ensure the bed is locked



**Patient**

- Explain procedure to the patient
- Ensure the patient empties the bladder
- Close nearby windows



## Environment

- Safe, warm and conducive for the procedure
- Adequacy of lighting and ventilation
- Cleanliness of the room
- Availability of standard operating procedure



## Requirements

- A clean trolley with;
  - Two large sheets
  - Draw sheet if needed
  - One blanket
  - One bed cover
  - Water proof draw sheet
  - Pillow cases
- Portable linen hamper
- Two stools or a chair for stripped bed linen

## C. Implementation

Steps	Rationale
1. Wash, dry hands and wear clean gloves	1. For infection prevention and control
2. Take requirements to the bed side	2. To facilitate organization and promote efficiency
3. Screen bed	3. To provide privacy
4. Remove all equipment attached to bed linen	4. To ensure safety
5. Loosen the linen from the head to the foot of the bed	5. To promote efficiency
6. Fold and place unsoiled linen on the chair or stool while leaving the patient covered with the top sheet. Place soiled linen in the linen hamper	6. For privacy, patient comfort and prevention of infection
7. Place bed in flat position if not contraindicated	7. To allow efficiency in bed making without strain for both the patient and the nurse
8. Raise the side rail nearest to the patient	8. To promote the patient's safety
9. Assist the patient to turn on the side facing away from the side where the clean linen is while ensuring proper body alignment	9. To allow placement of clean linen for changing while maintaining the patient's comfort
10. Loosen the foundation of the linen on the side of the bed near the linen supply	10. To allow easy removal of the soiled linen

Steps	Rationale
11. Fan fold the draw sheet and the bottom sheet at the centre of the bed as close to the patient as possible	11. To facilitate changing of linen
12. Place the new bottom sheet and the draw sheet on the bed and vertically fan fold the half to be used at the far side of the bed as close to the patient as possible	12. To facilitate changing of bed linen without contamination of the clean ones
13. Tuck the sheet under the near half of the bed and miter the corner if a contour sheet is not being used	13. To ensure that the sheet is secured and wrinkles don't occur thus promoting the patient's safety and comfort
14. Assist the patient to roll over to the clean prepared side and inform them that they will feel a bump in the middle of the mattress. The assistant nurse removes the dirty linen from the other side, pulls, spreads the clean linen and tucks it tightly	14. To allow the nurse to completely replace the bottom sheet and draw sheet with minimal discomfort to the patient
15. Raise the patient's head and remove the pillow. Replace the pillow case	15. To ease removal of the pillow
16. Assist the patient to the centre of the bed, determine which position the patient prefers and assist him / her to that position if not contraindicated	16. To promote comfort and safety
17. Cover the patient and complete the rest of the top bed	17. For privacy, protects the patient from chills and promotes the patient's hygiene, safety and comfort
18. Raise all side rails and place the bed to low position	18. To prevent the patient from falling and injuries
19. Put items used by the patient within easy reach, inform him/her of completion of the procedure and leave him/her comfortable	19. For promotion of the patient's comfort and self esteem

## D. Evaluation

Evaluate	Rationale
1. Level of adherence to the procedure	1. To ascertain the patient's safety and comfort

## E. Documentation

### Record:

- Date and time when the procedure was done
- The patient's reaction during changing of bed
- Skin status of the patient
- Outcome of evaluation

■ ■ ■

## 1.3-2: Positioning a Patient in Bed

### Definition:

The process of placing the client/patient in bed in the most comfortable position that prevents musculoskeletal injuries and allows comfort and for therapeutic interventions.

### Purpose:

- To maintain muscle tone, stimulate postural reflexes, prevent musculoskeletal discomfort and undue pressure with subsequent pressure ulcers
- To allow therapeutic interventions

### Indications:

Examples;

- Paralyzed patients
- Unconscious patients
- Patients undergoing specialized diagnostic and therapeutic procedures.
- After certain procedures e.g. post-operatively

## A. Assessment

Assess	Rationale
1. The client's understanding of the need for position change	1. To determine concerns, education needs and acceptance of further instructions
2. Condition of the skin	2. To identify precautions that may need to be considered
3. The client/patient's general physical condition	3. To determine assistance required and any contraindicated positions
4. Neuromuscular and musculoskeletal status	4. For muscle powers warranting positioning
5. Equipment required/assistance needed	5. To promote efficiency during positioning
6. Appropriateness of the working environment	6. For the client/patient's and nurse's comfort

## B. Planning



### Self

- Wash and dry hands
- Assemble equipment
- Review procedure of moving the patient in bed



## Staff

- Explain the procedure to the patient and obtain informed consent
- Explain to patient the roles he/she is expected to play during changing of position



## Environment

- Safe and allows privacy during the procedure
- Adequate working space
- Adequacy of lighting and ventilation
- Cleanliness of the room
- Availability of standard operating procedure



## Requirements

- A trolley with:
  - Equipment for making an occupied bed if necessary
  - Pressure area care equipment if necessary
  - Draw sheet/ bed sheet to assist in moving client.
  - Extra pillows
  - Sandbags
  - Bed cradle
  - Bed blocks
  - Footboard
  - Trochanter roll or supportive pads
  - Stirrups
- Bed with:
  - Orthopaedic / fracture boards
  - Ripple mattress / sheepskin or sorbo pads
  - Backrest or adjustable systems
  - Trapeze as required
  - Side rails

## C. Implementation

Steps	Rationale
1. Wheel trolley to bedside	1. For efficiency of the procedure
2. Explain procedure to the patient and instruct him/her on position to be achieved	2. To allay anxiety and promote co-operation
<b>Supine Position</b>	
1. Assist the client/patient to lie on the back facing up	1. To position the patient in supine
2. Place pillow under the patient's neck	2. To prevent hyperextension of the neck
3. Position the patient's arms on the side with hands pronated	3. For comfort

Steps	Rationale
4. Use extra pillows at pelvis	4. To align the body and maintain the position
<b>Left / Right Lateral</b>	
1. Assist the client/patient to lie on the side (left or right) with the head supported with a low pillow	1. To maintain the position
2. Bring the underlying arm forward and flex it; use a pillow to support the body posteriorly	2. To provide support and balance
3. Flex top leg forwards and a place pillow in between the legs	3. For comfort and to prevent friction between the thighs
<b>Prone Position</b>	
1. The client/patient lies on the abdomen with the head turned to either side.	1. To allow drainage of oral secretions if any
2. Pillow is placed under the chest, pelvis and ankles	2. To prevent pressure and provide comfort for the structures of the chest, pelvis and ankles
3. Arms may be on the side or flexed near the head	3. To promote comfort
<b>Sims Position</b>	
1. The client/patient is assisted to lie in extreme lateral position	1. To maintain position
2. Extend forward hand and leg to lie flat on the bed. Lower foot extends behind at the back.	2. To allow the client to lie on the abdomen
3. Flex both knees	3. For comfort
<b>Knee chest Position</b>	
1. The client's/patient's chest and elbows rests on the bed	1. To maintain position
2. The client then kneels, the thighs are straight and the lower limbs are flat on the bed	2. To ensure the pelvic region is raised
3. Place a pillow under the client'/patient's head and turn the head to either left or right side	3. To promote comfort and lessen fatigue
<b>Trendelenburg Position</b>	
1. Position the client/patient in supine position on an adjustable bed or operating table	1. To promote comfort
2. Use straps to secure and support the client on the bed/table before adjusting the bed/table	2. To ensure the patient's safety
3. Tilt the bed/ table to position the head so that it is lower than the feet/ legs	3. To maintain position

Steps	Rationale
<b>Cardiac Position</b>	
1. Position client/patient in sitting up position in bed supported by a back rest	1. To reduce venous return to the heart
2. Adjust the bed or arrange pillows to achieve cradle at the back rest	2. To promote the client's/patient's comfort and ease breathing
3. Use of a bedside table with a pillow to allow the client/patient to lean over	3. To allow the client/patient to lean over while in sitting position
<b>Lithotomy Position</b>	
1. Assist the client/patient to lie in supine position on an adjustable bed/examination table /operating table	1. To maintain position
2. Move the client/patient so that buttocks are placed as close as possible to the edge of the bed/table	2. For easy accessibility and visibility of perineum
3. Flex both knees and support on stirrups	3. For ease of access to external genitalia and pelvis
<b>Fowlers Position</b>	
<b>Position the client/patient in supine position</b>	
1. Adjust head of bed to an angle of 45 degrees and support the client/patient with pillows or bed rest	1. To promote the client's/patient's comfort
<b>Semi Fowlers Position</b>	
2. As for fowlers but bed is tilted at 15 to 30 degrees	1. For the client's/patient's comfort and safety

## D. Evaluation

Evaluate	Rationale
1. If the body is well aligned and in a comfortable position	1. To ensure effectiveness of positioning

## E. Documentation

### Record:

- Date and time of procedure
- Record procedure and observations made during performance of procedure
- Condition of the skin
- The client's/patient's ability to assist during the procedure
- Outcome of evaluation



## 1.3-3: Bed Bath

### Definition:

A bath given to a patient who is in the bed and unable to bathe himself/herself.

### Purpose:

- To prevent microorganisms spreading on the skin, stimulate circulation, promote range of motion, make the patient comfortable and assess skin

### Indications:

- Unconscious patient
- Critically ill patient

## A. Assessment

Assess	Rationale
1. Condition of the patient	1. To determine assistance required and any contraindicated positions
2. The patient's understanding on the need for hygiene	2. To determine concerns, education needs and acceptance of further instruction

## B. Planning



### Self

- Review procedure on bed bath
- Wash and dry hands
- Assemble equipment required



### Patient

- Identify the patient
- Explain the procedure and obtain informed consent



### Environment

- Safe, warm and conducive for the procedure
- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedure



## Requirements

A clean trolley with;

### **Top shelf;**

- 2 washing Basins
- A jug of clean hot water
- A Jug of cold water
- Soap in a dish
- Two flannels/ wash clothes
- A pair of clean gloves
- Moisturizer cream for incontinent patients

### **Bottom Shelf;**

- Bath towel
- Mackintosh
- Clean linen
- Clean gown or pajamas
- Hair comb
- Bag for dirty linen

## C. Implementation

Steps	Rationale
1. Gather all required equipment and wheel to the bedside	1. To facilitate performance of the procedure
2. Wash, dry your hands and don gloves	2. For infection prevention and control
3. Screen the patient	3. To maintain the patient's privacy
4. Place dirty linen bag at the foot of the bed	4. To collect the used linen and maintain infection prevention and control
5. Strip and cover the patient with one sheet or blanket	5. To maintain the patient's privacy
6. Remove pillows and leave only one	6. To make the patient comfortable
7. Put a big towel under the patient's body from the head to shoulders	7. For easy accessibility
8. Mix the warm and cold water ensuring it is lukewarm	8. To avoid scalding the patient and ensure comfort
9. Wash the patient's eyes and face with plain water	9. To avoid irritating the eyes
10. Make the bath towel mitten. Cleanse the eyes and face starting with the eye furthest from you from inner to outer corners. Use a different section of the face flannel to wash each eye	10. Prevents sweeping debris into the patient's eyes. Using a separate portion of the flannel for each eye prevents the spread of infection
11. Wash the patient's neck and ears. Use soap on these areas. Rinse and dry carefully	11. To remove dirt and for comfort
12. Expose only the area that is being cleaned at a time	12. To avoid chilling the patient and for privacy

Steps	Rationale
13. Move the big towel and place it under the patient's far arm	13. To avoid the bed linen getting wet
14. Uncover the far arm	14. For easy accessibility
15. Fold the sponge cloth and moisten. Wash the far arm with soap, rinse with water	15. To remove dirt
16. Dry by use of a bath towel	16. For comfort
17. Move the big towel under the near arm and uncover it	17. To avoid bed linen getting wet
18. Wash, rinse and dry the near arm as same as for the far arm	18. To remove dirt and for comfort
19. Wash the chest and the abdomen, rinse and dry. Pay particular attention to the area under the breast, axilla and umbilicus for an obese patient	19. To prevent microorganisms and dirt lodging in such areas
20. Wash the further away leg, rinse and dry and then do the same to the other leg	20. To remove dirt and for comfort
21. Soak feet in wash basin, scrub gently if necessary and cut toe nails if necessary	21. To remove hard and scaly skin from the feet
22. Change water as necessary	22. For infection prevention and control
23. Roll the patient on left side, wash, rinse and dry the back, buttocks and upper back of the thigh. Repeat the same for the right side	23. To provide easy access to the back area
24. Change water and then wash the flannel	24. To prepare for cleaning of the next part of the body
25. Lastly wash, rinse and dry the genitalia	25. To remove dirt and enhance infection prevention and control
26. Apply lotion or Vaseline on the patient's skin and dress him/her in clean clothes	26. To enhance the skin's softness and for comfort
27. Change linen if necessary and make the bed. Cut finger nails if long	27. To keep the patient clean and comfortable
28. Perform oral care to the patient	28. To maintain oral hygiene and prevent halitosis
29. Comb hair if necessary	29. To ensure good grooming
30. Position the patient in the most suitable position	30. For comfort
31. Thank the patient for cooperation during the procedure	31. To make the patient feel appreciated and enhance cooperation
32. Open the windows and remove the screen	32. To allow air circulation in the room

<b>Steps</b>	<b>Rationale</b>
33. Clear the equipment	33. To prepare equipment for subsequent use
34. Remove gloves and wash hands	34. For infection prevention and control

## D. Evaluation

<b>Evaluate</b>	<b>Rationale</b>
1. Cleanliness and comfort of the patient	1. To ensure the procedure was successful
2. Condition of the skin	2. To ensure the patient is not prone to pressure ulcers

## E. Documentation

**Record:**

- Date and time the procedure was done
- The patient's tolerance to the procedure
- Observations made on the skin

■ ■ ■

## 1.3-4: Pressure Area Care

### Definition:

This is the care of body areas that are considered to be at risk of developing pressure sores/ ulcers.

### Purpose:

- To enhance the maintenance of blood circulation
- To relieve pressure
- To prevent alteration of skin integrity

### Indications:

Patients with;

- Poor nutrition
- Altered general physical condition
- Altered mental status
- Inactivity
- Immobility
- Incontinence

## A. Assessment

Assess	Rationale
1. The patient's possible risk of impaired skin integrity associated with their condition	1. To get baseline data to plan for intervention
2. The client's understanding of the need for pressure area care	2. To Identify education needs, allay anxiety and promote cooperation
3. Determine equipment required	3. To confirm availability and functionality

## B. Planning



### Self

- Wash and dry the hands
- Assemble equipment
- Review procedure of moving the patient in bed



### Staff

- Explain the procedure to the patient and obtain informed consent



### Environment

- Ensure privacy, warmth and safety
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedure



## Requirements

A clean trolley with;

### Top shelf;

- A jug of warm water
- A jug of cold water
- One washing basin
- A clean tray containing;
  - One gallipot
  - Mild Soap in a dish
  - Spatula in a container
  - Zinc oxide cream or Vaseline (for incontinent patients)
  - Cotton wool balls in a bowl
  - Gloves
  - Flannel/wash clothes

### Bottom shelf;

- A clean tray containing;
  - Clean linen
  - Disposal towel
  - Clean gown/pyjamas
  - Draw sheet
  - A pair of bed sheet
  - Air freshener
- Receiver for dirty linen
- Receiver for used cotton wool balls

## C. Implementation

Steps	Rationale
1. Wheel trolley to bedside	1. For efficiency during the procedure
2. Identify the patient	2. To ensure correct procedure is performed on the right patient
3. Screen the patient's bed	3. To protect the patient's rights to privacy and maintain dignity
4. Explain the procedure to the patient again	4. To allay anxiety and promote cooperation
5. Wash, dry hands and don gloves	5. For infection prevention and control
6. Fold back the bed linen, leaving the patient covered with a bed sheet	6. For easy access/visualization while maintaining privacy and avoiding chilling of the patient
7. Use warm water	7. To prevent injury from hot or very cold water and enhance the patient's comfort
8. Protect the bed linen with a bath towel	8. To avoid wetting the bed linen

Steps	Rationale
9. Expose the client on the most accessible side	9. For ease of performing the procedure
10. Apply mild Soap generously on hands and massage over the pressure points (using firm circular movement)	10. To prevent friction and stimulate circulation
11. Rinse and pat dry the patient	11. To remove soap and leave the skin dry
12. Repeat the process for all pressure points on exposed side before turning the patient	12. To relieve the points of pressure, stimulate circulation, improve skin integrity and for comfort
13. Apply water repellent cream over treated area as appropriate	13. To soothe the patient and act as a barrier against destruction of skin by moisture and microorganisms and promote skin integrity
14. Turn the client and repeat steps 8-11	14. To ensure that all pressure points are treated and the patient is turned and left comfortable
15. Put in place pressure relieving devices if needed	15. To relieve any possible pressure
16. Reposition the patient appropriately and cover him, and turn him/her every two hours	16. To ensure comfort and help relieve pressure from pressure areas thus improving circulation
17. Clear equipment	17. To prepare for next use
18. Wash hands	18. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The condition of the skin for any signs of loss of skin integrity	1. To determine the need for alterations or continuation of the pressure area care plan and for any interventions
2. The patient's tolerance during the procedure	2. To determine success of the procedure

## E. Documentation

### Record:

- Date and time of the procedure
  - Procedure, including the patient's risk pressure ulcer score
  - Results of skin assessment
  - Interventions implemented and the patient's tolerance
  - Outcomes of evaluation.
  - Description of the current position, time for the next turning and pressure relieving devices used
  - The need for additional consultation for the high risk patient
- ■ ■

## 1.3-5: Performing Oral Care

### Definition:

Oral care is defined as the care of the teeth and mouth.

### Purpose:

To keep the mouth clean and fresh and prevent oral infections and dryness

### Indications:

- Altered patient's physical condition
- Altered mental status
- Immobility

## A. Assessment

Assess	Rationale
1. General condition of the patient	1. To determine assistance required
2. The patient's understanding of the need for oral hygiene	2. To determine concerns, education needs and acceptance of further instructions
3. Determine equipment required	3. To ensure availability of equipment
4. Determine allergy to solutions/equipment to be used	4. To ensure the appropriate solution is used on the client

## B. Planning



### Self

- Review procedure on oral care
- Wash and dry hands
- Assemble equipment required



### Staff

- Identify the patient
- Explain the procedure and obtain informed consent



### Environment

- Ensure it is safe and conducive for the procedure
- Adequacy of lighting and ventilation
- Availability of standard operating procedure



### Requirements

- Tray (1)
- Gauze-padded tongue depressor (1), to suppress tongue
- Torch (1)
- Appropriate equipment for cleaning
- Tooth brush
- Mouth gag
- Cotton wool balls
- Artery forceps (1) and dissecting forceps (1)
- Oral care agents; tooth paste/ betadine mouth wash solution/ sodium bicarbonate or warm normal saline
- Kidney dish (1)
- Drape
- Receiver for used cleaning solution
- Gauze pieces as required, to apply a lubricant
- Lubricants; Vaseline /glycerin/ lip cream
- Disposable gloves (1 pair)
- Small towel
- Gallipot

## C. Implementation

Steps	Rationale
1. Check the patient's identification and condition	1. To provide nursing care to the right patient
2. Explain the procedure to the patient	2. To gain cooperation and understanding
3. Screen the bed	3. To provide privacy
4. Wash hands and wear disposable gloves	4. For infection prevention and control
5. Collect all required equipment and bring to the bedside	5. For ease of access
6. Pour appropriate solution into gallipot	6. For ease of access
7. Soak the cotton wool ball in betadine mouth wash solution, sodium bicarbonate or warm normal saline using artery forceps	7. For use during the cleaning process
8. Squeeze excess solution from all cotton wool balls using artery and dissecting forceps and put into another gallipot	8. To avoid spillage
9. Position the patient in an appropriate position	9. To gain cooperation during the procedure and for comfort
10. Place the drape around the patient's neck	10. To absorb any spillage of the solution

Steps	Rationale
11. Inspect oral cavity with the aid of gauze-padded tongue depressor and torch	11. To establish any abnormalities e.g. bleeding, swelling, ulcers
12. Insert the padded tongue depressor gently from the angle of the mouth toward the back of the mouth  <b>NB:</b> Never use your fingers to open the patient's mouth.	12. To prevent injury
13. Clean the patient's teeth from incisors to molars using up and down movements from gums to crown. Clean the oral cavity from proximal to distal, outer to inner parts, using cotton wool ball for each stroke	13. To aid in friction for effective cleaning of the teeth
14. Clean the tongue from inner to outer aspect	14. To prevent introduction of microorganisms to the inner cavity
15. Rinse oral cavity using moistened cotton wool balls	15. To enhance the cleaning process
16. Wipe the outer aspect of the oral cavity	16. To dry off any excess solution
17. Apply lubricant to lips using a piece of gauze with the aid of an artery forceps	17. To prevent drying and cracking of the lips
18. Position the patient appropriately	18. To enhance comfort
19. Clear equipment	19. For next use
20. Remove gloves and perform hand hygiene	20. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Cleanliness of the mouth	1. To determine effectiveness of the procedure
2. Condition of the oral cavity	2. To plan for any required intervention

## E. Documentation

### Record:

- Date and time the procedure is done
- Condition of the oral cavity

■ ■ ■

## 1.4: Administration of Medicine

### 1.4-1: Administration of Oral, Sublingual and Buccal Medications

**Definition:**

This is the process by which prescribed medicine is given to a patient to swallow, placed underneath the tongue or between the cheeks (buccal cavity).

**Purpose:**

- **Oral:** To provide a safe, effective route for administration of medications.
- **Sublingual:** To provide a sustained medication action with minimal discomfort and reduce destruction/biotransformation of medications in the stomach and small intestines.
- **Buccal:** To prevent/reduce destruction/biotransformation of medications in the stomach and small intestines.

**Indications:**

- Patients on these prescribed medications
- Clients eligible for some specific routine immunizations

## A. Assessment

Assess	Rationale
1. The client's/patient's medication prescription	1. To ensure accuracy and completeness
2. The client's / patient's history of allergies	2. To prevent risk of anaphylactic shock and other immune reactions associated with some medications
3. Medication literature for its pharmacokinetic and pharmacodynamic properties	3. To facilitate monitoring of the client's/patient's response
4. The client's/patient's and family's knowledge on medication action, expected results and possible side effects	4. To identify teaching needs for improved compliance
5. The client's/patient's ability to take oral medications	5. To rule out any contraindication and special precautions to oral route
6. The client's/patient's premedication vital signs if indicated	6. To identify suitability for the particular medication

## B. Planning

### Self

- Review the procedure of oral medication administration
- Wash and dry hands
- Assemble and arrange equipment
- Get an assistant and explain to him/her their role in administration of oral medications
- Check expiry date of the medication

### Patient

- Correctly identify the patient
- Explain to the patient the medication schedules
- Educate the patient on: Purpose, dose, frequency, side effects of his/ her medications and implications, the medication interactions and dietary implications

### Environment

- Safe with adequate working space
- Adequacy of lighting and ventilation
- Availability of standard operating procedure

### Requirements

A medication trolley/cabinet with;

#### Top shelf;

- Medicine in a tray with clear labels
- Medicine measures
- Treatment sheets
- Spoons and saucers
- Disposable paper towels
- Water

#### Bottom shelf;

- A container with a decontaminant for used cups and spoons
- Disposable bag for general waste
- Hand sanitizer

**NB:** Always consider the rights of medication administration

- Right patient
- Right medication
- Right time
- Right dose
- Right route
- Documentation

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. For infection prevention and control
2. Wheel trolley to begin at one end of the ward	2. To promote efficiency and ease of access
3. Confirm with the assistant the rights of medication administration and counter check the medication container	3. To prevent medication error and enhance the patient's safety
4. Dispense medications on to a saucer or medicine measure appropriately	4. To ease the process of dispensing
5. For liquids shake gently to mix	5. To ensure even distribution of active ingredients
6. Place medicine measure on flat surface and pour liquid with label uppermost	6. To ensure accurate measurement of the dose, avoid spillage and preserve the label
7. Measure correct dose at eye level or meniscus	7. To avoid medication error and enhance the patient's safety
8. Wipe the tip of the bottle, replace cork/cap and store in its unit after dispensing	8. To prevent soiling of the bottle and ensure safe custody of medications
9. For patients getting more than one medication, use a separate container for each mixture	9. To prevent medication interactions
10. Confirm the patient's identity before giving medicine	10. To prevent medication error
11. Give one tablet at a time, give water as appropriate and ensure the patient has swallowed	11. To enhance the patient's ease in swallowing the medication
12. For sublingual medications, instruct the patient to place the medication under the tongue and allow it to dissolve completely	12. To prevent gastric destruction of medication and first pass effect
13. For buccal medications, instruct the patient to place medication in the lower or upper buccal pouch against the cheek until it dissolves completely	13. To promote local activity on the mucous membranes
14. Leave the patient in an appropriate position	14. To enhance comfort
15. Wash and dry or sanitize hands before moving to the next patient	15. For infection prevention and control
16. When all patients have been given due medication, take the equipment to the treatment room and store medications appropriately	16. For safe custody of medicines and equipment

Steps	Rationale
17. Process instruments/equipment and store in accordance with hospital disposal guidelines	17. For infection prevention and control
18. Wash and dry hands	18. For infection prevention and control
19. Record in the medication register and balance the medication books appropriately	19. For accountability and control of medications

## D. Evaluation

Evaluate	Rationale
1. The patient's response to the medication	1. To aid in planning for appropriate interventions

## E. Documentation

### Record:

- Date and time of medication administration
  - Interventions and outcomes of any adverse reactions observed
  - Any medications withheld and reasons
  - Missing medications and action taken
  - Treatment sheets that need change
  - Name and signature
- ■ ■

## 1.4-2: Administration of Parenteral Medications

### 1.4-2.1: Administering Intramuscular Injections

**Definition:**

The injection of medication into the muscle tissue, usually on the deltoid, thigh, or gluteal muscles.

**Purpose:**

To administer medications when the intramuscular route is the most ideal.

**Indications:**

- When medications may be destroyed by Gastrointestinal tract (GIT) enzymes or significantly affected by first pass biotransformation
- When rapid medication effects are required.
- Clients on some routine immunizations.
- When other routes of administration are contraindicated

## A. Assessment

Assess	Rationale
1. The medication orders and possible medication interactions	1. To ensure accuracy and completeness, guide signs and symptoms to observe for early detection of adverse effects
2. The client's/patient's history of allergies	2. To prevent anaphylactic shock and other immune reactions associated with the specific medications
3. The client's/patient's and family's knowledge on medication action, expected results and possible side effects	3. To identify teaching needs for improved compliance
4. Any factors that may contraindicate the route of administration	4. To rule out any contraindications and for special precautions to the intramuscular route
5. Anxiety related to anticipatory pain	5. To identify education needs, that promote relaxation and reduce pain
6. Adipose tissue and muscle mass	6. To determine a suitable site

## B. Planning

### Self

- Review the procedure on intramuscular medication administration.
- Wash and dry hands
- Get an assistant and explain to him/her his/her role in the Intramuscular medication administration

### Patient

- Correctly identify the client/patient
- Educate the patient on;
  - Purpose, dose, frequency, side effects of medications and implications
  - The medication interactions and dietary implications
  - Basic safety and storage measures for his/her medications
- Help the client/patient to a comfortable position

### Environment

- Safe with adequate working space
- Adequacy of lighting and ventilation
- Cleanliness of the room
- Availability of standard operating procedure

### Requirements

- The client's/patient's treatment chart
- A clean trolley with;

#### **Top shelf;**

Disinfected tray(s) containing;

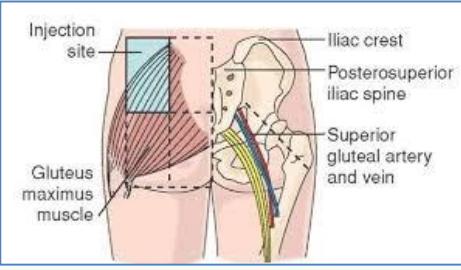
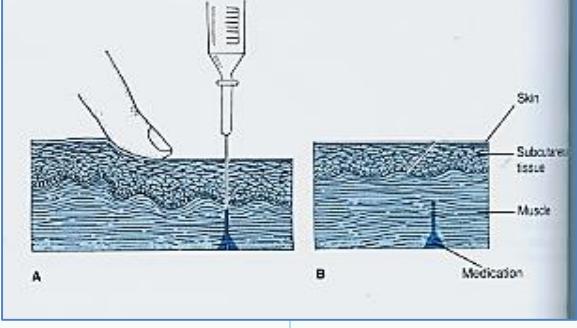
- Disposable syringes and needles of assorted sizes
- Cotton wool balls
- Surgical spirit in a container with nozzle sprayer/ Alcohol swabs
- A pair of forceps in a kidney dish
- Gallipot
- Kidney dish for carrying prepared medication to the patient
- Vials and ampoules containing the ordered medications
- File to cut ampoules
- Sterile water for injection
- Dry disposable paper towels
- Clean gloves
- Adhesive tape

#### **Bottom shelf;**

- Sharps container
- Receiver for dirty swabs and used gloves

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. For infection prevention and control
2. Assemble and arrange the equipment and take to the ward/bedside/treatment room	2. To enhance efficiency and ease of access
3. Take the treatment sheet and ampoule or vial of the prescribed medication from the tray and with the assistant check the rights of medication administration	3. To prevent medication errors
4. Remove the metal cap from the vial using a file	4. To access the rubber stopper
5. Use the pair of forceps to pick one cotton wool ball, place it in the gallipot, gently spray little antiseptic over it to prepare a swab for disinfecting the rubber site for puncture	5. To disinfect the rubber site for puncture
6. For ampoules, clean the septum of the vial using antiseptic solution and dry with sterile swab. Using the file, while protecting the fingers with a cotton wool swab, break the ampoule at the neck	6. To reduce the chance of introducing microorganisms into the sterile container
7. If the medication is to be diluted, reconstitute it with the correct amount of sterile water for injection and mix well	7. To prevent tissue irritation that occurs from inadequately diluted medication and ensure even distribution of active ingredients
8. To withdraw the medication from a vial draw up the syringe and inject amount of air equivalent to medication required	8. To facilitate withdrawal of medication from the vial
9. To withdraw the medication from ampoule, ensure the piston is plugged in completely, lift the ampoule and withdraw the dose required carefully without contaminating the plunger/piston	9. To facilitate withdrawal of the medication from the ampoule
10. Counter check with the assistant	10. To minimize medication errors and promote medication safety
11. Remove used needle and discard in sharp container and replace with new needle, place the medication in the syringe in the kidney dish	11. To prevent use of blunt needle that would cause tissue injury and to facilitate safe transportation of the medication to the patient's bed side

Steps	Rationale
12. Check the rights again with the assistant and take the kidney dish containing the medication to the bed side while the assistant takes care of the medication trolley	12. To prevent medication errors and promote safety
13. Explain the procedure to the client/patient a second time, ask him/her not to move while the injection is being given and help him/her to choose the site to be injected	13. To promote cooperation and safe medication administration
14. Locate the injection site on the upper outer quadrant and wipe with spirit swab (Fig 1.16)	14. To reduce transmission of micro-organisms and ensure medication is safely administered
	
<p>Figure 1.16 Locating the Ventrogluteal Site in Upper Outer Quadrant for Injection (Adapted from Craven &amp; Hirnle, 2000)</p>	
15. Hold the skin between the fore fingers and thumb and insert the needle at 90 degrees (Fig 1.17)	15. To ensure medication is given deep into the muscles
	
<p>Figure 1.17 Depositing Medicine at 90° in to the Muscle (Adapted from Craven &amp; Hirnle, 2000)</p>	
16. Withdraw the piston slightly	16. To ensure that the point of the needle has not punctured a blood vessel
17. If blood is seen discard medication and equipment and prepare again. If no blood is seen, push the medication in slowly but steadily until the piston reaches the end of the barrel	17. To ensure the patient safety and accuracy in administration of the medication
18. Quickly withdraw the needle while applying firm pressure and support on the needle site	18. To prevent backflow of the medication and bleeding

<b>Steps</b>	<b>Rationale</b>
19. Immediately discard needle and syringe into sharps container	19. For safety of self, staff and patient
20. Indicate time and sign on the prescription sheet	20. For accountability
21. Record in the medication register	21. For accountability and balancing medication records

## D. Evaluation

<b>Evaluate</b>	<b>Rationale</b>
1. The client's/patient's response to the medication	1. To aid in planning for appropriate interventions

## E. Documentation

### Record:

- Date and time the medication is administered
- Interventions and outcomes of any adverse reactions observed.
- Any medications withheld and reasons
- Review of treatment sheets
- Name and signature



## 1.4-2.2: Administering Hypodermic/Subcutaneous Medications

### Definition:

This is the process of introducing medicinal medications into the loose connective tissues just below the dermis of the skin.

### Purpose:

- To administer medications for rapid action that cannot be achieved by oral route
- To facilitate slow absorption of medications whose first release into circulation when given by intramuscular injection (I.M) may cause adverse reaction

### Indications:

- Medications prone to destruction by gastrointestinal tract (GIT) juices and first pass effect
- When the client/patient cannot tolerate oral medications
- When less rapid medication effects than those by (I.M) are required.
- Stat doses to relieve pain before a procedure or in an emergency situation.
- Clients on routine immunizations.
- Patients with gastrointestinal dysfunction

## A. Assessment

Assess	Rationale
1. Medication orders and possible medication interactions	1. To ensure accuracy and completeness, guide signs and symptoms to observe for early detection of adverse effects
2. The client's /patient's history of allergies	2. To reduce possibilities of inducing anaphylactic shock and other immune reactions associated with the specific medications
3. The clients and family's knowledge on medication action, expected results and possible side effects	3. To identify teaching needs for improved compliance
4. Dosage and properties of the medication	4. To ensure only small amounts (0.5-1.0ml) doses of isotonic, non-viscous and water soluble medications are given subcutaneously
5. Anxiety related to anticipatory pain	5. To identify education needs, that promote relaxation and reduce pain
6. Time when last dose was administered	6. To prevent too close intervals that may cause cumulative effect with subsequent toxicity

Assess	Rationale
7. Circulatory and local tissue perfusion state	7. To ensure adequacy of tissue perfusion for medication absorption and distribution.

## B. Planning

### Self

- Review the procedure on subcutaneous medication administration.
- Wash and dry hands.
- Get an assistant and explain to him/her his/her role in subcutaneous medication administration.

### Patient

- Identify the patient
- Explain to the client/patient the medication schedules
- Educate the client/patient on;
  - Purpose, dose, frequency, side effects of medications and implications
  - The medication interactions and dietary implications
  - Basic safety measures for the medications he/she is on including storage
- Help the patient to a comfortable position

### Environment

- Safe with adequate working space
- Adequacy of lighting and ventilation
- Cleanliness of the room
- Privacy of the room
- Availability of standard operating procedure

### Requirements

A clean trolley with;

#### Top shelf;

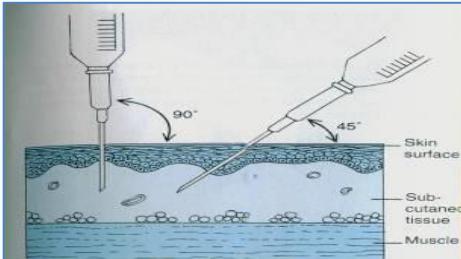
- The client's/patient's medication sheet
- Disinfected tray(s) containing;
  - Disposable syringes of assorted sizes
  - Disposable needles gauge 25-27 (3/8-5/8inch)
  - Cotton wool balls
  - Surgical spirit in a container with nozzle sprayer/ Alcohol swab
  - A pair of forceps in a kidney dish
  - Gallipot
  - Kidney dish for carrying prepared medication to the patient
  - Vials and ampoules containing the ordered medications
  - File to cut ampoules
  - Sterile water for injection
  - Dry disposable paper towels
  - Clean gloves

**Bottom shelf;**

- Sharps container
- Receiver for used swabs and gloves
- Receiver for used ampoules and vials

**C. Implementation**

<b>Steps</b>	<b>Rationale</b>
1. Wash and dry hands	1. For infection prevention and control
2. Assemble and arrange equipment and take to the bedside or the ward procedure room	2. To promote access and efficiency
3. Take treatment sheet and ampoule or vial of the prescribed medication from the tray and with the assistant check the rights of medication administration	3. To prevent medication error
4. Remove the metal cap from the vial using a file	4. To access the rubber stopper
5. Use the pair of forceps to pick one cotton wool ball, place it in the gallipot and gently spray little antiseptic over it to prepare a swab for disinfecting the rubber site for puncture	5. To minimize microorganisms at the rubber site for puncture
6. If ampoule, clean the neck using cotton wool swab and dry with sterile swab. Use the file to break the ampoule at the neck, while protecting the fingers with a cotton wool swab. If a vial, remove the metal cap, use spirit swab to clean the top	6. To ensure safe access to the medication and prevent contamination of the medication
7. If the medication is to be diluted, reconstitute it with the correct amount of sterile water for injection and mix well	7. For transformation of the medication to its usable form and prevention of tissue irritation that occurs with inadequately diluted medication. To ensure even distribution of active ingredients
8. If it is a vial, draw up the syringe and using a sterile cotton wool swab placed at the neck of the syringe hold the syringe up and inject air equivalent to medication to be withdrawn	8. To facilitate withdrawal of medication from the vial
9. To withdraw the medication from ampoule, ensure the piston is plugged in completely, lift the ampoule, withdraw the dose required and counter check with the assistant	9. To ensure accurate measurement of the dose

Steps	Rationale
10. Remove used needle and discard in sharp container and replace with new needle, place the medication in the syringe in the kidney dish	10. To prevent tissue injury associated with blunt needle, minimize pain to the client and facilitate administration of the medication
11. Check the rights again with the assistant and take the kidney dish containing the medication to the bed side while the assistant takes care of the medication trolley	11. To minimize medication error, promote efficiency and ensure medication safety
12. Explain the procedure to the patient a second time and ask him/her not to move while the injection is being given. Help the client/patient to choose the site to be injected	12. To promote cooperation and safe administration and for comfort
13. Locate the injection site and wipe with the spirit swab. Hold the skin between the forefingers and thumb and insert the needle at 45 degrees into the subcutaneous tissue (Fig 1.18)	13. To ensure blood vessels and other structures are not damaged during medication administration and to reduce transmission of micro-organisms
	
<p>Figure 1.18 Subcutaneous Injection Deposits Medications at 45°-90° into the Subcutaneous Tissue (Adapted from Craven &amp; Hirnle, 2000)</p>	
14. Withdraw the piston slightly to ensure that the point of the needle has not entered a blood vessel. If blood is seen discard medication and equipment and prepare again	14. To ensure medication is delivered into the subcutaneous tissues
15. If no blood is seen, push the medication in slowly but steadily until the piston reaches the end of the barrel	15. To ensure accuracy in administration and the patient's safety
16. Quickly withdraw the needle while applying firm pressure and support on the needle site	16. To prevent backflow and bleeding
17. Immediately discard the needle and the syringe into sharps container	17. To promote safety of both the patient and the nurse
18. Indicate time and sign on the prescription sheet	18. To communicate to other staff and reduce double dosing

<b>Steps</b>	<b>Rationale</b>
19. Record in the medication register	19. For accountability and balancing medication records

## D. Evaluation

<b>Evaluate</b>	<b>Rationale</b>
1. The client's/patient's response	1. To monitor progress and guide plans for appropriate intervention

## E. Documentation

### Record:

- Date and time the medication was administered
- Interventions and outcomes of any adverse reactions observed
- Any medications withheld and reasons
- Missing medications and action taken.
- Review of treatment sheet
- Name and signature

■ ■ ■

### 1.4-2.3: Administering Intradermal Medications

**Definition:**

This is the process of introducing medicines into the dermis, below the epidermis at an angle of 15 degrees.

**Purpose:**

To obtain local effect at the site of injection such as when testing allergic reactions of the medication or administering some vaccines.

**Indications:**

- Tuberculin screening
- Testing allergies
- Prior to administration of medications likely to cause reactions
- Immunizations

## A. Assessment

Assess	Rationale
1. Medication orders and possible medication interactions	1. To ensure accuracy and completeness, guide signs and symptoms to observe for early detection of adverse effects
2. The client's /patient's history of allergies	2. To reduce possibilities of inducing anaphylactic shock and other immune reactions associated with the specific medications
3. The client's/patient's and family's knowledge on medication action, expected results and possible side effects	3. To identify teaching needs for improved compliance
4. Dosage and properties of the medication	4. To guide the signs to observe for a positive or negative result
5. Anxiety related to anticipatory pain	5. To identify education needs that promote relaxation and reduce pain
6. Time when the last dose was administered	6. To prevent close intervals that may cause cumulative effect with subsequent toxicity
7. Circulatory and local tissue perfusion state	7. To ensure adequate tissue perfusion for medication absorption and distribution

## B. Planning

### Self

- Review the procedure of intra-dermal medication administration
- Wash and dry hands
- Get an assistant and explain to him/her his/her role in intra-dermal administration of medications

### Patient

- Identify the patient
- Explain to the client/patient the medication schedules
- Educate the client/patient on;
  - Purpose, expected reactions of medications and implications.
  - The medication interactions and dietary implications
- Help the patient to a comfortable position

### Environment

- Safe with adequate working space
- Adequacy of lighting and ventilation
- Cleanliness of the room
- Privacy of the room
- Availability of standard operating procedure

### Requirements

A clean trolley with;

#### Top shelf;

- The client's/patient's medication sheet
- Disinfected tray(s) containing;
  - Disposable syringes of assorted sizes
  - Disposable needles gauge 25-27 (3/8-5/8inch)
  - Cotton wool balls
  - Surgical spirit in a container with nozzle sprayer/ Alcohol swab
  - A pair of forceps in a kidney dish
  - Gallipot
  - Kidney dish for carrying prepared medication to the patient
  - Vials and ampoules containing the ordered medications
  - File to cut ampoules
  - Sterile water for injection
  - Dry disposable paper towels
  - Clean gloves

#### Bottom shelf;

- Sharps container
- Receiver for used swabs and gloves
- Receiver for used ampoules and vials

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. For infection prevention and control
2. Assemble and arrange the equipment and take to the bedside or the ward procedure room	2. For efficiency and easy access
3. Take the treatment sheet and ampoule or vial of the prescribed medication from the tray and with the assistant check the rights of medication administration	3. To prevent medication error
4. Remove the metal cap from the vial using a file	4. To access the rubber stopper
5. Use the pair of forceps to pick one cotton wool ball, place it in the gallipot and gently spray little antiseptic over it to prepare a swab for disinfecting the rubber site for puncture (for non-toxoids or live attenuated substances)	5. To avoid contamination while ensuring safe access to the medication
6. If an ampoule, clean the septum of the ampoule with an antiseptic solution and dry with a sterile swab. Break the neck of the ampoule using a file while protecting the fingers with a cotton wool swab. If a vial, remove the metal cap, and use a spirit swab to clean the top.	6. To ensure safe access to the medication and prevent contamination
7. If the medication is to be diluted/reconstituted, dilute the medication with the correct amount of sterile water for injection and mix well	7. To transform the medication to its usable form and prevent tissue irritation that occurs with inadequately diluted medication. To ensure even distribution of active ingredients
8. To withdraw the medication from ampoule/vial, ensure the piston is plugged in completely. Lift the ampoule/vial and withdraw the dose required and counter check with the assistant	8. To ensure accurate measurement of dose
9. Place the medication in the syringe in the kidney dish	9. To facilitate administration of the medication
10. Explain the procedure to the client/patient a second time and ask him/her not to move while the injection is being given	10. To promote cooperation and safe administration
11. Help the client/patient to choose the site to be injected. (For BCG, the site is prescribed in the immunization policy.)	11. To promote cooperation and safe administration

Steps	Rationale
Usually left forearm sites should be 3-4 finger widths below antecubital space and one hand width above the wrist on the inner aspect of the forearm)	
12. Inspect the site for lesions, inflammation, oedema, tenderness and scars from previous injections	12. To ensure absorption and expected effects of the medication. For rotation of repeated injections
13. With non-dominant hand, stretch skin over the site with fore finger and thumb. Insert needle gently and slowly at 5-15 degrees angle, bevel up until resistance is felt, then advance to $\leq 1/8$ inch below the skin (FIG 1.19)  	13. To facilitate administration of medication with minimal pain
14. Observe for wheal formation	14. To ensure correct administration of medication. Dermal layer is tight and does not expand easily when fluid is injected. Bleb like mosquito bite appearance is an indication that medication was deposited in the dermis
15. Withdraw the needle while applying firm pressure and support using a swab on the needle site	15. To prevent backflow and bleeding
16. Do not massage the site	16. To ensure medication is not quickly dispersed into tissues altering the therapeutic effect
17. Immediately discard the needle and the syringe into sharps container	17. To promote safety for both the client/patient, the nurse and staff

Steps	Rationale
18. Indicate the time and sign on the prescription sheet	18. To communicate to other staffs and prevent double dosing of medication
19. Record in the medication register	19. For accountability and balancing of medication records
20. Appreciate client for cooperation	20. To enhance the patient's positive experience of the procedure

## D. Evaluation

Evaluate	Rationale
1. The client's/patient's response to the medication 2. Effective delivery of the medicine in the right tissues	1. To monitor the client's/patient's progress and guide plans for appropriate interventions

## E. Documentation

### Record:

- Date and time the medication is administered
  - Interventions and outcomes of any adverse reactions observed
  - Any medications withheld and reasons
  - Missing medications and action taken
  - Review of treatment sheet
  - Name and signature
- ■ ■

## 1.4-2.4: Administering Intravenous (IV) Medications

### Definition:

This is the process of introducing medications directly into the systemic circulation through the vein.

### Purpose:

- To achieve high levels, immediate and maximum effects of medications within a short period of time.
- To monitor serum levels of specific medication

### Indications:

- In emergency management e.g. shock, diabetic ketoacidosis, coma and poisoning
- When medications cannot be taken by other routes
- When the substance to be administered is too irritating if administered into the skin or muscle
- Administration of medication or dyes for certain diagnostic and radiological tests

### Contraindications:

- Known allergies to specific medications

## A. Assessment

Assess	Rationale
1. Medication orders and possible medication interactions	1. To ensure accuracy and completeness, guide signs and symptoms to observe for early detection of adverse effects
2. The client's /patient's history of allergies	2. To reduce possibilities of inducing anaphylactic shock and other immune reactions associated with the specific medications
3. The client's/patient's and family's knowledge on medication action, expected results and possible side effects	3. To identify teaching needs for improved compliance
4. Dosage and properties of the medication	4. To inform on the action of the drug
5. Time when last dose was administered	5. To prevent cumulative effect leading to toxicity
6. Skin over intravenous site	6. To prevent tissue destruction
7. Circulatory and local tissue perfusion state	7. To promote medication absorption and distribution

Assess	Rationale
8. Anxiety related to anticipatory pain	8. To determine learning needs and promote compliance

## B. Planning

### Self

- Review procedure on intravenous medication administration
- Review the rights of medication administration (Right patient, medication, dose, time, route, and documentation)
- Wash and dry hands
- Get an assistant and explain to him/her their role in intravenous medication administration

### Patient

- Identify the patient correctly using at least two identifiers (Patient's full names and medical record number/date of birth)
- Explain the medication schedules to the patient;
  - Purpose, dose, frequency, side effects of medications and implications.
  - The medication interactions and dietary implications
  - Basic safety measures for the medications he/she is on
- Help the patient to a comfortable position

### Environment

- Safe and conducive for the procedure
- Adequacy of lighting and ventilation
- Cleanliness of the room
- Privacy of the room
- Availability of standard operating procedure

### Requirements

Disinfected medication trolley/ tray;

#### Top shelf;

- Treatment sheets
- Disinfected tray(s) containing;
  - Disposable syringes and needles of assorted sizes
  - Cotton wool balls
  - Disinfectant spray/ Alcohol swabs
  - Kidney dish for carrying prepared medication to the patient
  - Gallipot
  - Vials and ampoules containing the ordered medications
  - File to cut ampoules
  - Sterile water for injection
  - Dry disposable paper towels
  - Clean gloves

**Bottom shelf;**

- Sharps container
- Receiver for used swabs and gloves

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. For infection prevention and control
2. Assemble and arrange the equipment and take them to the bedside or the ward procedure room	2. To promote efficiency
3. Together with the assistant check the patient's identification band and countercheck with full names and number on the medication sheet then call the patient	3. To prevent medication errors
4. Take ampoule or vial of the prescribed medication from the tray and check the rights of medication with assistant	4. To ensure that the medication is being administered to the right person as prescribed
5. Swab the top of the ampoule with cotton wool swab. Using a file while protecting the fingers with a cotton wool swab, break the ampoule at the neck. If a vial, remove the metal cap, use spirit to swab the top.	5. To prevent contamination and ensure safe access to the medication
6. If the medication is to be diluted, dilute the medication with the correct amount of diluent.	6. To ensure even distribution of active ingredients
7. Draw up the syringe and using a sterile cotton wool swab placed at the neck of the syringe hold the syringe up and inject air equivalent to the amount of medication intended for withdrawal. To withdraw the medication from vial, ensure the piston is plugged in completely, lift the vial and withdraw the dose required.	7. To facilitate withdrawal of medication from the vial
8. Withdraw the required amount of medication and counter check with the assistant	8. To ensure accurate measurement of the dose
9. Remove used needle and discard in sharp container and replace with new needle. Place the medication in the syringe in the kidney dish.	9. To prevent use of blunt needle, minimize pain and facilitate administration of the medication
10. Check the rights of medication administration again with an assistant	10. To minimize medication errors

Steps	Rationale
and take the kidney dish containing the medication to the bed side while the assistant takes care of the medication trolley.	
11. Explain the procedure to the patient for the second time and ask the patient not to move while the injection is being administered	11. To promote cooperation, efficiency and safe administration
12. Swab the cannula site with cotton wool swab. Connect a syringe with sterile water for injection to intravenous port and withdraw the piston/plunger. Check for back flow of blood and air. If air is present in the syringe remove the syringe from the port and push the air out then connect the syringe again and push the water for injection.	12. To prevent air entry and confirm the patency of the vein
13. Carefully and slowly over the prescribed duration, inject the medication while observing the patient's reaction	13. To prevent adverse reaction from uncontrolled plasma levels concentration of medication
14. Clear cannula by infusing 1-2mls of sterile water for injection	14. To ensure that the entire dose is infused into the circulatory system and to prevent phlebitis
15. Remove the syringe while applying pressure on the intravenous line	15. To prevent back flow of the medication and blood
16. Immediately discard needles and syringe into sharps container	16. For infection prevention and control
17. Indicate the time and append signature on the prescription sheet	17. For accountability and continuity of care
18. Record in the medication register	18. For accountability and balancing medication records

## D. Evaluation

Evaluate	Rationale
1. The client's/patient's response to the medication	1. To plan for appropriate interventions

## E. Documentation

### Record:

- Date and time the medication is administered
- Record the medications administered on the medication chart
- Append your name and signature.
- The client's/patient's response to treatment
- Missing medication and action taken

■ ■ ■

## 1.4-3: Administering Nebulized Medications

### **Definition:**

This is the process by which aerosolized medications are directly delivered into the airway by inhalation method.

### **Purpose:**

To deliver medications directly into the mucosa of the lungs in the fastest, noninvasive manner.

### **Indications:**

- Patients with respiratory distress symptoms requiring symptomatic relieve
- In conditions such as:
  - Asthma
  - Chronic obstructive pulmonary disease (COPD)

## A. Assessment

Assess	Rationale
1. The client's/ patient's and family's knowledge on medication action, expected results and possible side effects	1. To identify teaching needs for improved compliance
2. The client's/patient's respiratory status and use of accessory muscles for respiration	2. To determine primary reason to administer nebulized medications
3. Check the client's vital signs and oxygen saturation levels	3. To obtain baseline data
4. The client's/patient's ability to use the nebulizer or metered-dose inhaler	4. To determine the type of equipment to be used
5. Concurrent medications	5. To facilitate clinical judgment on medications such as Beta-blockers that can antagonize the beta agonists and cause or worsen asthma symptoms
6. History of symptoms and length of time of the client's/ patient's distress	6. To rule out other causes of respiratory distress such as foreign objects in the airways that will not be relieved by the medication
7. Client's /patient's signs and history of medication allergies and hypersensitivity	7. To reduce possibilities of inducing anaphylactic shock and other immune reactions associated with the specific medications

Assess	Rationale
8. Medication properties	8. To aid in planning for appropriate intervention

## B. Planning

### Self

- Review the procedure on administration of nebulized medication
- Get an assistant and explain their role

### Patient

Educate the patient on;

- Purpose, dose, frequency, side effects of medications and implications.
- The use of the nebulizer or metered-dose inhaler
- The medication interactions and dietary implications
- Basic safety measures for the medications he/she is on

### Environment

- Ensure privacy
- Adequate working space
- Adequacy of lighting and ventilation
- Availability of standard operating procedure

### Requirements

Disinfected trolley

#### Top shelf;

- Medication administration record
- Tray(s) containing;
  - Handheld Nebulizer / Metered-dose inhaler
  - Nebulizer set (tubing, T-shaped tube, mouthpiece, or mask) or prepackaged nebulizer and applicator
  - Medication
  - Normal saline/ sterile water for injection
- A Face flannel or towel
- A packet of sterile cotton wool balls
- Dry disposable paper towels
- Clean gloves



Figure 1.20 Metered dose inhaler with spacer

#### Bottom shelf;

- Receiver for used cotton wool balls and gloves
- Sputum mug
- Piped oxygen / Oxygen cylinder
- Nebulization machine
- Aero chamber, if applicable

## C. Implementation

Steps	Rationale
<b>Handheld Nebulizer</b>	
1. Perform hand hygiene	1. For infection prevention and control
2. Assemble the equipment and take to the bed side	2. To promote organization and efficiency
3. Take the medication and check the rights of medication administration with an assistant	3. For accuracy and prevention of medication errors
4. Set up the medication(s). Look at the medication at eye level if using droppers to dispense the solution into the nebulizer	4. For accuracy and prevention of medication errors
5. Pour the entire amount of the medication(s) into the nebulizer cup taking care not to touch the medication	5. To determine the correct amount and accurate dosage of the medication and prevent contamination
6. Cover the cup with the cap and fasten	6. To avoid spillage and reduce the transmission of microorganisms
7. Fasten the T-piece to the top of the cap	7. To prevent spillage of the medication
8. Fasten a short length of tubing to one end of the T-piece	8. To provide a connector for the mouthpiece
9. Fasten the mouthpiece or mask to the other end of the T-piece taking care not to touch the nebulizer mouthpiece or the interior part of the mask	9. To provide dead space to prevent room air from entering the system and medicated aerosol from escaping
10. Assist the client/patient to fowler's position	10. To promote better expansion of the lungs
11. Attach tubing to the bottom of the nebulizer cup and attach the other end to the air compressor or wall oxygen	11. To provide a channel for the compressed air
12. Before turning it on, adjust the wall oxygen valve to 6 liters/min	12. To drive the medication into a mist or wet aerosol form
13. Leave the air on for about 6 to 7 minutes until the medications get used up	13. To allow the client to receive the entire dose of medication
14. Instruct the client/patient to breathe in and out slowly and deeply through the mouthpiece/mask with lips tightly sealed around the mouthpiece	14. To promote efficacy of the medication in the airways
15. Remain with the client/patient until effective inhalation-exhalation technique is observed	15. To ensure the correct use of the nebulizer
16. When the nebulizer cup is empty, turn off the compressor or wall air and	16. To ensure correct dosage has been administered

Steps	Rationale
detach the tubing from the compressor and the nebulizer cup	
17. Wash and dry hands	17. For infection prevention and control
<b>Metered-Dose Nebulizer</b>	
1. Assess the client for ability to use the metered-dose nebulizer	1. To ensures accuracy in the administration of medication
2. Wash and dry hands before administering medication and don clean gloves	2. For infection prevention and control
3. Shake the prepackaged nebulizer	3. To allow even distribution of medication particles
4. Place the nebulizer into the applicator	4. To allow proper administration of the medication
5. Place the aero chamber onto the nebulizer if needed	5. To provide dead space for the medicated mist while the client/patient inhales
6. Have the client place the mouthpiece in his mouth	6. To deliver medication to the lungs through the proper route
7. Have the client press down on the pre-packaged dispenser as she/he simultaneously inhales	7. To allow delivery of the medication to the lungs
8. If there is an aero chamber attached to the nebulizer, have the client inhale slowly and deeply	8. To allow proper delivery of the medication
9. Observe the client for several minutes to assess for possible adverse effects from the medication	9. To aid in planning for necessary intervention
10. Clear and dispose equipment according to institution policy	10. To aid in preparation for the next use
11. Wash and dry hands	11. For infection prevention and control
12. Record the medication administration and observations	12. For communication to other health providers and to ensure a record of care and continuity of care

## D. Evaluation

Evaluate	Rationale
1. The client's/patient's condition immediately and at 5 -10 minutes following the treatment	1. To determine the effectiveness of or the reaction to medication
2. Vital signs and, oxygen saturation	2. To compare with baseline data and determine the effectiveness of the

medication and for further interventions if needed

## E. Documentation

### Record:

- Date and time of the medication administration
- Interventions and outcomes of any adverse reactions observed
- Any medications withheld and reasons
- Missing medications and action taken
- Treatment sheets that need change
- Name and signature



## 1.4-4: Administering Topical Medications

### **Definition:**

This is the application of medication directly to the skin in form of lotions, creams, aerosol sprays, paste and ointments.

### **Purpose:**

To promote the absorption of medication through the skin.

### **Indications:**

- Nappy rash
- Bacterial skin infections
- Inflammatory skin conditions
- Venipuncture
- Burns
- If other methods are contraindicated

## A. Assessment

Assess	Rationale
1. The equipment required	1. To confirm availability of requirements
2. The client's/patient's readiness for the procedure	2. To plan with the client/patient on the procedure
3. The suitability of the site	3. For effectiveness of the procedure

## B. Planning



### **Self**

- Review own level of knowledge and skills on topical applications and requirements
- Assemble requirements
- Wash hands



### **Patient**

- Explain the need, benefits, and risks of the procedure
- Provide detailed information regarding the client's/patient's role during and after the medication
- If a child, co-operation can be enhanced if the child /care giver applies the medication under the nurse's supervision



## Environment

- Ensure privacy
- Adequate working space
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures



## Requirements

A tray containing:

- Cotton wool swabs in a gallipot
- Wooden spatula in a container
- Local ointment/cream/powder/paste/patch
- Receiver for used swabs
- Bandage if indicated
- Mackintosh and towel
- Shaving tray if required
- Disposable clean gloves
- Soap and water in a basin

## C. Implementation

Steps	Rationale
1. Take the equipment to the bedside, screen the bed	1. For ease of access and privacy
2. Follow the rights of medication	2. To prevent medication error
3. Wash, dry hands and put on gloves	3. For infection prevention and control
4. Request the patient to position him/herself appropriately	4. To access the site easily
5. Expose only the part to be treated	5. To ensure privacy and respect to the patient
6. Prepare the area of medication appropriately	6. To ensure effectiveness of the medication
7. For creams and ointments take the application and squeeze it into a gauze swab held with gloved hands and apply to the affected area spreading it gently	7. To ensure an even distribution of the medication on the site
8. Bandage the site if indicated	8. To keep the medication on site
9. For patches prepare the site by shaving if it is hairy	9. To ensure the patch sticks to the skin appropriately
10. Take the tray and trolley to the procedure room	10. To clear equipment and prepare for next use
11. Clear the equipment, clean them with soap and water, rinse, dry and store/dispose the disposable items	11. To prepare for next use

## D. Evaluation

Evaluate	Rationale
1. The comfort of the patient	1. To determine if the expected outcome was achieved
2. Whether the right medication was applied at the affected site	2. To determine the effectiveness of the medication

## E. Documentation

**Record:**

- Date and time the medication was administered
- The medications administered on the treatment chart
- The client's/patient's response to treatment
- Any adverse effects of the treatment
- Missing medication and action taken
- Append your name and signature

■ ■ ■

## 1.4-5: Instillation of Ear Drops

### Definition:

This is the delivery of a prescribed solution using a dropper into the external auditory canal.

### Purpose:

- To introduce medication solution into the ear for treatment or softening of wax in preparation for removal

### Indications:

- To soften wax in the ears
- Inflammatory and infectious conditions of the ear

### Contraindications:

- Known medication allergies

## A. Assessment

As for general administration of medication but include the following:

Assess	Rationale
1. Condition of the external structures and canal of the ear	1. To provide baseline data for further planning of the management
2. Whether the patient has symptoms of discomfort or hearing loss	2. To detect hearing impairment due to occlusion which may change after medication instillation
3. The client's/patient's ability to grasp and manipulate the dropper	3. To determine the client's ability to self-administer medication

## B. Planning



### Self

- Review own level of knowledge and skills on procedure for instillation of ear drops
- Review anatomy of the ear
- Assemble requirements



### Patient

- Identify and explain the need, benefits, and risks of the procedure.
- Provide detailed information regarding the patient's role during and after the medication



## Environment

- Ensure privacy
- Adequate working space
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedure



## Requirements

- Disposable clean gloves
- Medication in a dropper
- Cotton wool balls in a receiver
- Medication sheet
- Receiver for clinical waste

# C. Implementation

Steps	Rationale
1. Explain the procedure to the client/patient	1. To ensure understanding, reduce anxiety, gain cooperation and obtain informed consent
2. Wash hands and assemble requirements	2. For infection prevention and control
3. Position the patient in upright position with the affected ear facing upward	3. To ensure the best position for instillation of the ear drops
4. Observe rights of medication administration	4. To prevent medication errors
5. Wash hands and wear clean gloves	5. For infection prevention and control
6. Pull the pinna of the ear upward and the auditory meatus backward for adults or downwards and backwards for children	6. For clear visibility and ease of medication administration
7. Instill prescribed drops holding the dropper 1/2inch above the opening of the ear canal	7. For accuracy of administration
8. Position a piece of cotton wool ball at the opening if medication is running out	8. To prevent spillage of medicine
9. Ask the patient to remain in the same position for 2-3 minutes	9. To ensure maximum absorption of the medication
10. Decontaminate equipment and discard other wastes appropriately, remove gloves and wash hands	10. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Signs of discomfort	1. To determine response to medication
2. Condition of external ear for ability to hear	2. To aid in planning for appropriate intervention

## E. Documentation

**Record:**

- Date and time the medication was administered
- Record the medications administered on the treatment chart
- The client's/patient's response to treatment
- Any adverse effects of the treatment
- Missing medication and action taken
- Append your name and signature

■ ■ ■

## 1.4-6: Instillation of Eye Drops

### Definition:

This is dispensation of sterile ophthalmic medication into a client's/patient's eye(s).

### Purpose:

- To introduce medication solution for cleansing, dilation or constriction of pupil, relieve pain or pressure treatment of infections/disease anaesthetize or lubricate the eye

### Indications:

- Eye infection
- Dry eyes
- Eye examination
- To anesthetize the eye before operation

### Contraindications:

- Known medication allergies

## A. Assessment

Assess	Rationale
1. The client's/patient's history of allergies	1. To prevent allergic reactions
2. Condition of the eyes	2. To provide baseline data for further planning of the management
3. Whether the client/patient has symptoms of discomfort	3. To guide on further plan of action
4. The client's/patient's ability to grasp and manipulate the dropper	4. To determine the client's/patient's ability to self-administer medication

## B. Planning



### Self

- Review own level of knowledge and skills on the procedure for instillation of eye drops
- Review anatomy of the eye
- Assemble requirements



### Patient

- Correctly identify the patient
- Explain the need, benefits, and risks of the procedure
- Provide detailed information regarding the client's/patient's role during and after the medication



## Environment

- Ensure privacy
- Adequate working space
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedure



## Requirements

- Disposable clean gloves
- Medication in a dropper
- Cotton wool balls in a receiver
- Medication sheet
- Receiver for clinical waste

# C. Implementation

Steps	Rationale
1. Explain the procedure to the client/patient	1. To ensure understanding, reduce anxiety, gain cooperation and obtain informed consent
2. Assemble requirements	2. For efficiency during the procedure
3. Position the patient in supine position	3. For clear visibility and ease of drug administration
4. Follow the rights of medication	4. To prevent medication error
5. Wash hands and wear clean gloves	5. For infection prevention and control
6. Clean the affected eye(s) with a cotton wool swab moistened with normal saline	6. To remove dirt
7. Use each cotton wool ball for only one stroke, moving from the inner to the outer canthus of the eye	7. To prevent solution or tear from flowing towards the other eye
8. Tilt the client's/patient's head back slightly if he is sitting or place the head over a pillow if he is lying down	8. For accuracy of administration
9. Instill prescribed drops holding the dropper 1/2inch above the opening of the eye	9. To prevent possible contact and traumatization of the eye
10. Position a piece of cotton at the opening if medication is running out	10. To ensure maximum absorption of the medication
11. Ask the patient to remain in the same position for 2-3 minutes	11. For absorption of the medication
12. Wipe off excess solution with gauze or cotton wool balls	12. For comfort and the patient's hygiene

Steps	Rationale
13. Decontaminate equipment and dispose other waste appropriately, remove gloves and wash hands	13. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Signs of discomfort	1. To determine response to medication
2. Condition of the eyes	2. To determine response to medication and any further interventions needed

## E. Documentation

### Record:

- Date and time the medication is administered
- Record the medications administered on the treatment chart
- The client's/patient's response to treatment
- Any adverse effects of the treatment
- Missing medication and action taken
- Append your name and signature

■ ■ ■

## 1.4-7: Administration of Enema/Suppositories/Rectal Washout

### **Definition:**

This is the process of introducing fluid into the rectum or lower colon.

### **Purpose:**

- To administer medication through the rectum
- To evacuate the rectum

### **Indications:**

- Pre-operatively for lower gastrointestinal tract operations
- Diagnostic purposes e.g. Endoscopy
- Specimen collection
- Fecal impaction
- Treatment e.g. antipyretics

## A. Assessment

Assess	Rationale
1. The patient for any contraindications for the procedure e.g. paralytic ileus	1. For baseline data to guide on management
2. The patient for post gastro-intestinal and gynecological surgery	2. To rule out presence of distension, which may cause rupture of the rectum and to avoid rupture of the suture line

## B. Planning



### **Self**

- Ensure all equipment needed are available
- Explain the procedure to the assistant and the role he/she needs to play



### **Patient**

- Explain the procedure and purpose to the patient and obtain consent. If a child below 18 years obtain consent from parent or guardian
- Take baseline vital signs, which include blood pressure, temperature, heart rate, respirations

■ ■ ■

## Environment

- Privacy
- Adequate working space
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedure

■ ■ ■

## Requirements

Disinfected trolley

### Top shelf;

- Gloves (disposable)
- Drapes
- Prescribed enema/medication
- Incontinence sheet and mackintosh
- Rectal tube/rectal catheter/syringe
- Bed pan/commode
- Lubricating jelly

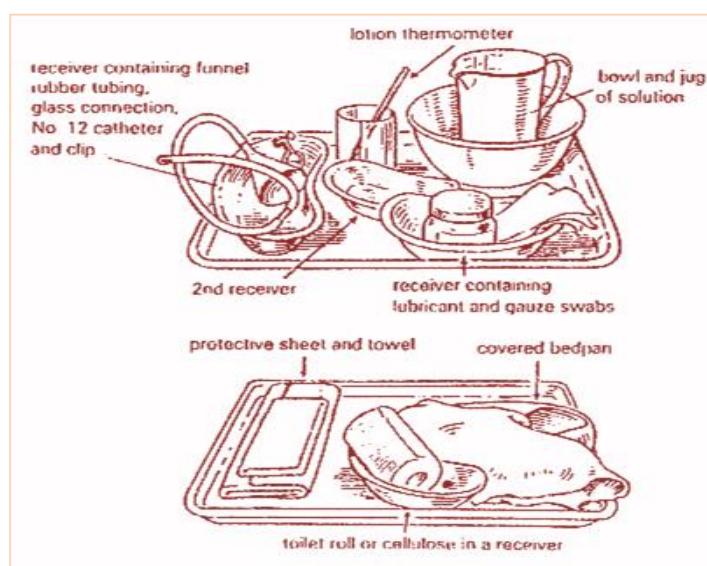


Figure 1.21 Tray for Administration of Enema

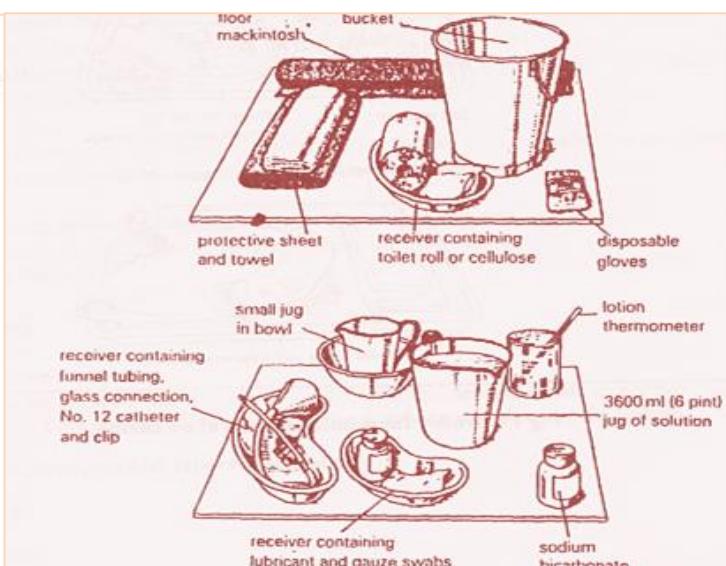


Figure 1.22 Tray for Rectal Washout

### Bottom shelf;

- Toilet paper
- Air freshener
- Receiver for soiled linen

## C. Implementation

Steps	Rationale
1. Screen the patient's bed	1. To ensure privacy
2. Wheel the trolley to the bedside	2. For efficiency during the procedure
3. Wash hands, dry and put on glove	3. For infection prevention and control

Steps	Rationale
4. Ask the assistant to position the patient in the left lateral position with knees flexed and buttocks moved to the side of the bed	4. To allow ease of passage of the tube into the rectum by following the natural anatomy of the colon. The gravity created will aid flow of the solution into the colon
5. Drape the patient	5. To maintain dignity of the patient
6. Lubricate the rectal tube/catheter	6. To prevent trauma to the anal and rectal mucosa by reducing surface friction
7. Expel any air in the tubing then clamp	7. To minimize chances of distension which will cause unnecessary discomfort to the patient
8. Insert the tube, in an upward and forward motion <ul style="list-style-type: none"> <li>• Adults (7cm – 12cm)</li> <li>• Child 5 – 7cm</li> <li>• Infant 2.5 – 3.375 cm</li> </ul> <p><b>NB:</b> Note any resistance during the passage of the tube</p>	8. For ease of passage and prevent injury to the rectal mucosa  NB: Any resistance may indicate , impacted stool, growth or tumour
9. Release the clip slowly to allow the prescribed solution to run in by gravity and then clip the tube (Fig.1.23)	9. To bypass the anal canal and ensure that the nozzle is in the rectum. This is to avoid increasing peristalsis.
	
<b>Figure 1.23 Raising Enema Solution to above Rectum and Instilling Slowly Aided by Gravity (Adapted from Craven &amp; Hirnle, 2000)</b>	
10. Ask the patient to breathe in and out as the fluid runs in to avoid pushing it out. If cramping occurs stop flow of fluid until the cramp is over	10. To promote comfort and prevent expulsion of the solution
11. Gently withdraw the catheter and urge the patient to retain the fluid as long as possible	11. To maximize the effect of the enema

<b>Steps</b>	<b>Rationale</b>
12. Place the rectal tube in a receiver as you withdraw it	12. To minimize contamination and prevent infection
13. Assist the patient to a sitting position on the bedpan commode or toilet	13. To facilitate the act of defecation
14. Ask the patient not to flush the toilet	14. To allow the nurse to examine /observe the stool
15. If specimen is required use a bed pan or commode	15. To facilitate specimen collection
<b>Clearing</b>	
16. Clear equipment and decontaminate as necessary, wash and dry hands	16. For infection prevention and control
17. Leave the patient comfortable	17. To promote recovery from the procedure
<b>Suppository</b>	
1. Place the patient in left lateral position	1. For ease of the procedure
2. Put on gloves	2. For infection prevention and control
3. Lubricate the tip of the suppository tube	3. To minimize the discomfort associated with the process of suppository insertion
4. Pass the suppository into the anal canal advancing upwards to the length of the index finger	4. To help in directing the suppository into the anal
5. Ask the patient to hold suppository as long as possible then go to the toilet or use bed pan	5. To allow the suppository to melt and release the active ingredients
<b>Clearing</b>	
Same as for enema procedure	
<b>For Rectal Washout</b>	
1. In rectal washout, prepare irrigation solution and repeat procedure until returns are clear	1. Clear returns from the rectum indicate the success of the procedure
2. All other aspects of the procedure as in enema	2. For effectiveness of the procedure

## D. Evaluation

<b>Evaluate</b>	<b>Rationale</b>
1. Whether the patient tolerated the procedure or not	1. To determine the patient's physiologic and psychological status during and after the procedure
2. Whether the desired effects for the procedure were achieved	2. To establish effectiveness of the medication given

## E. Documentation

### Record:

- Date and time of the procedure
  - The amount, color and consistency of returns from the rectum
  - Any observations made and problems encountered during the procedure e.g. resistance at the external sphincter when inserting the rectal tube
  - The type of medication and dose given and effects witnessed
  - Append your name and signature
- ■ ■

## 1.4-8: Maintenance of Drug Registers

### **Definition:**

This is the process of keeping records of drugs ordered, received, used and at hand.

### **Purpose:**

To ensure accountability and proper planning of medication use.

### **Indications:**

- Antibiotics
- Dangerous drugs
- Others as per Institutional policy

## A. Assessment

Assess	Rationale
1. Availability of lockable cupboards	1. To ensure safe custody of the drugs
2. Staff knowledge on the use of drug registers	2. To enhance competence in the use of the register
3. Staff knowledge on law governing dangerous drugs	3. To ensure conformity with medico/legal issues governing the use of certain drugs. (Drugs governed by the dangerous drugs ACT (DDA) should be kept in a lockable cupboard within a lockable cupboard)

## B. Planning



### **Requirements**

Availability of at least one qualified registered nurse

#### **A. Dangerous drugs**

- Lockable dangerous drugs (DDA) cupboard within a lockable cupboard
- DDA register

#### **B. Antibiotics**

- Lockable antibiotic cupboard
- Antibiotic register
- The patient's treatment sheet/card

## C. Implementation

Steps	Rationale
1. Two nurses should work together throughout the procedure. Both nurses must read the prescription and confirm the drug prescribed, the signature of the clinician, time to be given and route of administration.	1. To ensure that the nurse conforms with the DDA regulations
2. Open medicine cupboard and then DDA cupboard and remove the DDA register. Open the page with the record of drugs to be given.	2. To allow the nurse to confirm the accuracy of the balance before administration is done
3. Remove all the stock of the drugs to be given, count and then countercheck with the stock.	3. To promote accuracy in counting so that no drugs are missed out
4. Remove the dose to be given, check with assistant and place on the tray, return the remaining stock in the DDA cupboard.	4. To prevent medication error, ensure that only the required dose is removed and promote safe custody of the drug
5. Enter all the details of the patient, time, date, drug dose and stock at hand. Both nurses must sign.	5. For accountability, follow up and facilitation of balancing and maintenance of the drug register
6. Return the DDA register back into the DDA cupboard. Lock the cupboard and then lock the general cupboard.	6. To ensure DDA regulations for safe custody of DDA drugs and the register are observed
7. The two nurses should give the drug to the patient and record in the patient's treatment sheet.	7. To minimize chances of drugs being given to the wrong patient or taken away by unauthorized persons, and accountability purposes
Antibiotics	
8. Enter the details of the patient in the antibiotic register	8. To ensure accountability and follow up
9. Bring forward the stock of the drugs remaining after subtracting the medications given	9. To confirm the accuracy of the balance before administration is done
10. Enter all antibiotics given during drug administration session as appropriate	10. To facilitate balancing and accurate maintenance of the antibiotics register
11. Record drugs at every shift and both nurses who checked should sign in the antibiotic register	11. To facilitate close control and accountability
12. Enter all antibiotics ordered and received in the antibiotic register	12. For accountability, follow up and facilitation of balancing and maintenance of the drug register

Steps	Rationale
13. Balancing of all the antibiotics should be done every 24hrs, preferably in the morning and the balance brought forward to the next page	13. To facilitate control, early identification of errors and allow appropriate corrective measures
14. Check the expiry dates for drugs not used and return them to the pharmacy for re allocation to other wards and information entered in the antibiotic register	14. To ensure that only potent drugs are kept in the ward, prevent expired agents into the ward

## D. Evaluation

Evaluate	Rationale
1. If all Dangerous drugs and antibiotics were accounted for	1. To enhance good record keeping practice
2. If any misuse was identified	2. To institute necessary action
3. What orders and returns need to be done	3. To enhance planning

## E. Documentation

### Record:

- Status of the registers
  - Drugs given or borrowed out
  - Incidents of missing or non-accounted for drugs
  - Date and time of the procedure
  - Name of nurses who conducted the procedure
- ■ ■

# 1.5: Admission, Transfer and Discharge of a Patient

## 1.5-1: Admission of a Patient

### **Definition:**

This is a process of receiving, registering and retaining the patient in the health facility for provision of skilled therapeutic interventions in a safe environment.

### **Purpose:**

To provide a safe environment, close monitoring, further investigations, therapeutic interventions and specialized care for the patient.

### **Indications:**

All Patients;

- In critical condition
- For emergency management
- Who require therapeutic interventions
- In unstable physiological condition that require close monitoring
- Who require pre-operative and post-operative care
- Suffering from disorders requiring detoxification

## A. Assessment

Assess	Rationale
1. The physiological state of the patient	1. To determine if the patient can tolerate the admission procedure or if there are emergency interventions required before completing the admission process
2. The provisional diagnosis	2. To determine the type of bed and room to be assigned within the ward

## B. Planning



### **Self**

- Review the admission procedure
- Review the admission requirements for patients suffering from various conditions



### Patient

- Confirm readiness for admission
- Avail hospital gown



### Environment

- Privacy of the room
- A room with adequate lighting and ventilation
- Adequate comfortable seats
- Adequate working space
- Sitting arrangement that allows for full view of the patient



### Requirements

Table with;

- Stationery:
  - Admission file
  - Pen, continuation sheets, consent forms, daily bed return, lab request forms
  - Admission record book
  - Nursing notes/cardex
  - Assorted charts (vital signs, fluid charts, treatment sheet, suicide precaution form)
- Treatment trolley
- Emergency tray
- Weighing machine
- A trolley with physical examination equipment
- Hospital gown
- Examination couch

## C. Implementation

Steps	Rationale
1. Welcome the patient and his/her companion (s) and offer them a seat	1. To enhance comfort and relaxation
2. Receive the report of the patient from the accompanying nurse	2. For continuity of care and planning for appropriate interventions
3. Verify the admission documents	3. To confirm that all relevant documents are available
4. Identify the patient and apply identification band	4. To ensure right interventions are done to the right patient
5. Explain the procedure to the patient and companions	5. To promote cooperation and enhance the patient's understanding of the process
6. Take history from the patient and/or companion they are comfortable with. <b>(Refer to procedure 1.1-2, History Taking)</b>	6. To establish baseline data and formulate nursing diagnosis

Steps	Rationale
7. Provide the examination gown to the patient	7. To ease the process of physical examination
8. Assist the patient to the examination couch	8. To facilitate the physical examination
9. Perform physical examination ( <b>Refer to procedure 1.1-3</b> )	9. To establish baseline data, validate subjective data and facilitate clinical judgment on the patient's diagnosis
10. Thank the patient and companion and give feedback on the assessment findings	10. To gain cooperation and involve them in the care
11. Take the patient to the allocated bed	11. To settle the patient and make him/her comfortable
12. Inspect all valuables and identify items to be taken home by the companion	12. To ensure safety of the patient's property
13. Give the necessary instructions and release the companions	13. To gain their cooperation and involve them in the patient's care
14. Label, make a list and appropriately store items that must be left in the ward	14. To ease identification of the patient's property and avoid loss
15. Orient the patient to the ward	15. To promote quick adjustment to hospital environment, relieve anxiety
16. Ensure the patient takes a bath (if necessary) and changes into hospital gown	16. To improve the patient's image and hygiene status
17. Administer due treatment	17. For continuity of care
18. Inform the ward clinician to review the patient	18. To ensure prompt clinical judgment
19. Develop a nursing care plan	19. For systematic, organized and quality care
20. Keep the patient's file in the file cabinet	20. To ensure safe custody of legal documents for reference
21. Clear the examination room	21. For safe custody of equipment and in readiness for subsequent use

## D. Evaluation

Evaluate	Rationale
1. If the patient is well settled	1. To identify areas where more information is required
2. If the patient is well informed of the disease process and treatment regimen	2. To allow participation in own management
3. Adequacy of interventions provided	3. To assess need for further interventions

## E. Documentation

**Record:**

- Date and time of admission
- Assessment data
- Any treatment administered
- The interventions done
- Findings of evaluation
- Routine investigations done or due
- Health education provided to the patient and family

■ ■ ■

## 1.5-2: Transfer/Referral of a Patient

### Definition:

Transfer is moving a patient from the current ward to another ward.

Referral is moving a patient from current hospital to a more specialized hospital.

### Purpose:

- To provide specialized, affordable or palliative care.
- If the patient no longer needs specialized care.

### Indications:

- Patients in the general ward who need critical/specialized care
- Patient who no longer need critical or specialized care.
- Patient's/ relatives' own request

## A. Assessment

Assess	Rationale
1. The reason for transferring/ referring the patient	1. To determine relevance of the activity
2. Patient's current physical condition	2. To determine the appropriate timing and means of transfer/ referral
3. Protocol of transferring/referring the patient	3. For proper planning and ensuring adherence

## B. Planning



### Self

- Review own knowledge on transfer/referral of a patient
- Review procedure of transfer/referral of patients



### Patient

- Inform the patient and family the need, process, the location and date and time of transfer/referral



### Environment

- Ensure privacy of the patient
- Adequate lighting and ventilation



### Requirements

- Fully equipped ambulance with oxygen, resuscitation tray and stretcher
- Adequate supplies
- Duly filled referral forms

## C. Implementation

Steps	Rationale
1. Explain to the patient and family the procedure, the process and available alternatives	1. To inform, alleviate anxiety and fear related to transfer/referral and allow questions and clarifications
2. Notify the nurse on the receiving ward/hospital and transport team	2. To ensure adequate preparedness
3. Gather and label the patient's personal belongings	3. To ensure the patient's belongings are safely transferred
4. Update all medical records on the patient's care during their stay  <b>NB:</b> For transfer, carry all the medical records and for referral carry the referral letter	4. To ensure effective continuity of care
5. Assist the patient to wheel chair or stretcher where applicable	5. To ensure the patient is transferred safely
6. Accompany the patient to their designated location	6. To intervene in case of the patient's change of condition
7. Alert the receiving nurse of the arrival of the patient	7. To start the process of admission and ease handing over
8. Hand over to the nurse in the receiving unit a verbal and written report of the patient	8. For continuity of care
9. Document the outcome of referral/transfer	9. To provide evidence of nursing care and management

## D. Evaluation

Evaluate	Rationale
1. If the referral/ transfer process was successful	1. To ensure effectiveness in subsequent referrals/ transfers
2. The patient's reaction during transfer/ referral	2. To determine feelings that need to be communicated to the new agency staff for planning appropriate interventions

## E. Documentation

### Record:

- Date and time of leaving the old unit and arrival to the new unit.
  - The patient's condition before and during the transfer/referral.
  - The patient's concerns during transfer/referral and interventions provided.
  - Details of the patient's transfer/referral location including the receiving health care provider, ward, bed number and the health facility contacts
- ■ ■

## 1.5-3: Discharge of a Patient

### Definition:

This is the process of releasing a patient from the current in-patient care environment to their home or any other facility.

### Purpose:

- To provide effective integration of the patient in the family/society/ community for optimal functioning
- For continuity of care

### Indications:

All Patients;

- Patients who have recovered
- Patients who wish to continue with care in an environment of their choice

## A. Assessment

Assess	Rationale
1. The level of readiness of the patient for discharge	1. To determine and plan for appropriate interventions for health promotion and optimal functioning
2. The level of preparedness of the patient's/companion for discharge	2. To determine teaching needs for the companion and plan for the patient's follow up care
3. The home environment	3. To identify any assistance required and intervene as necessary
4. The mode of travel	4. To confirm suitability of transport arrangements

## B. Planning



### Self

- Review procedure for discharging a patient
- Assemble all requirements necessary for the patient's discharge
- Facilitate documents needed for discharge in other departments



## Patient

- Confirm the patient's awareness of discharge details
- Prepare the patient's belongings
- Organize for the patient's transport (if required)



## Environment

- Ensure privacy of the patient
- Adequate lighting and ventilation



## Requirements

- Stationery: Discharge record book, discharge summary, nursing cardex
- Tray with dry swabs, adhesive tape (if necessary)
- Updated patient's medical records.
- Discharge prescriptions (if appropriate)
- Patient's medications (if appropriate)
- Physical examination equipment

## C. Implementation

Steps	Rationale
1. Explain the procedure to the patient and companion and expectations after discharge	1. To promote cooperation
2. Wash and dry hands	2. For infection prevention and control
3. Perform a complete physical assessment	3. To confirm suitability for discharge
4. Clear all hospital equipment	4. To make the room tidy and prepare for subsequent examination
5. Provide health education on disease process, drug regimen and follow-up	5. To ensure compliance, avoid relapse of the disease and facilitate understanding of the patient's/companion's role in follow up care
6. Assemble the patient's personal belongings and hand over to them	6. To ensure safe and organized handling of patient's belongings
7. Update all the documentation and medical records	7. To provide evidence of care during hospital stay
8. Thank the patient/ companions and remind them of the follow up care	8. For appreciation and ensure compliance
9. Assist the patient to wheel chair or stretcher where applicable	9. To ensure safe movement of patient

Steps	Rationale
10. Accompany the patient with their belongings, discharge documents, and discharge medication to the transport area	10. To ensure the patient leaves the hospital safely

## D. Evaluation

Evaluate	Rationale
1. The patient's understanding of his/her role in the treatment at home	1. To determine if the patient requires further clarification concerning his/her treatment
2. The success of the discharge process	2. To plan for necessary intervention
3. Contents of discharge notes, medication and follow up schedules	3. To determine quality of documentation and care given

## E. Documentation

### Record:

- Date and time of discharge
  - Physical and mental state of the patient on discharge
  - Discharge medications
  - Companion of the patient and the relationship
  - The follow up schedule
  - The expected destination of the patient
  - Nurse's name and signature
- ■ ■

## 1.6: Conducting a Ward Round

### Definition:

This is the process of reviewing every patient(s) management plan and evaluating progress made and/ or need for change in the management.

### Purpose:

To create a forum for collective decision making regarding the patients' plan of care.

### Indications:

- For continuity and collaborative patient care

## A. Assessment

Assess	Rationale
1. The patient's condition and working diagnosis	1. To anticipate the type of patients being managed
2. The number and type of patients to be reviewed	2. To allow for adequate time allocation and equipment needed
3. Preparedness of the patient for the procedure	3. To encourage the patient's cooperation and contribution to his/her care
4. The patient's understanding of his/her condition	4. To determine teaching needs of the patient during the ward round
5. The state and the quality of the environment	5. To avoid distraction during the ward round
6. Required equipment and supplies	6. To determine availability of equipment to ensure efficiency

## B. Planning



### Self

- Review the procedure of conducting a ward round
- Ensure the ward is organized and set for a ward round
- Review the patient's report
- Alert the staff/students to join the ward round as necessary



## Patient

- Explain to the patient that his/her presence will be required
- Explain to the patient that his/her condition and management will be discussed and is free to contribute in the discussion



## Environment

- Adequacy of lighting and ventilation
- Cleanliness of the room
- Screens for privacy
- Adequate space
- Availability of standard operating procedure



## Requirements

Trolley;

### Top shelf;

- The patient's medical records
- Prescription book
- Ward round book
- Continuation sheets
- Lab/X-ray request forms
- Nursing cardex
- Vital signs tray
- Hand sanitizer

### Bottom shelf;

- Gloves
- Antiseptic
- Dressing materials
- Extra gauzes and swabs

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. For infection- prevention and control
2. Wheel trolley to the bedside where the round begins and move from one patient to another as required	2. To ensure order during the ward round
3. Provide an update on the patient's current health status and advocate for their care needs	3. To update the ward round team on the current health status of the patient
4. Discuss and evaluate the patient's condition	4. To identify any emerging issues and health education gaps of the patient

Steps	Rationale
5. Allow the patient to join in the discussion, ask questions and clarify any information	5. To promote the patient's participation in own plan of care and alleviate their anxiety and fear
6. Document any new plan of care and interventions during the ward round	6. To ensure interventions are not missed out and additional care is implemented
7. Emphasize on the priority intervention(s) of the identified patient	7. To help the health care team to implement the patient's immediate needs
8. Thank the patient and leave him/her comfortable	8. To show appreciation and ensure the patient is satisfied
9. Sanitize/ wash hands and move to the next patient	9. For infection prevention and control
10. Clear the trolley after the ward round is complete	10. For preparation for the next procedure

## D. Evaluation

Evaluate	Rationale
1. If all patients have been reviewed	1. To ensure no omission
2. Whether all orders for investigations and prescriptions have been written	2. For continuity and follow up of care
3. The patient's understanding of subsequent management	3. To gain their cooperation and need for further health education

## E. Documentation

### Record:

- Date and time the patient was reviewed
  - Any investigations ordered/done
  - New recommendations on the patient's care
  - The findings during the ward round
  - Append your name and signature
- ■ ■

## 1.7: Handing Over Patients

### Definition:

It is the process of disseminating information about a client/patient's condition to an authorized staff.

### Purpose:

To show evidence of nursing care and ensure proper continuity of care.

### Indications:

- Change of shifts
- Referral/transfer of patients
- Ward rounds
- As a routine of the Institutions' management

## A. Assessment

Assess	Rationale
1. Own knowledge of the client's/patient's diagnosis and the current management	1. To know what to include in the report
2. The progress of the patient	2. To determine the patient's response to the management
3. Readiness of authorized staff to receive report	3. To effectively receive the report

## B. Planning



### Self

- Ensure completeness of written report
- Avail all necessary documents used for reporting
- Meet the staff receiving the report
- Review the patient's notes, treatment charts and all other information about the patient
- Perform physical check to determine presence of patients in the respective beds/cubicles



### Patient

- Identify and explain to the client/patient the importance of sharing his information with other authorized members of staff to gain consent
- Encourage the client/patient to ask any questions and make any comments if he/she wishes to.
- Clarify any issues they may have during and after report
- Answer any questions and concerns that the patient may have



## Environment

- Safe and quiet
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Adequate working space
- Availability of standard operating procedure



## Requirements

- The patient's nursing care notes (cardex)/report book, treatment sheets
- Observation charts, turning charts, fluid chart and any other available chart.
- Pen and notebook

# C. Implementation

Steps	Rationale
<b>Verbal Report</b>	
1. Get a private room to discuss about the patient's progress throughout the shift	1. To ensure shared confidentiality of the patient's information
2. The voice should be audible and the staff receiving the report should have notebooks to record the report	2. To ensure that they capture the content of the report
3. Capture and maintain the attention of all staff members as one staff attends to patients while you give the report	3. To ensure continuity of the patient's care during the hand over session
4. Allow the staff receiving the report to ask for clarification of reports and any other relevant questions	4. To verify information given
5. Carry out a nurse's round for all patients	5. To be able to relate the information given and the patient
<b>General Reports</b>	
Examples; <ul style="list-style-type: none"> <li>• Number of patients in the ward</li> <li>• New admissions</li> <li>• Transfers in and out</li> <li>• Discharges</li> <li>• Deaths (if any )</li> </ul>	To give a general overview of expected workload for the purpose of planning ward activities
<b>Special Reports</b>	
1. Provide information to include; the patient's demographic data, attending doctor, new orders, discontinued orders, assessment findings, vital signs, investigations done and results. If surgery has been done, indicate type, time and any other special reports	1. To enhance wholistic quality care to the patient and continuity of care

Steps	Rationale
2. Carry out a nurses' round for all patients	<p>2. To provide a detailed report about a patient.</p> <p>For adequate planning and administrative facilitation of continuity of care</p>

## D. Evaluation

Evaluate	Rationale
1. Completeness of information given	<p>1. To determine quality of the report and identify gaps for inclusion</p>
2. Area of concern during the report giving	<p>2. For correction and improvement in subsequent reports</p>
3. Reliability of information gathered	<p>3. To validate the information gathered</p>

## E. Documentation

### Record:

- Date and time of report
- Investigations scheduled and new orders, with clear timelines
- Concerns raised by patients during the round
- Progress made by the patients
- Concerns raised by the medical team during the round and the suggested interventions

■ ■ ■

## References

Altman G.B (2004). *Dalmar's Fundamental and Advanced Nursing Skills*. 2nd ed. Canada, Thomson Learning Lab

College of Registered Nurses of Nova Scotia (2012). *Documentation Guidelines for Registered Nurses*. Retrieved from <https://crnns.ca>

Craven R. and Hirle C. J. (2000). *Fundamentals of Nursing: Human Health and Function*. 3rd ed. Philadelphia, Lippincott

<http://www.nanb.nb.ca/media/resource/NANB-StandardsFor-Documentation-E.pdf>

<http://www.oxfordmedicaleducation.com/clinical-examinations/examination-of-the-respiratory-system-detailed> 2014 retrieved on 19.05.2017

<http://www.stethographic.com/heart/main/sites.htm> retrieved on 19.05.2017

Joint Commission International (2014). *Joint Commission International Accreditation Standards for Hospitals. Including Standards for Academic Medical Center Hospitals*. 5th ed. USA, JCI, Department of Publication

Nurses Association of New Brunswick (2015). *Standards for Documentation*. Retrieved from <http://www.nanb.nb.ca>

Nursing Council of Kenya (2009). *Manual of Clinical Procedures*. 3rd Ed. Nairobi

Oxford Medical Education (2014). *Clinical Examinations*. Retrieved from <http://www.oxfordmedicaleducation.com>

Prakash R. (2007). *Manipal Manual of Nursing Procedures, Fundamentals of Nursing Part 1*. New Delhi, CBS

Prakash R. (2007) *Manipal Manual of Nursing Procedures, Fundamentals of Nursing Part 2*. New Delhi, CBS

# Chapter 1: Evaluation Checklist

Please fill this evaluation checklist to help the Nursing Council of Kenya improve the quality of subsequent procedure manuals.

FUNDAMENTALS OF NURSING	YES	NO	COMMENTS
1. Critical procedures in Fundamentals of Nursing are included in the chapter			
2. Procedures are placed under their relevant functional patterns/systems			
3. Procedures are arranged from simple to complex within the respective functional patterns/systems			
4. Procedures are correctly defined			
5. Purpose of the procedures is stipulated clearly			
6. Indications for the procedures are correct			
7. Steps in procedures are accurate			
8. Nursing process is correctly applied:			
➤ Assessment			
➤ Planning			
➤ Implementation			
➤ Evaluation			
➤ Documentation			
9. Scientific rationales are given in assessment, implementation and evaluation			
10. Approach of the nursing process is useful in these procedures			
11. Diagrams are:			
➤ Relevant			
➤ Appropriate			
➤ Arrangement			
12. How would you rate this chapter on a scale of 1 to 10 (where 1 is the lowest & 10 is the highest score)?			
13. Overall comments for this chapter			

# Appendix 1: Documentation Guideline for Procedures

## Introduction

Nursing documentation is essential for good clinical communication and forms an integral part of professional nursing practice. It reflects the application of nursing knowledge, skills and judgment in the care of clients/patients.

## Definition of terms

**Documentation:** Encompasses all written and/or electronic entries reflecting all aspects of a patient's care communicated, planned recommended or given to that patient.

**Late entry:** Nursing documentation that is not entered in real time

## Purpose

To provide a structured and standardized approach to recording of data for patients' care. This will ensure consistency and improve clinical communication. It provides evidence of care and is an important professional and legal requirement of nursing practice and forms the basis of nursing research.

## Scope/Responsibilities

- Nurses at all cadres
- **The guiding principles in nursing documentation:**
  - Ensure documents include patient's particulars for identification
  - Nurse's name and signature
  - In teaching hospitals, information by a student includes the student's year in training in addition to name and signature and countersigned by the supervisor of the student. This could be the lecturer, clinical instructor or the qualified nurse working with the student
  - Complete documentation in timely manner
  - Document in chronological order and indicate when an entry is late as "LATE ENTRY"
  - Document at the next available entry space when using paper documentation forms, draw a line from the end of the entry. Indicate at least your two names, designation and signature for accountability.
  - Correct mistaken entries by crossing with a straight line; indicate 'error' and sign against. This is to ensure the original information remains visible/retrievable.
  - Never delete, alter or modify anyone else's documentation.

- Document any unanticipated event of a client in RED, and should include the following:
    - Nurses' observation and action.
    - Outcome of the procedure
  - Avoid the use of abbreviations
  - Ensure legibility
  - A clear, concise and accurate statement of the client's status
- **Documentation of nursing care should contain the following elements:**
- The care/service provided
  - An evaluation of outcome

**NB:** The general guidelines of documentation should be complemented with institutional documentation policy.

## Appendix 2: Risk Assessment Tool

RISK AREAS	RISK FACTORS	MEASURES OF PREVENTION	REMARKS
<b>Pressure ulcer</b>	<ol style="list-style-type: none"> <li>1. Paraplegia</li> <li>2. Incontinence</li> <li>3. Immobility</li> <li>4. Terminal cachexia</li> <li>5. Obesity</li> <li>6. Severe anemia</li> <li>7. Multiple organ failure</li> <li>8. Major surgeries or trauma</li> <li>9. Advanced age-Over 80 years</li> </ol>	<ol style="list-style-type: none"> <li>1. Proper assessment of the patient- focus on skin</li> <li>2. Use of pressure relieving devices e.g. ripple mattress</li> <li>3. Two hourly turning and four hourly pressure area care</li> <li>4. Treatment of underlying condition</li> <li>5. Ensure balanced nutrition</li> <li>6. Physiotherapy</li> <li>7. Use of barrier cream /control incontinence</li> </ol>	<ul style="list-style-type: none"> <li>• Apply relevant Measures</li> <li>• Refer to institutional guidelines</li> </ul>
<b>Prescription medication misuse/abuse</b>	<ol style="list-style-type: none"> <li>1. Chronic conditions</li> <li>2. Major surgeries</li> <li>3. Low pain threshold</li> <li>4. Trauma</li> <li>5. Past or present addiction to other substances e.g. alcohol, tobacco</li> <li>6. Pre-existing mental and behavioral conditions</li> <li>7. Lack of knowledge on prescription medications</li> <li>8. Family history of substance misuse and abuse</li> </ol>	<ol style="list-style-type: none"> <li>1. Health education</li> <li>2. Pain assessment and re-assessment</li> <li>3. Counseling</li> </ol>	<ul style="list-style-type: none"> <li>• Apply relevant Measures</li> <li>• Refer to institutional policy on pain assessment</li> </ul>
<b>Deep venous thrombosis</b>	<ol style="list-style-type: none"> <li>1. Immobility</li> <li>2. Injury or surgery</li> <li>3. Blood-clotting disorder</li> <li>4. Pregnancy</li> <li>5. Contraceptives</li> <li>6. Pre-disposing lifestyle behavior</li> <li>7. Pre-disposing diseases</li> </ol>	<ol style="list-style-type: none"> <li>1. Mobilize the patient if not contraindicated</li> <li>2. Anti-embolism stockings</li> <li>3. Educate the family/patient about DVT risk factors</li> </ol>	<ul style="list-style-type: none"> <li>• Apply relevant Measures</li> <li>• Refer to institutional guidelines</li> </ul>

RISK AREAS	RISK FACTORS	MEASURES OF PREVENTION	REMARKS
	8. Personal history of deep vein thrombosis or pulmonary embolism (PE) 9. Family history of deep vein thrombosis or pulmonary embolism (PE) 10. Age-being over age 60 increases your risk of DVT	4. Prophylaxis treatment where appropriate 5. Increase fluid intake	
<b>Fall</b>	1. History of falls in similar circumstances 2. Convulsive disorders 3. Advanced age >80 years 4. Urgency/frequency/incontinence 5. Patients on sedation/Sedated within past 24 hours 6. Patient care equipment >2 (any equipment that tethers patient e.g IV infusion, chest tube, indwelling catheter) 7. Mobility <ul style="list-style-type: none"> <li>• Requires assistance/supervision</li> <li>• Unsteady gait</li> <li>• Visual/auditory impairment</li> </ul> 8. Mental status <ul style="list-style-type: none"> <li>• Impulsive</li> <li>• Altered awareness</li> <li>• Forgets limitations</li> </ul>	1. Identify high risk patients 2. Conduct safety rounds 3. Maintain a safe environment 4. Educate the family/patient about fall risk factors 5. Toileting schedule 6. Use of assistive devices 7. Close observation of the patient 8. Review medication for fall risks	<ul style="list-style-type: none"> <li>• Refer to institutional guidelines</li> </ul>
<b>Absconding</b>	1. History of absconding 2. History of refusing admission 3. Frustration due to disease, disease process and medication regimen 4. Poor coping mechanism during and after admission 5. Patient verbalizes they do not want to be admitted 6. Low-economic status 7. Safety awareness	1. Counsel the patient on area of concern 2. Refer to appropriate medical personnel 3. Assure clients safety and comfort 4. Put an alert/Alarm band on the patient	<ul style="list-style-type: none"> <li>• Refer to institutional guidelines</li> <li>• Refer to counseling protocol</li> </ul>

RISK AREAS	RISK FACTORS	MEASURES OF PREVENTION	REMARKS
		<p>5. Patient to wear hospital gown</p> <p>6. Guarded, locked and alarm doors</p>	
<b>Suicidal Risk</b>	<ol style="list-style-type: none"> <li>1. History of suicide attempts</li> <li>2. Self-injury behavior</li> <li>3. Current/Past psychiatric disorders</li> <li>4. Family history of suicide</li> <li>5. Acute Stressors</li> <li>6. Abrupt change in treatment</li> <li>7. Access to suicidal aids</li> </ol>	<ol style="list-style-type: none"> <li>1. Seek medical advice/ Refer for medical advice</li> <li>2. Seek professional counseling</li> <li>3. Keep harmful tools away</li> <li>4. Close monitoring</li> </ol>	<ul style="list-style-type: none"> <li>• Refer to institutional guidelines</li> <li>• Refer to Sad Person's scale</li> </ul>
<b>Hospital acquired infections</b>	<ol style="list-style-type: none"> <li>1. Patients with compromised immune system.</li> <li>2. Have invasive devices</li> <li>3. Prolonged hospitalization</li> <li>4. Pediatric patient &gt; 7days</li> <li>5. Adult patient &gt;</li> <li>6. High risk Units</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure high level of infection prevention and control on institutions and units with high risk patient</li> </ol>	<ul style="list-style-type: none"> <li>• Use National infection prevention and control guidelines</li> <li>• Use institutional guidelines</li> </ul>

## CHAPTER 2

# Medical - Surgical Nursing

### Chapter Outline

#### 2.1: Nutrition and Elimination

- 2.1-1:** Nasogastric Tube Insertion
- 2.1-2:** Nasogastric Tube Feeding
- 2.1-3:** Nasogastric Tube Suctioning
- 2.1-4:** Removing a Nasogastric Tube
- 2.1-5:** Gastrostomy Tube Feeding
- 2.1-6:** Gastric (Stomach) Washout
- 2.1-7:** Urinary Catheterization
- 2.1-8** Removal of a Urinary Catheter
- 2.1-9:** Urinary Bladder Irrigation/Wash Out

#### 2.2: Oxygenation

- 2.2-1:** Administration of Oxygen
- 2.2-2:** Endotracheal and Tracheal Tube Suctioning
- 2.2-3:** Care of a Client on Tracheostomy
- 2.2-4:** Care of a Patient on Underwater Chest Drainage System
- 2.2-5:** Endotracheal Intubation (Ei)
- 2.2-6:** Care of a Patient on Mechanical Ventilation
- 2.2-7:** Endotracheal Extubation

#### 2.3: Circulatory System

- 2.3-1:** Performing a Venepuncture Cannulation
- 2.3-2:** Maintaining an Intravenous Insertion Site
- 2.3-3:** Measuring Central Venous Pressure (CVP)
- 2.3-4:** Intravenous Fluid Administration
- 2.3-5:** Administration of Blood and Blood Products

#### 2.4: Musculoskeletal and Integumentary System

- 2.4-1:** Wound Dressing
- 2.4-2:** Removing Stitches/Staples and Clips
- 2.4-3:** Care and removal of Drains
- 2.4-4:** Central Venous Catheter Dressing

## **2.4-5: Wound irrigation**

## **2.5: Emergency Care**

- 2.5-1:** Performing Basic Life Support
- 2.5-2:** Performing Heimlich Manoeuvre
- 2.5-3:** Bag Valve Mask Ventilation
- 2.5-4:** Defibrillation and Cardioversion
- 2.5-5:** Intraosseous Cannulation

## **2.6: Ophthalmology Procedures**

- 2.6-1:** Measuring Visual Acuity
- 2.6-2:** Eye Swabbing
- 2.6-3:** Eye Irrigation
- 2.6-4:** Application of Eye Compress

## **2.5: Specialized Procedures**

- 2.5-1:** Performing Basic Life Support
- 2.5-2:** Management of chocking
- 2.5-3:** Bag Valve Mask Ventilation
- 2.5-4:** Defibrillation and Cardioversion
- 2.7-1:** Pre and Post-Operative Care
  - 2.7-1.1:** Pre-Operative Care
  - 2.7-1.2:** Immediate Post-Operative Care
- 2.7-2:** Care of a Patient on Abdominal Paracentesis
- 2.7-3:** Caring for a Patient during a Bone Marrow Procedure
- 2.7-4:** Care of a Patient for Peri-Radiological Examination
- 2.7-5:** Care of a Client/Patient for Magnetic Resonance Imaging (MRI)
- 2.7-6:** Care of a Patient for Computed Tomography (CT) Scan
- 2.7-7:** Care of Patient Peri-Haemodialysis
- 2.7-8:** Care of a Patient on Peritoneal Dialysis
- 2.7-9:** Care of a Patient Undergoing Brachytherapy (Internal Radiation Therapy)
- 2.7-10:** Care of a Patient Before, During and After Lumbar Puncture
- 2.7-11:** Care of a Patient with a Stoma

## **2.8: Male Circumcision**

## 2.1: Nutrition and Elimination

### 2.1-1: Nasogastric Tube Insertion

**Definition:**

This is the introduction of a tube through the nose and oesophagus to the stomach.

**Purpose:**

- To provide nourishment
- To empty stomach contents/gastric lavage
- For diagnostic procedures
- For medication

**Indications:**

- Intestinal obstruction
- Poisoning
- Gastro oesophageal reflux disease (GERD)
- Unconsciousness
- Post gastro intestinal operations
- Gastric distension
- Severe malnutrition

**Contraindications:**

Patients with or suspected fracture base of skull.

**NB:** Orogastric tube preferred

## A. Assessment

Assess	Rationale
1. The patient's suitability for nasogastric tube (NGT) insertion	1. To rule out any contraindications
2. The equipment to be used in the procedure	2. To ensure availability
3. The patient's readiness for the procedure	3. To allay anxiety and enhance cooperation

## B. Planning



**Self**

- Review knowledge and skills on the procedure
- Assemble all equipment
- Assign roles to the assistant



### Patient

- Explain the need, benefits and risks of the procedure and obtain informed consent from patient/ guardian
- Provide detailed information regarding the patient's role during and after the procedure



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



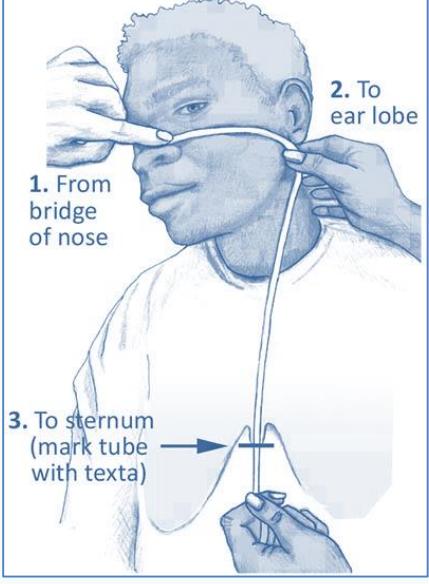
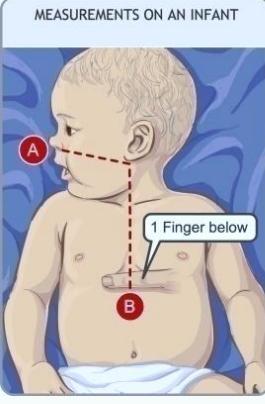
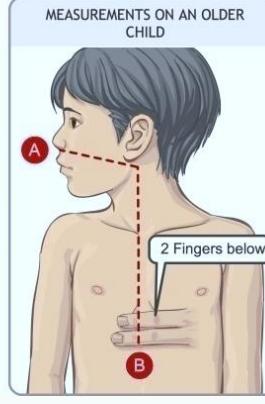
### Requirements

A trolley/tray containing;

- Plastic apron
- Clean gloves
- Towels
- Kidney dish with a naso-gastric tube (appropriate size)
- Water soluble lubricant
- Gauze swabs in a gallipot
- 20mls and 50mls syringes
- Cotton wool swabs in a gallipot
- Receiver with blue litmus paper
- Adhesive tape
- Water in a medicine cup
- Pen torch
- Stethoscope
- Marker pen
- Clean linen

## C. Implementation

Steps	Rationale
1. Take the equipment to the bedside and screen the bed	1. To enhance accessibility
2. Put on the plastic apron	2. To protect the nurses' uniform from splashes
3. Perform hand hygiene and put on gloves	3. For infection prevention and control
4. Ask the assistant to position the patient appropriately- fowler's position for conscious, semi-fowlers position for unconscious and lateral or prone for neonates	4. To prevent aspiration and enhance ease of procedure
5. Using wet gauze, clean mucus from the nares	5. To clear the nasal passage for the tube

Steps	Rationale
<p>6. Approximate the length of the tubing needed by measuring the distance from the tip of the nose to ear lobe, then to xiphisternum and mark with a marker pen (Fig 2.1)</p>	<p>6. To estimate the length of the patient's oesophagus to facilitate proper placement of the tube.</p>
	<p><b>MEASUREMENTS ON AN INFANT</b></p>  <p><b>MEASUREMENTS ON AN OLDER CHILD</b></p>  <p><b>Figure 2.2 Measuring Length of Nasogastric Tube (Infant &amp; Child)</b> (Adapted from About Kids Health, 2017)</p>
<p>7. Drape the patient's neck and chest appropriately</p>	<p>7. To prevent the patient from getting soiled</p>
<p>8. Tilt the head, lift the chin and hyperextend the patient's neck</p>	<p>8. To facilitate smooth entry of the tube into the nasal passage</p>
<p>9. Using a pen torch, assess the patency of the nares</p>	<p>9. To prevent trauma to the mucus membrane</p>
<p>10. Insert the lubricated tip of the tube into the clearest nare in an upward downward movement as the patient swallows saliva until the tube reaches the marked point <b>NB:</b> for unconscious patients swallowing saliva does not apply</p>	<p>10. To enhance easy entry of tube to the stomach</p>
<p>11. If the patient shows signs of distress e.g. gasping or cyanosis, remove the tube immediately</p>	<p>11. This shows that the nasogastric tube has entered the trachea</p>
<p>12. Aspirate 2mls of the stomach contents and test with litmus paper <b>OR</b></p> <ul style="list-style-type: none"> <li>• Introduce 5-20mls of air into the stomach via a syringe and check for bubbling sounds using a stethoscope placed over the epigastrum</li> </ul>	<p>12. To confirm the location of the tube is in the stomach</p>

Steps	Rationale
<ul style="list-style-type: none"> <li>Place the proximal end of the tube just above the surface of the water in the medicine cup and observe for presence of bubbles</li> </ul>	
13. Spigot and secure the tube to the tip of the nostril using an adhesive tape	13. To prevent air entry into the stomach and backflow of stomach contents. To hold the tube in place and prevent accidental removal while ensuring the patient's comfort.

## D. Evaluation

Evaluate	Rationale
1. The general condition of the patient before, during and after the procedure	1. To determine signs of successful insertion or presence of the tube in the wrong site

## E. Documentation

### Record:

- Date and the time the nasogastric tube was inserted
- Size of nasogastric tube inserted
- Any abnormal findings identified and interventions taken
- Amount of aspirate
- When change of tube is due (5-7days) or as per institution policy

■ ■ ■

## 2.1-2: Nasogastric Tube Feeding

### Definition:

The process of directly delivering nutrients into the stomach via a naso-gastric tube.

### Purpose:

To improve and maintain a patient's nutritional status.

### Indications:

- Patients with oesophageal obstruction
- Patients with decreased level of consciousness who cannot feed orally
- As adjunctive therapy for patients with malnutrition
- Premature infants/babies with inadequate sucking reflex

### Contraindications:

Patients with dysfunctional bowel

## A. Assessment

Assess	Rationale
1. Explain the need and benefits of the procedure and obtain informed consent	1. To allay anxiety and enhance the patient's cooperation
2. Type, amount and frequency of feed	2. To ensure right feeds
3. The patient's readiness for the procedure	3. To enhance patient's cooperation

## B. Planning



### Self

- Review knowledge and skills on the procedure
- Assemble all equipment
- Perform hand hygiene



### Patient

- Explain duration of feeding
- Ensure the patient's privacy



## Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements (Fig 2.3)

A trolley/tray containing;

- Correct amount of feed
- Appropriate size of syringe
- Emesis basin
- Prefilled bottle with a drip chamber, tubing and a flow-regulator clamp
- PH test strip or meter
- Feeding pump with feeding set
- Stethoscope
- Measuring container from which to pour the feed (if using open system)
- Luke warm water
- Towel



Figure 2.3 Items for Nasogastric Tube Feeding  
(Adapted from Kozier et. al., 2000)

## C. Implementation

Steps	Rationale
1. Check the expiry date of the feed if commercial preparations	1. To enhance accessibility
2. Warm the feed to room temperature	2. To prevent esophageal spasms
3. When an open system is used, clean the top of the feeding container with disinfectant before opening it	3. For infection prevention and control
4. Test if tube is in the stomach (refer to step 12 of Nasogastric tube insertion)	4. To prevent aspiration and enhance ease of procedure
5. Aspirate gastric residual volume and measure the amount prior to administering the feed <b>NB:</b> If $\geq 100\text{mls}$ is aspirated, re-instill the gastric contents, withhold feeds or subtract the amount withdrawn from the total feed and slowly administer some feed volume according to the patient's tolerance	5. To clear the nasal passage for the tube
<b>Feeding bag/ Continuous feeds</b>	
6. Hang the bag from the infusion pole about 30cm (12in) above the feeding	6. To allow gravitational flow

Steps	Rationale
tube's connection to the Nasogastric tube	
7. Clamp the tubing and add the feed to the bag. Open the clamp, run the feed through the tubing and re-clamp the tube	7. To allow displacement of air from the tubing
8. Commence the feed and regulate flow to the drop factor	8. To avoid irritation of the Gastrointestinal tract
<b>Syringe/ Bolus feeds</b>	
9. Remove the plunger from the syringe and connect the syringe to the clamped nasogastric tube	9. To prevent air entry into the stomach
10. Add the prescribed amount of feed to the syringe barrel and permit to flow in slowly by gravity for 5-10 minutes. (Fig 2.4)	10. To avoid irritation of the gastrointestinal tract
	
Figure 2.4 Bolus Feeding	
11. Flush the Nasogastric tube with lukewarm water as prescribed	11. To maintain patency of the tube
<b>Prefilled bottle with drip chamber (closed system)</b>	
12. Remove the screw from the cap of the container and attach the administering set to the drip chamber and tubing	12. To discontinue the flow and allow for reassessment
13. Close the clamp on the tubing and hang the container on an intravenous pole about 30cm (12inch) above the tube insertion point to the nasogastric tube. Squeeze the drip chamber to fill it to one-third or one-half of its capacity	13. To ease of the flow of feed
14. Open the clamp and run the formula through the tubing	14. To dispel air from the tubing
15. Regulate the drip rate to deliver feeds over the desired length of time	15. To ensure the prescribed amount of feed is delivered at the required time

Steps	Rationale
16. Using a syringe with prescribed amount of warm water rinse the feeding tube immediately after all the formula runs through	16. To maintain patency of the tube
17. Clamp and cover the feeding tube with spigot	17. To prevent entry of air into the stomach
18. Ask the client/patient to remain sitting in semi- fowler's position or in a slightly elevated right lateral position for at least 30 minutes	18. To prevent aspiration
19. Clear equipment and dispose waste according to the institution's waste management policy	19. To promote safety for self, patient and staff

## D. Evaluation

Evaluate	Rationale
1. Tolerance to feeds	1. To determine the need for an alternative method of feeding
2. Nutritional status of the patient	2. To establish baseline data for appropriate interventions

## E. Documentation

### Record:

- Date and time of feeding
- Amount of feed given
- The patient's tolerance to feeds, residual volume and colour of residual feeds
- Subsequent plan of care

■ ■ ■

## 2.1-3: Nasogastric Tube Suctioning

### Definition:

Removal of gastric contents through a naso-gastric tube by aspiration or free drainage.

### Purpose:

- To relieve abdominal discomfort
- For gastric decompression during and after surgery
- To measure and monitor gastric contents

### Indications:

- During gastro intestinal surgery
- Gastric distension
- Poisoning

## A. Assessment

Assess	Rationale
1. The need for suctioning	1. To determine the patient's suitability for the procedure
2. The patient's understanding of the procedure	2. To allay anxiety and enhance the patient's cooperation during the procedure

## B. Planning



### Self

- Review knowledge and skills of the procedure
- Perform hand hygiene



### Patient

- Explain the procedure to the patient and obtain informed consent



### Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

- **Initiating Suction;**
  - Naso-gastric tube in place
  - Basin with water
  - 50- ML syringe
  - Stethoscope
  - Suction device for either continuous or intermittent suction
  - Connector and suctioning tubing
  - Clean gloves
  - Litmus paper
  
- **Maintaining Suction;**
  - Calibrated container to measure gastric drainage
  - Basin of water
  - Cotton-tipped applicators
  - Clean gloves
  - Water soluble ointment/lubricant
  
- **Irrigation;**
  - Clean gloves
  - Stethoscope
  - Disposable irrigating set containing a sterile 50- ML syringe, moisture-resistant pad, basin and calibrated container
  - Normal saline or appropriate solution

## C. Implementation

Steps	Rationale
1. Assist the client to a semi-fowler's position if not contraindicated	1. To promote efficient suction and prevents reflux of gastric contents
2. Aspirate the stomach contents, check the acidity using a pH test strip or introduce air into the tube with the syringe and listen with a stethoscope over the stomach (just below the xiphoid process) for a swish of air	2. To confirm that the tube is in the stomach
3. Observe the amount, colour, odour and consistency of the drainage	3. To determine the characteristics of the content
4. Inspect the suction system for patency e.g. kinks or blockages of the tubing and tightness of the connections	4. To prevent air entry
5. Clean the client's nostrils as needed, using the cotton tipped applicators and water and Apply a water-soluble lubricant or ointment	5. To maintain skin integrity and promotes the patient's comfort

## D. Evaluation

Evaluate	Rationale
1. Relief of abdominal distension or discomfort	1. To determine success of the procedure
2. Presence/absence of bowel sounds	2. To determine if there is intestinal obstruction
3. Character and amount of gastric drainage, integrity of nares and hydration level of oral mucous membranes	3. To determine appropriate interventions
4. Patency of the tube	4. To determine need to change the tube

## E. Documentation

**Record:**

- Date and time the procedure is done
- The duration or frequency of suction
- The amount, colour and consistency of the drainage
- Nursing interventions during the procedure

■ ■ ■

## 2.1-4: Removing a Nasogastric Tube

### **Definition:**

Withdrawing a Nasogastric Tube from the stomach.

### **Purpose:**

To allow for resumption of normal gastrointestinal functions.

### **Indications:**

- When reason for insertion is achieved
- Blockage of the tube
- Mal-position / displacement
- Irritation of the gastrointestinal mucosa

## A. Assessment

Assess	Rationale
1. The need for removal	1. To confirm the indication for removal

## B. Planning



### **Self**

- Review the knowledge and skills of the procedure
- Perform hand hygiene



### **Patient**

- Explain the procedure to the patient and obtain an informed consent
- Assist the patient to a comfortable position
- Stop feeds 4 hours prior to removal



### **Environment**

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



### Requirements

- Appropriate Syringe
- Disposable towels
- Disposable waterproof pad
- Emesis basin
- Stethoscope
- Personal Protective Equipment e.g. Clean gloves, goggle, apron, mask
- Suction machine
- Suction catheter and tubing

## C. Implementation

Steps	Rationale
1. Prepare the equipment required screen the bed and place the client in fowlers position	1. To facilitate efficiency and effectiveness of the procedure while providing privacy
2. Put on appropriate Personal Protective Equipment	2. For infection prevention and control
3. Place the disposable waterproof pad over the patient's chest and then place the disposable towel under the client's nose and drape around the tube	3. To prevent soiling of the patient and linen for infection prevention and control
4. Have the client hold emesis basin and disposable waterproof pad while the tube is removed <b>NB:</b> In case of feeding pump disconnect the pump prior to removal of nasogastric tube	4. To prevent accidental spillage

## D. Evaluation

Evaluate	Rationale
1. The client's understanding of the reasons for removal of the tube	1. To allay anxiety and promote the patient's cooperation in the subsequent care
2. Skin integrity around the tube	2. To determine the appropriate interventions
3. The patient's outcome	3. To determine the appropriate interventions

## E. Documentation

### Record:

- Date and time of the procedure
- The patient's response post nasogastric tube removal
- Any complications during the procedure and interventions taken



## 2.1-5: Gastronomy Tube Feeding

### Definition:

This is the administration of semi-solid food/fluids directly into the stomach through the abdominal wall with the use of a tube.

### Purpose:

To improve and maintain adequate nutrition in patients with upper gastrointestinal tract pathology.

### Indications:

- Oesophageal obstruction
- Severe oral candidiasis
- Burns of the upper gastro-intestinal tract
- Severe oesophagitis
- For patients who require long term tube feeding
- Surgery of the upper gastrointestinal tract
- Add any other as indicated by the practitioner

## A. Assessment

Assess	Rationale
1. The need for gastrotomy tube feeding	1. To determine the patients suitability for the procedure
2. Tube placement	2. To enhance safety and good outcome
3. The abdomen for distension and tenderness	3. To determine presence of bowel sounds and rule out any contraindications for feeding

## B. Planning



### Self

- Perform hand hygiene
- Assemble the required equipment



### Patient

- Explain the procedure to the patient and obtain informed consent.
- Ensure the patient's privacy



## Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A clean trolley with;

### Top shelf;

- A tray with;
  - A funnel/large feeding syringe
  - Feed in a covered container/pre-packed feed.
  - A glass of warm water
  - A clean spigot
  - A gallipot with gauze swabs

### Bottom shelf;

- Stethoscope
- Clean gloves
- Mackintosh and draw sheet
- A towel or flannel
- A receiver for used instruments
- A feeding pump (if needed)

## C. Implementation

Steps	Rationale
1. Explain the procedure to the patient	1. To address any concerns and allay anxiety
2. Elevate the head of the bed to 30 degrees	2. To allow gravitational flow of the feed and prevent reflux
3. Perform hand hygiene	3. For infection prevention and control
4. Remove the cap/spigot from the feeding tube and aspirate the stomach contents with a syringe. If the aspirate is over 50mls return to the stomach and record, if less than 50mls, re-instill and continue feeding	4. To check the patency and position of the tube and check whether the previous feed has been digested
5. Attach funnel/syringe and flush tubing with 15 – 20mls of water	5. To preserve patency of the tube
6. Before all water has run through, pinch off tubing and add feed till funnel/syringe is half full.	6. To prevent introduction of air

Steps	Rationale
7. Release tubing to allow feed to run slowly, adding the remaining feed before it empties	7. To prevent gastrointestinal irritation
8. After administering the appropriate amount of feed flush the tubing with prescribed amount of warm water	8. To prevent accumulation of foods in the tubings, promote patency and minimize colonization of the tube with microorganisms
9. Disconnect the funnel/syringe from tubing and replace the spigot and clean any spillage with gauze swab	9. To prevent backflow, air entry and contamination
10. Maintain the elevated position for 30 – 60 minutes after feeding	10. To prevent reflux
11. Check the dressing around the gastrostomy tube and change if necessary	11. For infection prevention and control around the site
12. Clear equipment and dispose waste according to the institution's waste management policy	12. To promote safety for self, patient and staff and terminate the procedure

## D. Evaluation

Evaluate	Rationale
1. The patient's outcome	1. To determine the patient's tolerance to the feeds and whether the nutritional needs have been met
2. If the client's nutritional needs have been met	2. To determine the appropriate interventions

## E. Documentation

### Record:

- The type, amount and time feed given
- Any complications and interventions taken during feeding
- Further plan of care

■ ■ ■

## 2.1-6: Gastric (Stomach) Washout/Lavage

### **Definition:**

The process of emptying the stomach contents using fluids.

### **Purpose:**

To empty the stomach contents.

### **Indications:**

- Poisoning with non-corrosive substances
- Preoperative management for gastric surgery
- For diagnostic purpose to obtain a specimen
- Any other as indicated by the condition

### **Contraindications:**

- Patient at risk of gastrointestinal bleeding or perforation
- Poisoning with corrosive substances

## A. Assessment

Assess	Rationale
1. The client's/patient's condition	1. To establish suitability of the procedure
2. The client's understanding of the need for gastric washout	2. Allay anxiety, establish the patient's cooperation and determine education needs
3. The appropriateness of the working environment	3. For both the client's and nurse's comfort

## B. Planning



### **Self**

- Review knowledge and skills of the procedure
- Perform hand hygiene
- Assemble appropriate equipment
- Give instructions to the assistant



### **Patient**

Explain the procedure to the patient and obtain informed consent



## Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A trolley containing;

- A funnel with a rubber tubing attached
- Bowl containing disposable gastric tubes
- Clamp or artery forceps
- Appropriate amount of lukewarm irrigation fluid in a jug
- 1 litre measuring jug
- Cotton wool swabs in a gallipot
- Clean gloves
- Lubricant
- Gauze swab
- A Jug for collecting the stomach contents
- Mackintosh and bath towel
- Receiver for dirty swabs
- Bucket
- Blue litmus paper
- Specimen container
- Emesis bowl
- Disposable towels
- A jug with warm water

## C. Implementation

Steps	Rationale
1. Wheel the trolley to the client's/patient's bed side	1. To enhance efficiency of the procedure
2. Explain the procedure to the client and state what is required of him/her	2. To allay anxiety and gain cooperation
3. Position the client appropriately(high fowler or lateral position)	3. For the client's comfort and ease of the procedure
4. Cover the patient with a bath towel / protective mackintosh	4. To protect the client/patient from soiling and avoid wetting of linen
5. Place the bucket on the floor then connect the tube to the funnel and clamp	5. To direct to where the stomach contents would be emptied
6. Perform hand hygiene and don gloves	6. For infection prevention and control
7. Lubricate the end of the stomach tubing and instruct the patient to	7. To minimise trauma

Steps	Rationale
swallow as you insert the tube through the mouth into the stomach	
8. Hold the funnel above the client and fill it ¾ way with the irrigating fluid	8. To facilitate flow by gravitational force
9. Unclamp and add more fluid	9. To prevent air entry and allow siphoning of the fluid
10. When about 300mls has gone in lower the funnel and invert it over the bucket. In case of specimen collection preserve the initial contents in the specimen jug	10. To allow the fluid to pour out (for effectiveness of the washout)
11. Repeat the process until only clean fluid comes out	11. To ensure total washout from the stomach
12. Position the client and remove the bed screens	12. To aid the client's comfort
13. Clear used equipment according to institutional policy guidelines	13. For infection prevention and control
14. Take a sample in a specimen container if indicated from the specimen jug	14. For diagnostic purposes
15. Perform hand hygiene	15. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The client's outcome	1. To determine efficiency and effectiveness of the procedure and need for further interventions
2. Characteristics of aspirated fluids	2. To determine appropriate interventions

## E. Documentation

### Record:

- The type, amount and time feed given
- Date, time and duration of procedure
- The client's reaction pre, during and post gastric washout and interventions taken
- Need for additional consultation for the high risk client

■ ■ ■

## 2.1-7: Urinary Catheterization

### Definition:

This is the process of inserting a catheter through the urethra into the urinary bladder

**NB:** Straight catheters are used for intermittent urine withdrawals, indwelling (Foley) catheters are retained for continuous drainage of urine into a closed system.

### Purpose:

For withdrawal of urine, instillation of medications and bladder irrigation.

### Indications:

- Specimen collection
- Pre and post -abdominal or pelvic surgery
- Client with full bladder during late first or second stage of labour
- Post prostatectomy and bladder operations
- Radiological diagnostic procedures
- Urinary incontinence
- Urine retention
- Unconscious patient
- Facilitate precise measurement of urine output
- Intra-operatively for specified procedures e.g. caesarean section
- Others as indicated by the practitioner

## A. Assessment

Assess	Rationale
1. The need for catheterization	1. To determine suitability for the procedure
2. History of allergies to antiseptics or rubber	2. To determine decision on the type of antiseptics, catheter and gloves to use
3. The patient's understanding of catheterization procedure	3. To allay anxiety, enhance cooperation and determine education needs

## B. Planning



### Self

- Review knowledge and skills of catheterization procedure
- Perform hand hygiene
- Assemble appropriate equipment and prepare the environment
- Give instructions to the assistant



## Patient

Explain the procedure to the patient and obtain informed consent



## Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A clean trolley with;

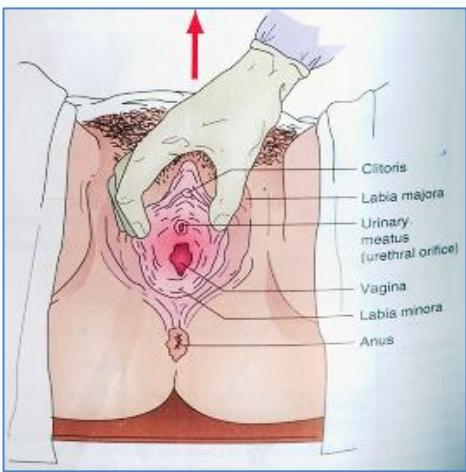
### Top shelf;

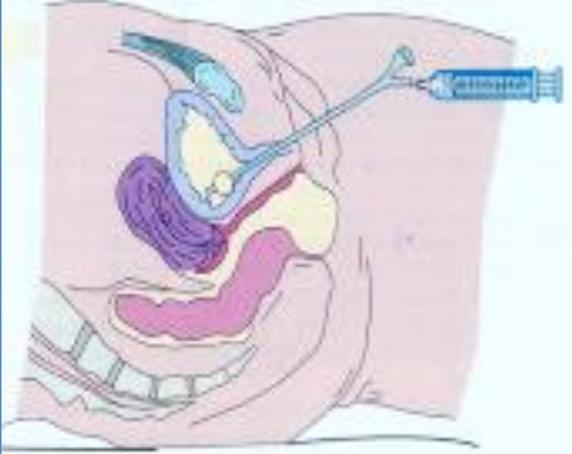
- Sterile catheterization tray containing;
  - Gallipot
  - cotton wool balls
  - drapes
  - 2 pairs of artery forceps
  - kidney dish
  - A funnel/large feeding syringe

### Bottom shelf;

- Tray containing;
  - Pack of sterile indwelling /intermittent catheter
  - Sterile urine bag
  - Antiseptic solution
  - Adhesive tape
  - Sterile water
  - Appropriate syringes
  - Sterile spigot
  - Water soluble lubricant
  - Sterile hand paper towels
  - Sterile specimen bottles as appropriate
  - Protective draw sheet and mackintosh
  - Decontaminant for used instruments
  - Measuring jug
  - Receiver for used swabs

## C. Implementation

Steps	Rationale
1. Perform hand hygiene	1. For infection prevention and control
2. Adjust the bed to a suitable height and position the patient in a dorso-recumbent position	2. To prevent strain and ensure efficiency of the procedure
3. Perform surgical scrub	3. For infection prevention and control
4. Ask the assistant to open the sterile pack and use the sterile hand towel to dry hands	4. To prevent contamination of the sterile pack
5. Arrange equipment on the sterile field and drape the patient's abdomen and thighs by placing fenestrated drape over the perineal area making it visible through the opening	5. To maintain a sterile field and minimize contamination
I. Female	
6. Gently spread minora with fingers of the non-dominant hand (Fig 2.5 below); Inspect and swab the perineum separating the labium with the thumb and forefinger of the non-dominant finger by gently lifting upward and outward	6. To locate the urethra; and infection prevention
7. Swab labia minora, perineal and urethral mucosa with one down ward stroke starting from the furthest using one swab per stroke (Fig 2.6)	7. To prevent introduction of external microorganisms into the urethra during the procedure
 <p>Figure 2.5 Spreading The Labia to Expose Urinary Meatus (Adapted from Craven &amp; Hirnle, 2000)</p>	 <p>Figure 2.6 Cleansing Urinary Meatus with a Down Ward Stroke. (Adapted from Craven &amp; Hirnle, 2000)</p>
8. With an artery forceps pick up the eye let end of the catheter and lubricate it using a sterile gauze swab. Keep the other end of catheter in the receiver and insert in the urethral orifice (4 – 5 cm)	8. To facilitate smooth entry of the catheter and prevent trauma to the urethra

Steps	Rationale
cm) in an upward and backward direction	
9. Place a kidney dish against the perineum to receive urine	9. To prevent soiling of the bed and allow for urine collection
10. When urine is obtained, withdraw catheter if intermittent. If indwelling, fill the balloon with sterile water or air (Fig 2.7)	10. To prevent catheter from dislodging
	
<b>Figure 2.7 Inflating Balloon with Prefilled Syringe (Adapted from Craven &amp; Hirnle, 2000)</b>	
11. Insert spigot or connect urine bag as indicated, secure the catheter to the thigh with strapping	11. To allow for continuous urine flow and prevent catheter from dislodging
12. Dress/cover the patient	12. To promote privacy and comfort
13. Perform hand hygiene	13. For infection prevention and control
<b>II. Male</b>	
1. Position the patient in supine with only genitalia exposed	1. To ensure maintenance of the client's dignity and privacy
2. Cover the patient's legs to mid-thigh	2. To provide comfort and privacy
3. The assistant to open catheterization tray	3. To prevent contamination
4. Perform surgical scrub, dry hands using sterile towel and put on sterile gloves	4. For infection prevention and control
5. The assistant opens sterile lubricant and pours it into the gallipot with care not to contaminate the sterile field	5. The gel will lubricate the catheter
6. Lubricate catheter	6. To prevent trauma to urethra
7. The assistant puts antiseptic lotion in the gallipot	7. To prevent self - contamination
8. Dip cotton wool swabs in the antiseptic for cleaning the glans penis	8. For disinfecting the urethra

Steps	Rationale
9. Inflate catheter balloon to check for any defects	9. To check for catheter defects prior to insertion
10. Place fenestrated drape over the patient's genitalia	10. To expose the genitalia and create a sterile field
11. With the dominant hand, hold the penis at a 90-degree angle to his body. If the patient is not circumcised, pull back the foreskin to visualize the urethral meatus (this hand is now considered unsterile)	11. To straighten the urethra, preventing contamination of the sterile field
12. Using the sterile hand, pick up antiseptic solution-soaked cotton balls with sterile forceps. Cleanse the urinary meatus with one downward stroke or use a circular motion from meatus to base of the penis. Discard the cotton wool ball, repeat this step at least 3-4 times	12. For infection prevention and control and eliminate external microorganisms
13. Use forceps to pick gauze and dry the meatus	13. To prevent introduction of cleansing solution into the urethra
14. With the sterile hand, pick the catheter and lubricate it generously	14. To facilitate easy passage and reduces chances of urethral trauma
15. Gently insert the catheter into the urethra to approximately 20 cm or until urine begins to drain and additional 1cm to ensure the catheter is in the bladder and allows sufficient space to inflate the retention balloon	15. To allow sufficient space to inflate the retention balloon inside the bladder and not inside the urethra where it would cause trauma
16. Gently pull slightly on the catheter to check placement	16. To prevent resistance for a successful inflation of the catheter
17. Connect distal end of the catheter to a drainage bag	17. To enable flow of urine and continuous drainage of the urinary bladder
18. Secure catheter with tape	18. To stabilize catheter preventing accidental dislodgement and irritation of the urethra from catheter movement
19. For non-circumcised patient, gently replace the foreskin over the glands penis	19. If left retracted, foreskin can cause constricting oedema and impaired circulation to the penis
20. Attach drainage bag to bed frame carefully ensuring the loops don't fall into dependant loops	20. To ensure patency and effective urine flow
21. Dress/cover the patient	21. To promote privacy and comfort

Steps	Rationale
22. Perform hand hygiene	22. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Whether the urine is draining and the distension has been relieved	1. To determine whether the catheter system is patent
2. For any discomfort and abnormalities in urine	2. To rule out any injuries or other abnormalities

## E. Documentation

**Record:**

- Date, time, size and type of catheter, amount of water instilled into the balloon, technique used, amount, colour and characteristics of urine.
- Any unusual discomfort during insertion and difficulties encountered in passing the catheter smoothly.
- If specimen was taken to the laboratory

■ ■ ■

## 2.1-8: Urinary Bladder Irrigation/Washout

### **Definition:**

This is the process of instilling a solution into the urinary bladder to provide cleansing and administer medications.

### **Purpose:**

- To prevent or relieve blockage of the urinary catheter
- To instill medication for local treatment of the bladder

### **Indications:**

- Patients having an indwelling catheter for a long time
- After bladder surgery
- Bladder infection/inflammation
- Blockage of the urinary catheter
- After prostatectomy
- Any other as may be indicated by a practitioner

## A. Assessment

Assess	Rationale
1. The need for the procedure	1. To determine suitability of the patient for the procedure
2. The patient's understanding of the procedure	2. To allay anxiety and enhance cooperation
3. If the patient is allergic to antiseptics, rubber or the irrigation fluid	3. To guide decision on the type of antiseptics and irrigation fluid to be used

## B. Planning



### **Self**

- Perform hand hygiene
- Assemble appropriate equipment and prepare environment
- Give instructions to the assistant



### **Patient**

Explain the procedure to the patient and obtain informed consent



## Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

- Sterile irrigation set (large catheter- tip syringe with a protective cap, sterile towels, and calibrated irrigation container).
- 2 dressing towels
- 1 Large kidney dish
- 2 gallipots, one with cotton wool and another with gauze swabs
- Catheter clamp
- Disposable hand towels
- Clean gloves
- Medication additives prescribed
- The recommended antiseptic solution for cleansing e.g. normal saline
- Large receiver or urine bag
- Measuring jugs
- Mackintosh and towel
- Warm soapy water in a bowl
- Wash cloth
- IV tubing
- IV pole

## C. Implementation

Steps	Rationale
1. Perform hand hygiene and don gloves	1. For infection prevention and control
2. Ask the assistant to open the sterile pack	2. To expose the sterile items without contamination
3. Assist the patient to assume dorsal recumbent position, if male supine position. Fold the linen to expose the catheter without exposing the patient	3. To expose the work area and maintains the patient's dignity
4. Place mackintosh and towel under the patient's buttocks, if female cover the thighs, if male cover the upper abdomen with a blanket	4. To prevent soiling of bed linen, provides privacy and warmth to the patient
5. Cleanse and dry perineal area and discard gloves. Wash hands and don gloves	5. To eliminate and minimize normal flora
6. Cleanse irrigation port of catheter with the recommended antiseptic solution	6. For infection prevention and control

<b>Steps</b>	<b>Rationale</b>
7. Connect tubing or irrigation fluid to irrigation port of the catheter	7. To enhance readiness for the procedure
8. Slowly open roller clamp on irrigation tubing and adjust drip rate	8. To provide continuous flushing of clots and debris from bladder
9. For intermittent irrigation, clamp and release catheter and adjust flow of irrigation fluid as per instructions	9. To allow proper exchange of fluids, electrolytes and uptake of medication
10. Clear the working area and leave the patient comfortable	10. To maintain a hygienic environment and promote the patient's comfort
11. Perform hand hygiene	11. For infection prevention and control

## D. Evaluation

<b>Evaluate</b>	<b>Rationale</b>
1. The patient's response during the procedure	1. To determine appropriate subsequent interventions
2. The characteristics of the urine and presence of clots	2. To determine effectiveness of the procedure and the need to repeat or stop the procedure

## E. Documentation

### Record:

- Date, time, method of irrigation and amount of solution used
  - Appearance and amount of drained fluid
  - The patient's tolerance to the procedure
  - Infusion rate and any medication added
- ■ ■

## 2.1-9: Removal of Urinary Catheter

### **Definition:**

It is the safe withdrawal of the urinary catheter from the bladder.

### **Purpose:**

To facilitate resumption of normal function of the urinary tract and to prevent any complications after the desired therapeutic effect is achieved.

### **Indications:**

- Routine change of catheter
- Patients who have gained normal bladder functioning
- Blocked catheter
- Urinary tract infection

## A. Assessment

Assess	Rationale
1. The need for the procedure	1. To determine suitability of the patient for the procedure
2. The patient's understanding of the procedure	2. To allay anxiety and enhance cooperation

## B. Planning



### **Self**

- Review knowledge on procedure for removing urinary catheter
- Perform hand hygiene
- Assemble appropriate equipment and prepare environment



### **Patient**

Explain the procedure to the patient and obtain informed consent



### **Environment**

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



### Requirements

- Receiver for the catheter
- Mackintosh and towel
- Gauze swabs
- Clean and sterile gloves
- Appropriate syringes
- Receiver for dirty mackintosh and towel
- Basin with warm water, soap and towel
- Sterile specimen bottles

## C. Implementation

Steps	Rationale
1. Perform hand hygiene	1. For infection prevention and control
2. Place mackintosh and towel under the buttocks if female or place mackintosh and towel over the thighs if male	2. To keep the patient and beddings dry
3. Remove adhesive securing the catheter. Using the syringe withdraw all the water from the balloon, perform hand hygiene and don sterile gloves	3. To ease removal and minimize risks for urethral trauma
4. Gently pull out the catheter and place it in a receiver. If unable to remove catheter easily proceed stop and consult	4. To withdraw the catheter without causing trauma to the urethra leading to post catheterization strictures
5. Inspect the catheter for completeness	5. To ensure that no piece is left inside the patient
6. Dry perineal area with towel or clean with warm soapy water if required	6. To promote the patient's hygiene and comfort
7. Clear the equipment appropriately	7. To prepare for subsequent use
8. Make bed and leave the patient comfortable	8. To promote comfort
9. Decontaminate instruments in accordance with institutional guidelines then perform hand hygiene	9. For infection prevention and control

### NB:

- Instruct the patient to inform the nurse after he/she has passed urine
- Instruct the patient to increase fluid intake
- Measure the output in the drainage bag
- Collect any specimens required e.g. urine or catheter tip

## D. Evaluation

Evaluate	Rationale
1. Presence of any trauma that may have occurred during the procedure	1. For appropriate interventions
2. Patient's discomfort	2. To rule out infection or injury

## E. Documentation

**Record:**

- Date and time of catheter removal
- Amount, colour, consistency, and any abnormality in the urinary bag at the time of removing the catheter
- Any specimens collected and sent to the laboratory for investigations
- Vital signs
- Any complications and interventions taken

■ ■ ■

## 2.2: Oxygenation

### 2.2-1: Administration of Oxygen

**Definition:**

Giving of oxygen at concentration greater than that in ambient air through the airway to correct hypoxia and prevent tissue damage.

**Purpose:**

To achieve and maintain arterial oxygen saturation above 95 %.

**Indications:**

- Airway obstruction
- Severe infections e.g. septicemia, lung disease
- Peri and post cardiac or respiratory arrest
- Shock causing stagnation of blood flow
- Respiratory compromise
- Conditions leading to hypoxia and hypoxemia
- Low cardiac output and metabolic acidosis

## A. Assessment

Assess	Rationale
1. The client's status by carrying out a physical examination	1. For baseline data for comparison during and at the end of the procedure
2. Airway patency	2. To determine the need for oxygen supplementation
3. The patient's understanding of condition and the ability to follow instructions	3. To identify knowledge gaps for appropriate interventions

## B. Planning



**Self**

- Review the knowledge of the procedure
- Perform hand hygiene



**Patient**

- Explain the procedure to the patient and obtain an informed consent
- Position the patient appropriately to optimize airway position



## Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space
- Put a '**No Smoking**' sign



## Requirements

- Oxygen tubing
- Humidifier with distilled water
- Oxygen cylinder and key / oxygen point
- Oxygen stand
- Flow meter and gauge
- Oxygen mask/nasal prongs
- Non re-breather mask
- A bag –valve-mask
- Emergency resuscitation tray/trolley
- A pulse oximeter
- Stethoscope



Figure 2.8 Humidifier, Reservoir Bag Tracheostomy Mask, T-Tube and a Simple Face Mask  
(Adapted from Altman, 2004)



Figure 2.9 Piped System Oxygen Apparatus

## C. Implementation

Steps	Rationale
1. Perform hand hygiene	1. For infection prevention and control
2. Explain the procedure to the patient and reassure him/her	2. To allay anxiety and promote co-operation
3. Assemble the equipment and connect the various gadgets	3. To enhance readiness for the procedure
4. Connect the patient to the pulse oximeter and monitor the work of breathing	4. To record oxygen saturation and monitor the patient's condition
5. Correctly position the oxygen delivery device and secure it in place (Fig 2.10)	5. To ensure comfort and efficiency



Figure 2.10 Correct Position of a Simple Face Mask

6. Open the cylinder, start oxygen flow and close the flow meter	6. To allow for smooth outflow of oxygen and prevents wastage
7. Regulate the oxygen flow as required	7. To deliver the right amount
8. Encourage the patient to breath normally (where possible)	8. To ensure efficiency of the system and allay anxiety of the client/patient
9. Clear the environment after the procedure	9. To ensure clean and tidy environment
10. Perform hand hygiene	10. For infection prevention and control

**NB:**

- Remove all articles that can cause fire from around the oxygen giving area
- Always have a spare cylinder ready to replace the finished one
- Oxygen administration generally targets SPO<sub>2</sub> of between 94% - 98% (PaO<sub>2</sub> between 80 and 100mm Hg in patients without cyanotic congenital heart disease or chronic lung disease)
- All empty cylinders must be labelled “Empty” and arrange for refilling
- Oxygen cylinders are identifiable by the colours (black and white)

## D. Evaluation

Evaluate	Rationale
1. The patient's breathing pattern and oxygen saturation levels and vital signs	1. To determine effectiveness of O <sub>2</sub> administration
2. The patient's tolerance to the selected method of delivery	2. To allow review on intervention measures

## E. Documentation

**Record:**

- Date and time
- The patient's condition before and after the oxygen administration
- The vital signs, oxygen saturation, oxygen flow rate and any other therapeutic intervention done

■ ■ ■

## 2.2-2: Endotracheal and Tracheal Tube Suctioning

### Definition:

This is the process of removing secretions from the trachea using negative pressure suction.

### Purpose:

- To maintain a patent airway
- Collect sputum specimen for diagnostic examinations

### Indications:

- Secretions
- Coarse crackles with inability to clear
- Diminished breath sounds
- Increased inspiratory pressure
- Decreased oxygen saturation

## A. Assessment

Assess	Rationale
1. For anxiety and restlessness	1. To determine need for extra interventions
2. Respiration rate, rhythm and depth	2. To evaluate airway status and determine need for suctioning
3. The client's understanding of the suctioning procedure	3. To fill in any knowledge gaps and enhance co-operation
4. Lung fields by auscultation	4. To determine air exchange and obstruction of the tube
5. Arterial blood gas and/or pulse oximetry value	5. To determine oxygen levels and adequate air exchange
6. Passage of air through the tracheostomy tube	6. To rule out any other causes of blockage

## B. Planning



### Self

- Review knowledge on procedure for removing urinary catheter
- Perform hand hygiene
- Assemble appropriate equipment and prepare environment



## Patient

- Explain the procedure to the patient and obtain informed consent
- Reassure the patient



## Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

- Sterile and clean gloves
- Mask, eye protection and gown as appropriate
- Source of negative pressure (suction machine or wall suction)
- Sterile suction catheters
- Yankauer suction catheter
- Oxygen source and Bag –valve-mask (BVM)
- Tracheostomy care tray
- Large towel
- Sterile irrigation saline / water for injection
- Endotracheal tube holder
- Adhesive tape
- Sphygmomanometer
- Cardiac monitor/ Pulse oximeter
- Stethoscope

## C. Implementation

Steps	Rationale
1. Assess the depth, rhythm and rate of respirations and auscultate breath sounds	1. To determine need for suctioning
2. Assemble supplies on the bedside table	2. For easy accessibility during the procedure
3. Perform hand hygiene, don personal protective equipment	3. For infection prevention and control
4. Position the patient on side or back with the head of bed elevated	4. To facilitate maximal breathing during the procedure
5. Turn suction machine on and place a finger over the end of tubing attached to suction machine	5. To test suction pressure (should range from 50mmHg in infants to 80-120 mmHg in adults)

Steps	Rationale
6. Administer oxygen directly or by use of Bag Valve Mask before beginning procedure	6. To increase the level of oxygen in the blood and prevent hypoxia during the procedure
7. Remove inner cannula and place in a basin of normal saline to loosen secretions if reusable or set aside if disposable. Do not dispose the disposable cannula until the new inner cannula is securely in place	7. To allow easier passage of the suction catheter and maintain cleanliness of the inner cannula
8. Place towel under the client's chin and don sterile gloves	8. For infection prevention and control
9. Open sterile suction catheter or use the reusable close system catheter. The sterilized suction catheter is removed from the package with your dominant sterile hand. Wrap the catheter tubing around your hand from the tip of the catheter down to the port end. Attach the catheter to the suction unit	9. To maintain catheter sterility and ensures correct attachment of catheter
10. Insert the suction catheter into the trachea without suction	10. To prevent trauma to the tracheal mucosa
11. Apply suction intermittently while gently rotating the catheter and wrap the disposable suction catheter around your sterile dominant hand while withdrawing in circular motion from the tracheal/endotracheal tube and then remove it	11. To increase removal of mucus secretions while minimizing irritation to tracheal mucosa
12. Connect oxygen to the patient or bag using non-rebreather mask depending on the patient's condition	12. To re-oxygenate the client and prevents hypoxia
13. Suction for not more than 10 seconds	13. To prevent alveoli collapse and hypoxia
14. Assess airway and repeat suctioning as necessary	14. To ensure that airways are patent for adequate oxygenation
15. Clean inner cannula using tracheostomy brush and rinse well in sterile water or sterile saline. Reinsert inner cannula and lock into place	15. To prevent secretions from obstructing outer cannula
16. Dry or open new disposable inner cannula	16. For infection prevention and control
17. Administer humidified oxygen or compressed air	17. To prevent dryness of mucous membrane and formation of crust in the airway
18. Clear the environment, remove gloves and discard as per the institutional policy then perform hand hygiene	18. For hygienic and infection prevention and control purposes

## D. Evaluation

Evaluate	Rationale
1. Patency of airway by auscultating for breath sounds	1. To assess if breath sounds are clear and confirm ventilation for adequacy
2. Arterial blood gas and/or pulse oximetry results	2. To determine level of oxygen saturation ( $\text{SaO}_2$ ) and take necessary action
3. The client for signs of dyspnoea	3. To rule out any other cause of airway obstruction
4. Consistency, colour, amount and odour of secretions	4. To Identify signs of infection or trauma to the airway

## E. Documentation

**Record:**

- Date and time of suctioning procedure
- Describe the client's tolerance of the procedure
- Amount, consistency, colour and odour of secretions
- Arterial blood gas and/or pulse oximetry reading

■ ■ ■

## 2.2-3: Care of a Patient on Tracheostomy

### Definition:

This is the nursing intervention of a patient on an artificial airway that is inserted directly into the trachea.

### Purpose:

- To facilitate tracheostomy healing
- Minimize tracheal trauma or necrosis and prevent infection

### Indications:

- Impaired skin integrity around the tracheostomy site
- Soiling of the dressing around the tracheostomy site
- The institution's policy on tracheostomy care
- Accidental loosening of the ties

## A. Assessment

Assess	Rationale
1. Condition of client/patient (level of consciousness, excess peristomal secretions, excess intratracheal secretions)	1. To establish need for the procedure
2. The patient and family's understanding of the tracheostomy tube care	2. To identify the patient's educational needs and promote participation of the client self-care
3. The patient's ability to ventilate the lungs effectively through the tube	3. To ensure adequate oxygenation to the lungs
4. The need for cleaning or changing the dressing	4. For improved hygienic status
5. Respiratory status (breath sounds, breathing pattern, depth and rhythm of respiration)	5. To ensure normal pulmonary respiration process and proper ventilation
6. Skin around the tracheal site	6. To implement necessary interventions and prevent necrosis

## B. Planning



### Self

- Perform hand hygiene
- Assemble equipment



## Patient

- Explain the procedure to the patient and obtain informed consent



## Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

Trolley containing:

- Sterile tracheostomy pack
- Appropriate size of sterile suction catheters
- Sterile warm saline
- Appropriate sizes of syringes
- Sterile Y connector
- Sterile gauze swabs
- 2 hand towels
- Extra Sterile Tracheostomy tubes (same size with that on the client)
- Extra tapes
- Face mask
- Goggles
- Pair of scissors
- Stethoscope
- Pipe cleaners
- Bag valve Mask (self-inflating bag)
- Receiver for dirty gauze
- Sterile gloves
- Cotton-tip applicators in a sterile pack
- Sterile Tracheostomy dressing (4x4 gauze without cotton lining)
- Sterile Tracheostomy ties (tapes, twill ties, or commercially available Velcro ties)
- Resuscitation trolley by the bedside
- Suction machine and tubing by bed side
- Oxygen equipment

**NB:** The suction equipment is included in the list in case suction is required.

## C. Implementation

Steps	Rationale
1. Perform hand hygiene and don gloves	1. For infection prevention and control
2. Stabilize the neck plate with the non-sterile hand (or have the assistant do so)	2. To ease removal of the tube and minimize movement to avoid trauma of the trachea

Steps	Rationale
3. Pick the sterile gauze with fingers of the sterile hand and use this to unlock the inner cannula	3. To minimize infection
4. Gently slide out the cannula and place it in a bowl of normal saline solution	4. To prevent discomfort and trauma to the trachea and enable cleaning
5. Unwrap catheter, suction outer cannula and have the client take deep breaths or use BVM to deliver 100% Oxygen	5. To remove residual secretions while providing oxygenation to the patient
6. Disconnect suction catheter and discard as per institutional guidelines	6. For infection prevention and control
7. Remove soiled dressing and discard	7. To keep the skin clean and minimize risk of infection
8. Cleanse the neck plate of tracheostomy tube with gauze moistened with normal saline. Then rinse with applicators moistened with saline	8 – 9. To remove dried crusted secretions from under the neck plate of tracheostomy tube
9. Clean the skin under the neck plate of tube with cotton applicators moistened with normal saline	
10. Dry the skin with sterile gauze. Use dry pipe cleaner to dry the lumen of the tracheostomy tube	10. To prevent dampness which can lead to excoriation of the skin
11. Slide inner cannula into outer cannula, hold the neck plate stable with one hand and turn inner cannula clockwise to lock it  <b>NB:</b> If not doing tie change discard gloves and clear the working area	11. To secure the tracheostomy tube prevent blockage
<b>One-person Technique of Changing Tracheostomy Ties</b>	
12. Prepare the clean tracheostomy ties <ul style="list-style-type: none"> <li>• Cut a length of twill tape that will fit around the client's neck plus 6 inches extra. Cut the ends of the twill tape on the diagonal</li> <li>• Opens Velcro ties on continuous neck band</li> </ul>	12. In preparation for securing the tracheostomy tube
13. Leaving the old tracheostomy ties in place, insert one end of the new tracheostomy tie through the hole in the tracheostomy neck plate from back to front. Slide both ends of the tape around the back of the head to the other side	13 -14. To facilitate securing of the tracheostomy tubes
14. Insert one end of the tape through the opening on the other side of the	

Steps	Rationale
tracheostomy tube neck plate from back to front	
15. Tie the two ends of the new tape with a square knot at the side of the neck. Keep two fingers under the tape as the knot is tied. Without putting pressure on the neck plate or the tape, pull on the knot to make sure it will stay tight	15. To secure the tube and prevent dislodgement
16. Untie and remove old tracheostomy tapes and discard. Hold the neck plate firmly with one hand while untying the old tapes	16. To minimize risk of infection and to support the secured tube in the correct position
17. Place one finger under tracheostomy ties	17. To minimize the risk of reduced cerebral flow due to external pressure
<b>Two-person Technique of Changing Tracheostomy Ties</b>	
18. Cut two pieces of twill tape about 12 to 14 inches in length	18. In preparation for securing the tracheostomy tube
19. Make a fold about 1 inch below the end of each piece of twill tape and cut a half-inch slit lengthwise in the centre of the fold	19. To prepare tape for insertion and ease of tying
20. Have an assistant gently hold the tracheostomy tube in place with fingers on both sides of the neck plate	20. To prevent accidental decannulation
21. Untie old tracheostomy ties and discard	21. To replace with new ones
22. Insert the slit end of the tracheostomy tape through the opening on one side of the tracheostomy tube neck plate. Pull the distal end of the tracheostomy tie through the cut end. Repeat the procedure with a second piece of twill tape	22. To secure tracheostomy tube in the correct position
23. Tie tracheostomy tapes with a double knot at the side of the neck putting two fingers under the tape to prevent the tape from being tied too tightly	23. To prevent tightness and interference with circulation
24. Insert one finger under tracheostomy tapes and insert tracheostomy gauze under the neck plate of the tube	24. Prevent irritation of skin from secretions and friction from tracheostomy tube
25. Remove gloves and clear environment then perform hand hygiene	25. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. If tracheostomy site has healed with minimal drainage and erythema	1. To determine effectiveness of interventions
2. For any evidence of infection	2. To enable early intervention
3. If the patient maintains a patent airway	3. To ensure effective oxygenation and maintenance of normal respiratory process
4. If the inner and outer cannulae are free of secretions and ties are clean and secured	4. To determine frequency of suction, cleaning and change of dressing

## E. Documentation

**Record:**

- Date and time of the procedure
- Size and type of the tracheostomy tube in place
- The patient's tolerance of the procedure and interventions taken
- Characteristics of secretions removed
- Condition of the client's skin
- Frequency of tracheostomy care

■ ■ ■

## 2.2-4: Care of a Patient on Underwater Chest Drainage System

### **Definition:**

Nursing intervention for a patient with a chest tube drainage system.

### **Purpose:**

To drain the fluids from the chest so as to improve gaseous exchange and prevent infection.

### **Indications:**

To facilitate efficiency and effectiveness of the procedure in the care of patients with:

- Chest injury
- Pneumothorax and haemothorax
- Pleural effusion
- Chest surgery

## A. Assessment

Assess	Rationale
1. The client's respiratory status by auscultating both lungs	1. To assess status of the lung
2. If the chest tube is set to the appropriate amount of suction as prescribed	2. Suction draws the air or fluid from the pleural space and it is essential that the appropriate amount is applied
3. Whether the water level in the water seal chamber is maintained at the marked line	3. To facilitate clinical decision on replacing the water
4. For an air leak in the water seal chamber	4. To prevent atelectasis
5. If the chest tube connections and dressings are secure (change dressing every 24 to 48 hours)	5. To determine need for change
6. The drainage system and note the amount and colour of the drainage	6. To determine need for change and necessary interventions
7. The tubing for kinks and dependent loops and ensure that it is not pinned to the bed	7. To enhance adequate drainage of the chest tube and prevent accidental dislodgement of the tube
8. The drainage system for tipping over, dropping or crashing	8. To prevent trauma to the collection system and destruction to the pleural cavity
9. Risk factors for a tension pneumothorax in the client with a chest tube	9. To prevent life threatening events

## B. Planning

### Self

- Review the knowledge and skills of the procedure.
- Perform hand hygiene

### Patient

- Explain the procedure to the patient and obtain informed consent

### Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space

### Requirements

- Sterile water or normal saline
- Silk tape, 1 – inch roll
- 3 packages of 4x4 gauze
- Vaseline gauze, 1 packet for each tube to be dressed
- Foam tape, 2 – inch roll
- A pair of sterile gloves
- Stethoscope
- Clamps

## C. Implementation

Steps	Rationale
1. Perform hand hygiene and don gloves	1. For infection prevention and control
2. Assemble equipment at the bedside and screen the bed	2. To ensure efficiency and maintain privacy of the patient
3. Fill the sterile bottle with 1000mls of normal saline or distilled water and mark the water level and cork it tightly. Ensure that the drainage tube is submerged at least 1 inch under the water	3. To facilitate drainage of fluid from the pleural cavity
4. Set the suction pressure to 20cm of water	4. To provide ideal negative pressure
5. Connect the tubings tightly to the chamber and to the patient	5. To be ready for the procedure

Steps	Rationale
6. If there is a new air leak, assess whether the air leak is from the chest tube or drainage system by briefly clamping the chest tube or the system. Continue procedure down the length of the tube and tubing until the air leak is no longer present. If the leak is still present at the end, change the entire drainage chamber	6. To facilitate clinical judgment on the need to change the tube
7. Assess that all connections at the site are spiral wrapped with silk tape	7. To prevent the tube from pulling apart and the silk tape is a strong adhesive
8. Assess the chest tube dressing every shift and change the dressing every 24 to 48 hours). Record the date and time of the last dressing change directly on the dressing for every 1 to 8 hours, depending upon the needs. Assess the drainage output from the chest tube, noting the colour and amount	8. To prevent air from being drawn in
9. Ensure that the drainage system is safely supported at lower position than the client, or hang off at the end of the bed to prevent tipping of the system (Fig 2.11)	9. To prevent backflow of drainage fluids
 <p>Figure 2.11 Drainage System lower than Client and Tubings Have No Kink</p>	
10. Monitor the tubing for kinks, and dependent loops	10. To prevent kinks that interfere with the drainage of the chest tube

Steps	Rationale
11. Ensure that a bottle of sterile water or saline is at the client's bedside	11. To ensure that there is a refill for the water seal and suction chamber if there is need for change. In case the chest tube becomes disconnected from the drainage system the bottle of sterile water should be used to create the temporary water seal by placing end of the chest tube in the bottle of water until a new drainage system is setup.
12. Ensure that an occlusive dressing is applied on the chest tube	12. To secure the system and decrease the risk of pneumothorax
13. Ensure that the chest tube is never milked or stripped to maintain patency	13. To prevent an increase of pressures up to 400cm of water, which can cause damage to lung tissue and vasculature

## D. Evaluation

Evaluate	Rationale
1. If drainage system was maintained	1. To confirm effectiveness of interventions
2. The patient's tolerance to the procedure	2. To confirm effectiveness of interventions
3. Prevention of cross infection to the patient	3. To confirm adherence to infection prevention and control guidelines
4. Chest tube and drainage system are maintained in a safe manner	4. To confirm quality of care

## E. Documentation

### Record:

- Date and time
- The amount of chest suction pressure used during the procedure
- Presence or absence of air leak
- Condition of the dressing and when it was changed
- Any disconnection or dislodgement of the tube and interventions taken
- The patient's condition and interventions taken
- Chest tube drainage amount and colour



## 2.2-5: Endotracheal Intubation (EI)

### Definition:

The placement of an artificial tube into the trachea to maintain an open airway.

### Purpose:

To facilitate ventilation and oxygenation.

### Indications:

- Inability to maintain airway patency
- Inability to protect the airway against aspiration
- To assist ventilation in respiratory insufficiency
- Pre or post-operative respiratory support
- Cardiac arrest with ongoing chest compressions
- Inability of the rescuer to ventilate the conscious client with conventional methods

## A. Assessment

Assess	Rationale
1. The patient's condition	1. To determine need for the procedure
2. The patient's airway for predictors of difficult intubation e.g. short neck, mallampati classification	2. To prepare for appropriate interventions
3. The patient's understanding of the need for intubation	3. To allay anxiety and ensure effectiveness of the procedure
4. The integrity of the cuff, pilot balloon and valve by confirming appropriate inflation/deflation prior to use	4. To ensure ETT is in working order

## B. Planning



### Self

- Review knowledge on anatomy of the respiratory system and the procedure of intubation
- Ensure that the equipment is in working order
- Organize the environment for the procedure and ensure privacy
- Identify and orient the assistant



### Patient

- Explain the procedure to the patient and obtain informed consent



## Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A trolley with;

- Laryngoscope handle and blades (curved and straight in appropriate sizes)
- Appropriate endotracheal tube (cuffed for adults and uncuffed for children less than 8 years of age. N/B for Paediatrics, assemble ETT 0.5mm larger and smaller than size anticipated)
- Stylet/ Introducer
- 10-mL syringe
- Water-soluble lubricant
- Suction unit with rigid and soft-tip catheters
- McGill forceps
- Stethoscope
- ETT tapes, ties, or commercially available holder
- Gauze swabs
- Bag Valve Mask
- Personal Protective Equipment – sterile and clean gloves, face shield, goggles
- Cardiac monitor/ Pulse Oximeter
- Medications as prescribed
- Cuff pressure monitor for cuffed ETT
- Scissors
- Oropharyngeal (guedel) airway

## C. Implementation

Steps	Rationale
<ol style="list-style-type: none"> <li>1. Move the bed away from the wall to allow access for two health care providers and assembled equipment           <ul style="list-style-type: none"> <li>• Remove the headboard from the bed or position the patient's head for ease of accessibility</li> <li>• The assistant should be on the right side of the person inserting the ETT and have ready access to the required equipment</li> <li>• Place the patient supine unless otherwise directed. This is dependent on the patient's tolerance and the nurses preference</li> </ul> </li> </ol>	<ol style="list-style-type: none"> <li>1. To ensure effectiveness and efficiency in performance of the procedure</li> </ol>
<ol style="list-style-type: none"> <li>2. Remove any false teeth, bridges or foreign objects, such as body piercings, from the mouth</li> </ol>	<ol style="list-style-type: none"> <li>2. To prevent airway obstruction from the objects</li> </ol>

Steps	Rationale
3. Slightly extend the head and flex the neck (“sniff position”), unless contraindicated (e.g. Fracture cervical spine). To assist in maintaining sniff position, a small roll under shoulders in paediatrics or under the head in adults, maybe useful	3. To align the oral, pharyngeal and laryngeal axes allowing visualization of the trachea and efficiency and effectiveness of the procedure
4. Monitor capnography (ETCO <sub>2</sub> or colour metric device) if available	4. To determine the patient's oxygenation status
5. Administer Sedation/Local or general anaesthetic agents as per institutional guidelines	5. To prevent teeth clenching, relaxation of the muscles, maintenance of a patent airway and effective procedure
6. Open the patient's mouth and place an oropharyngeal airway	6. To avoid rolling back of the tongue and blocking the airway
7. Hyper-oxygenate the patient using a Bag Valve Mask	7. To displace nitrogen from the alveoli and ensure oxygen reservoir in the alveoli (maintain PEEP)
8. Remove oropharyngeal airway	8. To facilitate start of the procedure
9. With the left hand insert well-lit laryngoscope into the right side of the mouth and sweep the tongue to the left, elevate laryngoscope along the axis of the handle to lift the mandible and epiglottis	9. To enable visualization and locating the orolarynx
10. Once the vocal cords have been located, insert a lubricated ETT into the patient's mouth or nostril all the way into the trachea as the assistant applies cricoid pressure. A stylet may be used if the patient is a candidate for difficult intubation. The tube may then be connected to a ventilator or manually attached to a Bag Valve Mask	10. To establish airway patency and to facilitate for ventilation and oxygenation
11. Auscultate for peripheral breath sounds at the mid-axillary point/region using a stethoscope, over the epigastrium, then the upper and lower lung fields	11. To confirm the tube placement position
12. Inflate the ETT where applicable and secure the ETT using ties or tapes	12. To prevent dislodgment of the tube and air leakage
13. Monitor vital signs and hemodynamic status of the patient hourly pre and post intubation and daily or as required	13. To establish baseline parameter

Steps	Rationale
14. Perform hand hygiene	14. For infection prevention and control
15. Request for chest x-ray	15. To confirm the tube location

## D. Evaluation

Evaluate	Rationale
1. The position of the endotracheal tube	1. To determine the success of the procedure
2. The patient's respiratory patterns i.e. respiratory rate, rhythm, depth, pre and post intubation	2. To determine the patient's ability to maintain ventilation and oxygenation
3. The patient's hemodynamic status pre and post intubation e.g. oxygen saturation, arterial blood gas analysis	3. To establish ventilation status and alterations pre and post intubation

## E. Documentation

### Record:

- Date and time of intubation
  - The patient's condition pre and post intubation i.e. Vital signs and hemodynamic findings (Arterial blood gas analysis)
  - The size of endotracheal tube placed
  - Ventilator settings
- ■ ■

## 2.2-6: Care of a Patient on Mechanical Ventilation

### **Definition:**

Nursing interventions for a patient on a positive /negative pressure breathing device which helps in maintaining automated respirations.

### **Purpose:**

To maintain breathing mechanism on a patient who is not able to breathe on his/her own.

### **Indications:**

- Patients experiencing continuous decrease in oxygen saturation
- Post-operative thoracic surgery
- Complicated abdominal surgery
- Medication overdose
- Neuromuscular diseases
- Inhalation injury
- Multiple trauma
- Shock
- Multi-system failure
- Coma
- And others as indicated by practitioners

## A. Assessment

Assess	Rationale
1. The need for mechanical ventilation, support for the patient as well as the ordered settings for the ventilation	1. To provide information for clinical judgement
2. The patient's vital signs, arterial blood gas (ABG) results, airway patency and chest expansion, SPO <sub>2</sub>	2. To obtain information on oxygenation state of the patient for planning and appropriate interventions
3. The patient's level of comfort and consciousness	3. To determine the need for analgesics, anxiolytics, paralytic agents and sedatives

## B. Planning



### **Self**

- Review your knowledge of the procedure
- Perform hand hygiene



### Patient

- Explain the procedure to the patient and obtain informed consent



### Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



### Requirements

- Mechanical ventilator/respirator
- Oxygen source
- Humidifier systems
- Clean gloves
- Bag Valve Mask with oxygen connecting tubing
- Tape for supporting endotracheal (ET) tube
- Well-equipped suction unit
- Well-equipped resuscitation tray or trolley on the bedside
- Cardiac Monitoring unit
- Respiratory monitoring unit
- Neurological monitoring unit
- Stethoscope

## C. Implementation

Steps	Rationale
1. Perform hand hygiene and don gloves	1. For infection prevention and control
2. Confirm and test the ventilator with the biomedical staff and ensure appropriate setting is done according to the client/patient's needs	2. To ensure respiration functions are maintained to as near normal as possible
3. Attach mechanical ventilator to endotracheal tube/ tracheostomy tube once the tube is secured	3. To aid the patient for effective ventilation
4. Compare the ventilator settings with ordered settings and observe the ventilator as it functions	4. To ensure adequate oxygenation and prevent ventilator related injuries
5. Ensure availability of functional suction equipment, resuscitation equipment, cardiac monitoring equipment, respiratory monitoring unit, neurological monitoring equipment at the bedside	5. To ensure emergency preparedness in case of resuscitation need arises

Steps	Rationale
6. Monitor vital signs; observe the client for distress and discomfort	6. Altered vital signs may indicate that mechanical ventilator settings need to be adjusted and the client may need medication for pain or anxiety
7. Monitor Arterial blood gases (ABGs) four hourly initially or as situation dictates	7. To ensure that adequate oxygenation is being supplied to the client
8. Remove gloves and perform hand hygiene	8. For infection prevention and control
9. Periodically empty accumulated water from tubing. Ensure there is no water in the tubing prior to changing the patient's position	9. To prevent a reduction of airflow and resistance during the process and prevent water from moving from the tubing into the lungs
10. Ensure that the Bag valve Mask is at hand on the resuscitation trolley/tray	10. To save time should the ventilator fail or an emergency arises
11. Perform oral hygiene to the client	11. To maintain oral hygiene and minimize infection related to the procedure
12. Continuous documentation of interventions and changes in the ventilator settings	12. To provide information on continuity of care and a record of actions

## D. Evaluation

Evaluate	Rationale
1. The patient and family's understanding of the need for mechanical ventilation	1. To determine education need
2. If pain and anxiety are controlled to ensure ventilation is successful	2. Facilitates recovery
3. The patient's response/tolerance to the procedure	3. To provide additional information necessary for nursing care
4. If the patient's Arterial Blood Gas Analysis and oxygen saturation levels are within normal limits, showing adequate oxygen delivery	4. To ascertain whether the airway is patent and successful tissue oxygenation has occurred

## E. Documentation

### Record:

- Hourly ventilator settings and hourly vital signs
- The patient's response to the interventions
- Results of Arterial Blood Analysis and any laboratory tests done and interventions undertaken in response to the results

■ ■ ■

## 2.2-7: Endotracheal Extubation

### **Definition:**

The removal of an endotracheal tube from the patient's airway.

### **Purpose:**

To allow the patient to breathe independently of the airway support.

### **Indications:**

- Patients who are able to adequately support their own ventilation and oxygenation
- When the reason for intubation has been adequately addressed
- When neurological status has improved to a Glasgow coma scale (GCS) level of above 8/15
- Intact airway protective reflexes (gag, cough and swallowing).
- Spontaneous respiratory rate according to age
- Minimum sedation to a level that does not affect respiration
- Presence of muscular strength to sustain work of breathing
- Acceptable blood gases or SpO<sub>2</sub>, and/or end-tidal CO<sub>2</sub> while on minimal ventilatory support, ventilation with FiO<sub>2</sub> less than / equal to 40 and CPAP less than / equal to 8 cm H<sup>2</sup>O

## A. Assessment

Assess	Rationale
1. The patient's readiness for extubation as per indication	1. To determine the patient's ability to support their own ventilation and oxygenation
2. Time the patient last fed. Need for the patient to remain nil orally four hours prior to extubation or empty gastric contents	2. To prevent aspiration during the procedure
3. The patient's understanding of the procedure	3. To allay anxiety and ensure effectiveness of the procedure

## B. Planning



### **Self**

- Review knowledge and skills of the procedure
- Assemble equipment
- Prepare the environment



### **Patient**

- Explain the procedure to the patient and obtain informed consent



## Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

- O<sub>2</sub> source
- O<sub>2</sub> delivery devices e.g. Bag valve mask (BVM), Non Rebreather Mask (NRM), Nasal prongs
- Functioning suction machine
- Suction tubes
- Oral pharyngeal airway (Guedel airway)
- Reintubation equipment if needed (**Refer to procedure 2.2-5, Endotracheal Intubation (EI)**)
- 10 ml syringe for deflation
- Scissors (for cutting adhesive tapes or twill tapes)
- Personal protective equipment
- Absorbent pad
- Patent vascular access
- Stethoscope

## C. Implementation

Steps	Rationale
1. Explain the procedure to the patient	1. To allay anxiety and ensure ease of procedure
2. Ensure the patient is connected to a cardiac monitor	2. Provides baseline data and alerts the nurse to changes in vital signs
3. Position the patient in semi or high fowler's position (paediatrics: 45 degrees unless contraindicated)	3. To maintain a patent airway and allow for easy flow of secretions
4. Perform hand hygiene and don PPE (face shield, clean gloves)	4. For infection prevention and control
5. Pre-oxygenate the patient with 100% O <sub>2</sub> using the Bag Valve Mask. N/B Hyper oxygenation not recommended for children with certain congenital heart defects	5. To maximize oxygen reservoir in the alveoli and the rest of the body (To maintain Positive End Expiratory Pressure- PEEP)
6. Suction the mouth and the pharynx	6. To clear secretions and ensure a patent airway
7. Give a large breath and withhold as the cuff is being deflated ( repeat until clear)	7. To force secretions above the cuff

Steps	Rationale
8. Unfasten or cut the tape or ETT securing device while maintaining a firm grip on ETT	8. In readiness for removal of the endotracheal tube
9. If a cuffed ETT is in place, deflate the cuff by inserting a 10ml syringe into one-way valve of pilot balloon and aspirate all the air from the cuff. If there is any concern regarding presence of laryngeal oedema, ensure the patient can breathe around the ETT by auscultating over the trachea. If there is no air leak, <b>DO NOT PROCEED.</b>	9. To ease removal of the ETT and determine the patient's ability to sustain spontaneous breathing; prevents trauma to tracheal lining
10. If patient can cooperate, ask patient to take in a deep breath then quickly and gently remove ETT at peak inspiration. In paediatric patients apply positive pressure with Bag Valve Mask and remove tube during peak inspiration  <b>NB:</b> If the ETT does not come out easily, do not attempt to force the removal	10. To maximize oxygen reservoir in the alveoli and the rest of the body (To maintain Positive End Expiratory Pressure)
11. Instruct the patient to cough immediately after removal of the ETT and suction secretions	11. To clear the airway and improve oxygenation
12. Administer the same or slightly higher Fraction of inspired oxygen ( $\text{FiO}_2$ ) as prior to extubation	12. To maintain same level of oxygenation
13. Monitor the patient closely and obtain Arterial Blood Gas Analysis (ABGAs), $\text{SpO}_2$ after one (1) hour	13. To establish the patient's acid base balance in comparison with the baseline data before extubation by sustaining adequate oxygenation

## D. Evaluation

Evaluate	Rationale
1. The patient's respiratory patterns i.e. respiratory rate, rhythm, depth, pre and post extubation	
2. The patient's hemodynamic status pre and post extubation e.g. oxygen saturation, arterial blood gas analysis	To determine the patients ability to maintain ventilation and oxygenation on their own

## E. Documentation

### Record:

- Time of extubation
- Problems encountered during the procedure and interventions done
- Oxygen therapy presently in use
- The patient's respiratory patterns and hemodynamic status

■ ■ ■

## 2.3: Circulatory System

### 2.3-1: Performing a Venepuncture Cannulation

**Definition:**

This is an invasive procedure in which a cannula is introduced into a vein.

**NB:** There are two methods: Syringe and Vacutainer methods.

**Purpose:**

- To establish venous access
- Manage fluid and electrolytes imbalance

**Indications:**

- Administration of intravenous medications or fluids
- Transfusion of blood and blood products
- Collection of blood for laboratory investigations

## A. Assessment

Assess	Rationale
1. The patient's condition and baseline observations	1. To determine assistance required and identify conditions that may contraindicate use of a specific site
2. Type of laboratory test required	2. To plan for the requirements for collecting the sample
3. Prospective sites and integrity of the veins to be punctured. Appropriateness and frequency of the test required	3. To avoid multiple venepuncture and the patient's discomfort
4. The patient's readiness for the procedure	4. To allay anxiety and obtain the patient's cooperation. If it is a child determine need for restraint of the lower extremities

## B. Planning



**Self**

- Review knowledge of the anatomy and physiology of the venous system
- The standard precautions
- Assign role to the assistant



## Patient

- Explain the need, benefits, risks of venepuncture and obtain an informed consent. If a child, obtain informed consent from the parent or guardian.
- Apply local anaesthetic cream to the site at least one hour before the procedure
- Take note of the patient's religious and socio-cultural beliefs
- Explain approximately when the results are expected and solicit co-operation required from the patient



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

Disinfected trolley with;

- Clean gloves
- Laboratory request forms
- Methylated spirit in a container with a nozzle/ Alcohol swabs
- Sterile 2x2 gauze pads
- Tourniquet
- Adhesive tape or Band-Aid (pre-cut)
- Appropriate type and size of cannula
- Appropriate blood collection tubes
- Needle/equipment disposal container
- Pair of scissors
- Labels for each specimen tube with accurate patient information
- Receiver for used items
- Small pillow or folded towel to support extremities as necessary.
- Splints and bandage
- Local anaesthetic cream or spray.
- Syringe method: sterile needles (20–21 gauge for adults, 23–25 gauge butterfly for older adults, 23–25 gauge butterfly for children)
- Vacutainer method: Vacutainer tube with needle holder; sterile double needles (20–21 gauge for adults, 23–25 gauge for children)
- Sterile specimen bottles
- IV Pole/ Drip stand if indicated
- Others depending on the purpose for venepuncture

## C. Implementation

Steps	Rationale
1. Explain the procedure to the patient	1. To allay anxiety and promote cooperation
2. Perform hand hygiene	2. For infection prevention and control

Steps	Rationale
3. Identify the patient and wheel equipment trolley to the bedside	3. To provide an organized approach to the procedure and ensure safety for the client and the nurse
4. Screen the patient if in the ward, otherwise venepuncture should be done in the procedure room especially for children	4. To provide privacy
5. Raise or lower the bed/table to suitable working height. Place the patient in fowler's or semi-fowler's position with extremity intended for cannulation below the level of the patient's heart. A pillow or towel should be placed under the extremity to enhance extension	5. For ease of the procedure
6. Place the mackintosh under the site for venepuncture	6. To avoid soiling linen
7. Perform hand hygiene and don clean gloves	7. To reduce the risk of infection to both the client and the nurse
8. Apply tourniquet 7-10cms above the selected site. The tourniquet should be able to be removed by pulling the end with a single motion	8. To provide improved visibility of the veins; allows the selected vein to engorge
9. Check for the distal pulse	9. In the absence of pulse means the tourniquet is applied too tightly and should be reapplied loosely
10. Have the client clench his/her fist prior to venepuncture. Maintain tourniquet only for 1–2 minutes	10. To increase the venous distension and enhance visibility of the vein
11. Identify the best venepuncture site through palpation; the ideal site is a straight prominent vein that feels firm and slightly rebounds when palpated. Palpate potential site	11. To ensure straight, intact veins for easier puncture
12. If the tourniquet has been on too long, release it and let the client rest for 1–2 minutes before reapplying tourniquet	12. To prevent tissue hypoxia due to prolonged ischemia
13. Prepare to obtain the blood sample. Technique varies depending on equipment used: <ul style="list-style-type: none"> <li>• <b>Syringe method:</b> Have syringe with appropriate needle attached</li> <li>• <b>Vacutainer method:</b> Attach double-ended needle to Vacutainer tube and have the proper blood specimen tube resting inside the vacutainer.</li> </ul>	13. For accurate and adequate sample collection

Steps	Rationale
Do not puncture the rubber stopper yet	
14. Cleanse the venepuncture site with alcohol swab using a circular method at the site and extending the motion 2 inches beyond the site. Allow the alcohol to dry	14. For disinfecting the skin prior to venipuncture
15. Remove the needle cover and alert the client that he/she will feel the needle prick for a few seconds	15. To prepare the patient psychologically for the prick
16. Place the thumb or forefinger of the non-dominant hand 1 inch below the site and pull the skin taut	16. To help stabilize the vein during insertion
17. Hold syringe needle or vacutainer at 15- 30° angle from the skin with the bevel up	17. To reduce the chance of penetrating through the vein during insertion. and trauma to the skin and vein
18. Slowly insert needle/vacutainer. Technique varies depending on equipment used: <ul style="list-style-type: none"> <li>• <b>Syringe method:</b> Gently pull back on syringe plunger and look for blood return. Obtain desired amount of blood into the syringe</li> <li>• <b>Vacutainer method:</b> Hold the vacutainer securely and advance the specimen tube into the needle of holder. Be careful not to advance the needle into the vein. The blood should flow into the collection tube. After the collection tube is full, grasp the vacutainer firmly, remove the tube, and insert additional specimen collection tubes as indicated</li> </ul>	18. To prevent puncture through the other side of the vein. <ul style="list-style-type: none"> <li>• If blood does not appear, the needle is not in the vein.</li> <li>• Pushing the needle through the stopper breaks the vacuum and causes the flow of blood into the collection tube. Failure of blood to appear in the collection tube indicates the vacuum in the tube has been lost or the needle is not in the vein</li> </ul>
19. After the specimen collection is completed, release the tourniquet	19. To reduce bleeding from pressure when the needle is removed
20. Apply 2x2 gauze over the puncture site without applying pressure and quickly withdraw the needle from the vein	20. To prepare for needle removal and help to gently prevent the skin from pulling with the needle removal
21. Immediately apply pressure over the venepuncture site with the gauze for 2-3 minutes or until the bleeding has stopped. Apply adhesive tape on the gauze dressing over the site (or apply the Band-Aid)	21. To stop bleeding and minimize formation of a hematoma
22. For Syringe method to transfer blood into the specimen bottles: <ul style="list-style-type: none"> <li>• Using one hand, insert the syringe needle into the appropriate</li> </ul>	22. <ul style="list-style-type: none"> <li>• To prevent needle stick injury</li> </ul>

Steps	Rationale
<p>collection tube and allow vacuum to fill. You may also remove the stopper from each specimen collection tube, remove the needle from the syringe, fill the tube, and replace the stopper</p> <ul style="list-style-type: none"> <li>• If any of the blood tubes contain additives, gently rotate back and forth 8–10 times</li> </ul>	<ul style="list-style-type: none"> <li>• To ensure that the additive is properly mixed throughout the specimen</li> </ul>
23. Inspect the client's puncture site for bleeding. Reapply clean gauze and tape if necessary	23. To keep the site clean and dry
24. Assist the client into a comfortable position. Return the bed into low position with guard rails up if appropriate	24. To provide comfort and safety for the client
25. Check the specimen tubes for any external blood and decontaminate with alcohol as appropriate	25. For infection prevention and control
26. Label the specimen tubes. Place the tubes into appropriate bags/containers for transportation to the laboratory	26. To ensure the specimens are properly identified and processed on time
27. Dispose off needles, syringe, and soiled equipment into proper container	27. For infection prevention and control and needle stick injury
28. Remove, dispose off gloves and perform hand hygiene	28. For infection prevention and control
29. Send specimens to the laboratory	29. To facilitate timely handling of specimens and timely results
<b>For Cannulation</b>	
<b>After applying tourniquet and palpating for the vein, have the following considerations in mind:</b>	
1. Select the most distal vein first to avoid bony prominence	1. To reduce discomfort and prevent inadvertent infiltration from venous puncture
2. Aseptically prepare the site and allow the alcohol/antiseptic to remain on the site for 30 seconds before venepuncture	2. For infection prevention and control
3. Remove the cannula needle cover and explain to the patient that the needle will be introduced to the vein	3. To facilitate cooperation during the procedure
4. Anchor the vein below the intended insertion site with gentle skin traction; using the thumb of the non-dominant hand pull the skin tight. Using a thumb, stretch and stabilize the vein and soft tissues about 5cm below the intended site of entry	4. To stabilize the vein during insertion

Steps	Rationale
5. Introduce cannula at 15- 30 degrees over the vein in line with direction of blood flow	5. To align the vein and promotes the patient's safety, prevent movement as the needle is introduced
6. Advance the cannula until a backflow of blood is observed in the flash chamber	6. To get access and confirm successful entry into the vein
7. Once the catheter is in the vein, lower the needle until it is almost flat with the skin. Advance the needle and the catheter until the catheter tip is in the centre of vein lumen	7. To confirm establishment of venous access
8. Remove the needle	8. To prevent puncturing of the opposite vein wall, maintains vein integrity and prevents infiltration and dislodgement
9. Flush the cannula with sterile water for injection or normal saline. Secure the cannula with adhesive tape	9. To prevent coagulation and maintain patency of the line
10. Apply splints and bandage if in a child	10. To provide support and to prevent dislodgment of the cannula
11. Leave the patient comfortable and clear all used equipment appropriately	11. To enhance the patient's comfort, safety and tidiness of the environment
12. Perform hand hygiene	12. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Site for bleeding or haematoma	1. To institute appropriate interventions where necessary
2. The patient's understanding of the purpose of the tests	2. To identify knowledge gaps

## E. Documentation

### Record:

- The date and time of the venepuncture, the site used for the procedure and any complications
- The tests obtained
- Handling of the specimen
- The client's reaction to the procedure and the position of the client after the procedure (i.e. bed lowered with side rails up)

■ ■ ■

## 2.3-2: Maintaining an Intravenous Insertion Site

### **Definition:**

This is a nursing intervention that is carried out to ensure care of the intravenous site.

### **Purpose:**

To maintain patency of the venous access, avoid infections and ensure safe infusion of fluids, medications and blood as prescribed.

### **Indications:**

All patients on IV infusion and intravenous medications

## A. Assessment

Assess	Rationale
1. The client understands of the need for IV therapy	1. To provide information on teaching needs
2. The IV site for complications: that is, signs of infection, phlebitis, or infiltration: redness, swelling, pallor, or warmth at the IV site and the surrounding tissue, and bleeding or drainage	2. To facilitate interventions to prevent further damage
3. IV site for patency by briefly compressing the vein above the cannula site. Note the slowing or momentary cessation of IV rate with a positive blood return	3. To provide ongoing assessment of current patency status

## B. Planning



### **Self**

Review knowledge on;

- Anatomy and physiology of the venous system
- Standard precautions
- Medications/fluids to be given
- Potential risk factors associated with long term use of IV line



### **Patient**

- Explain the need, benefits, and risks of IV line and role of the client/patient
- Explain the procedure to the patient and obtain informed consent



## Environment

Ensure;

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

Trolley with;

- Clean gloves
- Adhesive tape
- Nursing documentation record
- Heparin (where appropriate)
- Sterile isotonic sodium chloride/ Sterile water for injection
- Sterile gauze and cotton wool packs
- Appropriate sizes of syringes and needles

## C. Implementation

Steps	Rationale
1. Review the prescription for IV therapy	1. To ensure validity of the procedure
2. Review the client's/patient's history for medical conditions or allergies	2. To prevent risk of fluid over load and allergic reactions
3. Review the client's/patient's IV site record, intake and output record	3. To assess for potential problems with fragile IV sites and fluid balances
4. Perform hand hygiene	4. For infection prevention and control
5. Obtain the client's/patient's vital signs	5. To determine physiological status of the patient
6. Check the IV fluid rate, volume, patency of tubing and additives at the beginning of the shift (Fig 2.12, Fig 2.13 below)	6. To ensure the client's/patient's is receiving correct therapy
7. Check IV tubing for either tight connections, dislodgement or leaks after every 4 hours (Fig 2.14 below)	7. To ensure there are no fluid leaks from the tubing and connections
8. Check IV dressing site hourly initially to be sure it is dry and intact. If the dressing is not dry and intact remove the dressing and observe the site for inflammation and infection <b>NB:</b> If an occlusive dressing is used, do not remove the dressing when assessing the site	8. To monitor extravasations and resultant phlebitis that could lead to tissue necrosis

Steps	Rationale
	 <p><b>Figure 2.13 Aspirate for Blood Return when Assessing for Patency</b></p>
<p>9. Observe the vein track for redness, swelling warmth or pain hourly and document IV site findings in the nursing record or fluid chart</p> <p>10. Perform hand hygiene</p>	<p>9. To detect early signs of phlebitis</p> <p>10. For infection prevention and control</p>

## D. Evaluation

Evaluate	Rationale
<p>1. For signs of infection and impairment of skin integrity</p>	<p>1. To determine the quality of care given</p>
<p>2. Patency and dislodgement of the cannula</p>	<p>2. To determine need for change</p>

## E. Documentation

### Record:

- Date and time checked
- Condition of IV site i.e. Warmth and tightness of the site, any discharge observed, colour and odour and appropriate intervention taken
- Type of fluid regime and any additives
- Rate of flow and whether maintained
- Any change of dressings
- Patency of tubing

■ ■ ■

## 2.3-3: Measuring Central Venous Pressure (CVP)

### **Definition:**

This is the process of measuring/estimating the right ventricular end-diastolic volume and pressure.

### **Purpose:**

To measure the pressure of blood within the intrathoracic portion of inferior/superior vena cava (stroke volume) and monitor fluid status of the patient.

### **Indications:**

- All critically ill patients under mechanical ventilation
- Patients with cardiac diseases
- In dehydrated patients where rapid replacement of fluid is required
- Patients requiring strict fluid management

## A. Assessment

Assess	Rationale
1. The client's understanding (if conscious) of the procedure	1. To determine education needs
2. The patient's ability to lie in the supine position without a pillow	2. To assess if the patient can tolerate the procedure
3. The patient's vital signs, intake and output	3. To act as baseline observation for subsequent reference

## B. Planning



### **Self**

- Review knowledge of:
  - Anatomy and physiology of the cardiovascular system
  - Standard precautions and guidelines
  - Potential complications associated with CVP measuring
- Assemble all the required equipment



### **Patient**

- Explain the need, benefits, risks of measuring central venous pressure and role of the patient
- Obtain informed consent from the patient



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A trolley with;

- Sterile gloves
- IV tubing
- Manometer set for pressure transducer setup / Methylated spirit manometer
- 3-way stopcock if not introduced in manometer set
- Indelible ink marking pen
- Adhesive tape
- Mask
- Normal saline
- Heparin
- Syringes and needles
- IV pole/ Drip stand

## C. Implementation

Steps	Rationale
<b>Taking a CVP with a Manometer</b>	
1. Perform hand hygiene and don gloves	1. For infection prevention and control
2. Explain procedure to the patient	2. To allay anxiety and promote cooperation
3. Position the patient in supine or flat position. If this is not tolerated place them in a semi-Fowler position. Take all measurements at the same angle. Mark the right atrium (at the mid-axillary line about one-third of the distance from the anterior chest wall at the fourth intercostal space) with an "X" using indelible ink pen and zero the line. This phlebostatic axis may be used to identify the level of atrium	3. To obtain accurate measurements
4. Connect the IV fluid ( normal saline) to a three-way stopcock and flush the other two ports	4. To flush air out
5. Perform hand hygiene, don sterile gloves and mask	5. For infection prevention and control
6. Connect the CVP manometer to the upper port of the stopcock and the CVP tubing from the patient to the second side port of the stopcock	6. To prepare for the commencement of the procedure

Steps	Rationale
7. Allow normal saline to flow rapidly into the patient for a few seconds, with stopcock closed towards the manometer	7. To establish the patency of the line and in readiness for the procedure
8. Turn the stopcock to fill manometer with normal saline up to the 20cc mark above the upper limit of normal CVP range	8. To allow fluctuations for accurate reading (normal CVP reading varies from 6 to 12cm of water)
9. Hold manometer at the phlebostatic axis and turn the stopcock off to the normal saline and release manometer fluid to the patient	9. To take CVP measurement (If the fluid level fluctuates with the patient's respirations, take the reading at the end of the patient's expiration)
10. Watch as the fluid falls in the manometer. Mark the central venous pressure reading when the fluid stabilizes	10. To establish actual CVP reading
11. Turn the stopcock off from the manometer	11. To prevent air entry to the manometer at the end of the procedure
12. Store the manometer in an upright position (usually hanging from the IV pole)	12. To prevent air bubbles from entering the fluid column on the client and to prevent contamination of the manometer
13. Perform hand hygiene	13. For infection prevention and control
14. Document reading	14. To communicate findings for continuity of care
<b>Taking a CVP with a Transducer</b>	
1. Perform hand hygiene	1. For infection prevention and control
2. Prime the transducer and the IV lines that are attached to it using appropriate solution (usually heparinized normal saline)	2. To be ready for the procedure and to prevent clotting
3. Place the IV bags into a pressure bag and apply pressure on the IV solution	3. To increase the rate of flow and prevent the backflow of blood into the central catheter (transducer provides a very low flow of iv fluids)
4. Connect the IV pressure tubing from the transducer to the central line then connect the transducer to the pressure monitoring equipment	4. To prepare for the commencement of the procedure
5. Place the patient in the supine position with the bed flat if tolerated	5. For accuracy of the readings
6. Level the pressure transducer to the phlebostatic axis and zero the monitor	6. To initiate the procedure

Steps	Rationale
according to the manufacturer's instructions	
7. The CVP will appear on the monitor. (if the reading varies use the reading obtained at the end of the patient's expiration)	7. To obtain the actual reading
8. Return the patient to a position of comfort	8. For the patient's comfort
9. Perform hand hygiene	9. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. CVP findings and the patient's condition during and after the procedure	1. To obtain baseline data for interventions

## E. Documentation

### Record:

- Date and time of the procedure
- CVP results on the graphic and flow sheets
- The patient's condition and interventions taken

■ ■ ■

## 2.3-4: Intravenous Fluid Administration

### Definition:

This is a process of administering sterile fluids through a vein.

### Purpose:

- Manage fluid and electrolytes imbalance
- To provide water-soluble vitamins, glucose and medications

### Indications:

- Pre and post major surgical operations
- Severe dehydration
- Circulatory collapse (Shock)
- Medication administration and replacement of certain types of nutrients

## A. Assessment

Assess	Rationale
1. The client's understanding regarding the need for IV therapy	1. To provide information on teaching needs
2. The patient's condition	2. To determine the rate and type of solution to be infused
3. Condition of the venepuncture cannula	3. To confirm the cannula patency and identify signs of infection
4. Vital signs	4. To obtain baseline data

## B. Planning



### Self

Review knowledge on;

- Infection prevention and control precautions
- Fluid and electrolyte balance
- Potential risk factors associated with long term use of IV line
- Assemble equipment required



### Patient

- Explain the needs, benefits of the procedure to the patient and obtain informed consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

Disinfected trolley with;

- Sterile gloves
- Appropriate antiseptic solution
- Receiver for soiled swabs
- Adhesive tape
- Pair of scissors
- Infusion set
- Watch with second hand
- Appropriate IV Fluids
- Fluid charts
- Appropriate sizes of syringes and needles
- Receiver bowl
- IV pole
- Sharps container

## C. Implementation

Steps	Rationale
1. Review the patient's record	1. To verify order for IV therapy and history for medical conditions or allergies
2. Explain the procedure to the patient	2. To allay anxiety
3. Perform hand hygiene and don clean gloves	3. For infection prevention and control
4. If necessary perform venepuncture <b>(Refer to procedure 2.3-1, Performing a Venepuncture)</b>	4. To obtain IV line access
5. Verify the type, volume, expiration date of the infusion solution and examine the IV solution for particles, abnormal discoloration and cloudiness	5. To ascertain correct solution, prevent risk of fluid overload; suitability and allergic reactions
<b>Preparing the bag</b>	
1. Place the bag on a flat, stable surface or hang it on an IV pole/drip stand	1. To support the bag while fixing the administration spike
2. Remove the protective cap or tear the tab from the tubing insertion port and remove the protective cap from the administration set spike	2. To prepare for the administration spike insertion

<b>Steps</b>	<b>Rationale</b>
3. Hold the port firmly with one hand , and insert the spike with your other hand	3. For ease of spiking
4. Hang the bag on the IV pole, and squeeze the drip chamber until its half full	4. To facilitate flow by gravity
5. Label the bag with the patients name and identification number, date and time, ordered rate and duration of the infusion and your initials	5. To enable for continuity and accuracy of care
6. Add any prescribed medication to the solution and place a completed medication label on the bag	6. To ensure appropriate treatment administration
<b>Priming the tubing</b>	
1. Leave the protective cover on the end of the tubing, aim the distal end of the tubing over a receiver and slowly open the flow clamp. Leave the clamp open until the IV solution flows through the entire length of the tubing	1. To release trapped air bubbles and to avoid air embolism
2. Close the clamp and attach the IV tubing to the flash back chamber using the sterile technique	2. For infection prevention and control
<b>Drop rate calculation</b>	
1. Calculate the number of drops per minute	1. To determine the accurate drop rate (for the children refer to Basic Paediatric Protocol by MOH)
2. Remove the watch and hold it next to the drip chamber	2. To observe the watch while counting drops simultaneously
3. Release the clamp to the approximate drip rate, adjust the clamp as necessary and count drops for 1 minute. Continue to adjust and count drops until the correct rate is achieved	3. To ensure the correct drop rate is achieved
4. Check the flow rate every 15 minutes until stable and then every hour and adjust as needed	4. To detect irregularities
5. Inspect the IV site for complications, and assess the patient's response to therapy regularly	5. To detect any complications
6. Leave the patient comfortable, clear all used equipment appropriately, remove and discard gloves	6. To promote the patient's comfort and for infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The patient's condition during and after the procedure	1. To assess the achievement of the procedure
2. Fluid Intake and out put	2. To determine fluid status

## E. Documentation

### Record:

- Date and time
- The patient's condition before, during and after infusion
- Type of IV solution with additives
- Condition of IV site and any change of dressings
- Rate of flow and whether maintained

■ ■ ■

## 2.3-5: Administration of Blood and Blood Products

### **Definition:**

Intravenous administration of blood or blood products.

### **Purpose:**

- To restore haemodynamic status of the patient
- To treat factor specific deficiencies
- For immunotherapy

### **Indications:**

- Massive blood loss of ≥ 25-50% of a person's total blood volume
- Severe haemolysis in the new-born
- Severe anaemia
- Peri-operatively in major surgeries
- Bleeding disorders such as thrombocytopenia, haemophilia and disseminated intravascular coagulopathies

## A. Assessment

Assess	Rationale
1. Indications for blood products to be given	1. To allow for precision of transfusion treatment
2. The patient's transfusion history especially any reactions and pre-transfusion medication given	2. To prevent risk of reactions and anaphylactic shock
3. Vital signs	3. To provide baseline information for intervention
4. Signs and symptoms that might be misinterpreted for reaction during the transfusion	4. Prevents erroneous stoppage of blood transfusion
5. Type, integrity and patency of venous access	5. To allow for successful completion of transfusion
6. The patient's understanding of the procedure	6. To determine educational needs and cooperation of the patient
7. Mental and physical state of the patient	7. To determine need for assistance or restraints

## B. Planning

### Self

- Knowledge of physiology of blood, its components and cardiovascular system
- Knowledge on the procedure of blood transfusion and institutional policy on the same
- Required equipment
- Assign role to the assistant

### Patient

- Explain procedure, reasons for transfusion, expected results and duration of the transfusion to the patient and/or guardian and obtain informed consent in writing
- Explain to the patient/guardian normal transfusion experiences and that she/he should alert the health worker in case of itching, swelling, chest pain and dyspnoea or unusual feeling

### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space

### Requirements

- Disinfected trolley with a tray containing;
- Sterile blood transfusion set
- IV. solution of 0.9% sodium chloride / Sterile water for injection
- Clean gloves
- Leukocytes depleting filter if required
- Vital signs observation set
- Unit of blood /blood product
- Blood observation chart
- Resuscitation trolley/Tray (in case of reaction)

## C. Implementation

Steps	Rationale
1. Perform hand hygiene	1. For infection prevention and control
2. Take equipment to the patient's bed side	2. To promote accessibility and efficiency of the procedure
3. Ensure emergency medications such as antihistamines and steroids, extra intravenous infusion fluids are within reach	3. To prepare for prompt interventions in case of reactions

Steps	Rationale
4. Explain the procedure to the patient /guardian again	4. To allay anxiety and gain the patient's cooperation
5. Review the patient's understanding of the procedure , side effects and experiences that must be reported to the nurse	5. To allow the patient to cope and comply with the procedure
6. Take vital signs	6. To establish baseline data for intervention
7. Verify with another nurse the following (Fig 2.15): <ul style="list-style-type: none"> <li>• The blood product or unit of blood to be transfused as per the prescription</li> <li>• The patient's identification data on the nurse's notes with patient's blood transfusion card and the transfusion unit (blood to be transfused)</li> <li>• The blood group and the Rhesus factor type</li> <li>• Cross match compatibility</li> <li>• If the blood has been screened for infections</li> <li>• Expiry date and time on the blood bag</li> <li>• Presence of clots in the blood</li> </ul>	7. To promote the patient's safety
8. Instruct the patient to empty his/her bladder	8. To promote comfort and prevent unnecessary blood flow distractions
9. Perform hand hygiene again and don gloves	9. For infection prevention and control
10. Open the blood administration tube/kit and move roller clamps to commence installation	10. To initiate preparations for commencement of the transfusion
<b>For Y-tubing Set</b>	
11. Spike Normal saline by opening the roller clamp on the Y-tubing connected to the bag and the roller clamp in the unused inlet tube until the tubing from the Normal saline is filled. Close clamp on the unused tubing	11. To allow the nurse to switch from infusing N/saline to blood
12. Squeeze sides of the drip chamber and allow transfusion filter to partially fill (Fig 2.16 below) <ul style="list-style-type: none"> <li>• Open the lower roller clamp and allow the tubing to fill with Normal saline to the hub</li> <li>• Close the lower clamp</li> <li>• Spike the blood bag and open the clamps on inlet tube to allow blood to cover the filter completely</li> </ul>	12. Allows for accurate drop count <ul style="list-style-type: none"> <li>• To remove all air from the tubing system</li> <li>• To prevent wastage of IV fluid</li> <li>• Fragile RBCs may be damaged if they drop on an uncovered filter</li> </ul>

Steps	Rationale
<ul style="list-style-type: none"> <li>Close the lower clamp</li> </ul> 	<ul style="list-style-type: none"> <li>To prevent blood from flowing until the tubing is attached to various catheters.</li> <li>To attach the tubing to the blood unit.</li> </ul>
<p>13. Spike the blood bag</p> <ul style="list-style-type: none"> <li>Squeeze the drip chamber and allow the filter to fill with blood to the hub.</li> <li>Allow flow from the tubing to various catheters using sterile precautions and open lower clamp.</li> <li>Infuse the blood at a lower rate of 2-5 mls per minute according to prescription.</li> <li>Remain with the patient for the first 15 to 30 mins, and monitor vital signs every 15 mins for 1hour then hourly and 4 hourly after the transfusion is completed.</li> <li>Dispose the bag, tubing and gloves according to the waste disposal procedure.</li> <li>Explain to the patient signs of delayed reactions and the need to report</li> </ul>	<ul style="list-style-type: none"> <li>To prevent air flowing into the vein.</li> <li>To allow flow of blood/ blood product into the veins</li> <li>To follow policy guideline and prevent bacterial growth</li> <li>To identify early signs of reactions</li>     <li>To prevent transfer of infection and for the safety of patients and hospital staff</li> <li>To facilitate early detection and intervention</li> </ul>

## D. Evaluation

Evaluate	Rationale
1. For any adverse reaction during and after the procedure	1. To provide data for planning appropriate interventions
2. Improvement of the patient's condition or relief of symptoms	2. To determine if more units of blood/ blood products are required

## E. Documentation

**Record:**

- Date and time for the procedure
- Range of vital signs before, during and after the procedure
- Laboratory findings e.g. Full haemogram, Prothrombin time etc.
- Any medications given prior, during and after the transfusion
- Start and completion time of the transfusion
- Amount of blood administered

■ ■ ■

## 2.4: Musculoskeletal and Integumentary System

### 2.4-1: Wound Dressing

**Definition:**

The process by which a wound is cleaned and a sterile dressing applied.

**Purpose:**

For infection prevention and control and enhance healing.

**Indications:**

- Surgical incision
- Septic wound
- Decubitus ulcer (Pressure ulcer)
- Removal of stitches/staples/clips/drains

## A. Assessment

Assess	Rationale
1. Condition of the client and the wound	1. To establish suitability of the procedure
2. The client's understanding of the need for dressing	2. To identify education needs
3. Extent of skin impairment and the drainage from the wound (amount, colour and odour)	3. For clinical decision on suitable antiseptics and instruments to be used
4. The client's possible risk/benefit associated with wound dressing	4. To identify contraindications to the procedure
5. Equipment and required assistance	5. To promote efficiency
6. Appropriateness of the working environment	6. For both the client's and the nurse's safety and comfort
7. The client for history of allergies to dressing solution and materials	7. To avoid reactions and further skin breakdown
8. Need for analgesia	8. To arrange for its administration appropriately

## B. Planning

### Self

Review knowledge on:

- Management of wounds
- Procedure of wound dressing

### Patient

- Explain the procedure to the client/patient to obtain informed consent

### Environment

- A privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space

### Requirements

A trolley with:

#### Top shelf;

Sterile dressings pack containing:

- Dressing forceps
- Dissecting forceps
- Gallipots
- 10 cotton wool swabs
- Gauze swabs
- 1 hand towel/ 4 paper towels
- Petri dish

#### Bottom shelf;

- Pair of scissors
- Adhesive tape/bandage
- Antiseptic solutions as required
- Kidney dish or jug with disinfectants (as per institutional policy)
- Topical medications if required
- Extra sterile swabs and gauze
- Sterile gloves
- Receiver for used swabs
- Dressing mackintosh (as required)

## C. Implementation

Steps	Rationale
1. Close windows and screen the bed	1. For the client's privacy and comfort
2. Wash the hands and don gloves	2. For infection prevention and control
3. Ensure that the trolley is clean then disinfect it with spirit. Allow the spirit to dry	3. To ensure a sterile working field
4. Place sterile dressing pack on the top shelf and wheel trolley to the bedside	4. For easy accessibility and efficiency
5. Explain the procedure and position the client appropriately	5. For co-operation and to allay anxiety
6. Loosen the dressing	6. Facilitates subsequent removal of dressing without trauma
7. Perform hand hygiene	7. To minimize cross infection
8. Open the dressing pack to expose dissecting forceps	8. For readiness of the procedure
9. Using the dissecting forceps, arrange the instruments	9. For easy access during the procedure
10. Use the same dissecting forceps to remove the loosened dressing from the wound and discard dressing into the clinical wastes receiver	10. To expose the wound in preparation for dressing
11. Place the forceps into the jug/kidney dish with decontaminant	11. For safe handling of instrument thereafter
12. Ask the assistant to pour dressing solutions into the gallipots and add extra sterile materials on the sterile field as required	12. For efficiency and to prevent break in technique during the procedure
13. Perform surgical hand scrub ( <b>Refer to procedure 1.2-2, Surgical Scrubbing, Gowning and Gloving</b> )	13. To prevent contamination of hands and facilitate donning of gloves
14. Dry hands using sterile towels and don sterile gloves	14. To allow handling of sterile supplies without contaminating
15. Drape the patient with a dressing towel	15. To create a sterile surface
16. Note condition of the wound, surrounding tissues, and odour	16. To assess wound status prior to dressing
17. Prepare the cotton wool swabs as follows: <ul style="list-style-type: none"> <li>• Using the dissecting forceps, put enough cotton wool balls in the dressing solution. (If using two solutions, put swabs in both)</li> <li>• With the dressing forceps in the dominant hand, squeeze excess solution from the swabs, and place</li> </ul>	17. To prevent contamination and for infection prevention and control

Steps	Rationale
them on the extra gallipot/kidney dish/Petri dish	
18. Using the dissecting forceps pick a wet swab and transfer to the dressing forceps	
19. Clean the wound from inside outward rotating the forceps using a swab only once and discard. Repeat until the wound is clean. Then clean the skin around the wound	
20. Place the dressing forceps into the disinfectant.	
<b>NB:</b> If using two solutions repeat the procedure with second solution	18 – 23. To prevent contamination and for infection prevention and control
21. Transfer the dissecting forceps to the dominant hand and pick the second dissecting forceps with the non-dominant hand	
22. Using the non-dominant hand, pick the dressing material e.g. gauze or sofratulle and transfer to dominant hand. Cover the wound with dressing material (Ensure the wound is adequately covered)	
23. Place forceps into the disinfectant	
24. Secure the dressing with strapping	24. To ensure the dressing remains in place
25. Remove the drape and place it on trolley. Use the towel lining the trolley to cover used equipment	25. For infection prevention and control
26. Position the patient appropriately	26. Promotes comfort and safety
27. Dispose the waste and manage equipment as per hospital policy, then perform hand hygiene	27. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Changes in the status of the wound i.e. decrease in size, increased granulation, raised wound edge - stagnation	1. To ascertain appropriate response to intervention
2. Alteration in sensation or pain	2. Provides information for further wound management
3. The patient's nutritional status	3. Improve the nutritional status for faster healing and avoid complications

Evaluate	Rationale
4. The surrounding skin	4. To identify any complications and take appropriate actions

## E. Documentation

### Record:

- Date and time of the procedure
- The characteristics of the wound
- Type and amount of dressing and dressing solution used
- Tolerance of the client to the procedure and any abnormality detected during the procedure and action taken

■ ■ ■

## 2.4-2: Removing Stitches/Staples and Clips

### **Definition:**

The process of removing materials used for approximation of incision wounds.

### **Purpose:**

To promote healing after surgical intervention.

### **Indications:**

- Surgical wounds
- Following trauma/accidents

## A. Assessment

Assess	Rationale
1. The suture line	1. To ascertain extent of closure
2. Condition of the client	2. To establish suitability of the procedure
3. The client's understanding of the need for removal of stitches/staples	3. To identify and fill in any knowledge gaps
4. The client's possible risks associated with the procedure	4. To identify previous problems or contraindications to the procedure
5. Equipment and assistance required	5. To promote efficiency
6. Appropriateness of the working environment	6. For both the client and the nurse's safety and comfort
7. Drainage from the wound, amount, odour and colour	7. To determine intervention needed
8. The client history of allergies to dressing solution and materials	8. To avoid reactions and further skin breakdown
9. Need for analgesia	9. For pain control

## B. Planning



### **Self**

Review knowledge and skills of the procedure



### **Patient**

- Explain the procedure to the client/patient to obtain informed consent
- Ascertain stitches/staples to be removed



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A trolley with:

### Top shelf;

- A sterile dressing pack

### Bottom shelf;

A clean tray containing:

- Stitch removing scissors/cutter/ sterile blade
- Clip/staple remover
- Dressing solutions and materials as required
- Examination lamp (as required)

## C. Implementation

Steps	Rationale
1. Follow the procedure for <b>Wound Dressing 2.4-1</b> up to step 16	1. To ensure sterility and minimize the risk for infection
2. Place the gauze a few inches from the suture line	2. To act as a receptacle for removed sutures/clips/staples
3. Grasp scissor/blade/cutter/staple remover in the dominant hand and forceps in the non-dominant hand(avoid cutting skin)	3. To smoothly remove sutures without tension to suture line, thus for the client/patient's comfort
4. Cut suture as close to the skin as possible away from the knot	4. For infection prevention and control from the skin surface
5. Grasp the staple/clip or knotted end of suture and remove in one continuous action and place on gauze	5. To ease removal and accurate counting of removed sutures
6. Repeat the steps until every suture is removed and counted <b>NB:</b> Clean wound with solution if there is a discharge	6. To ensure all pieces are removed
7. Apply light dressing if the wound has not healed with first intention. Expose the wound if completely healed	7. To prevent wound dehiscence and infection

Steps	Rationale
8. Clear equipment as for wound dressing <b>(Refer to procedure 2.4-1, Wound Dressing)</b>	8. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Incision site	1. To determine the extent of the healing process
2. For presence of pain	2. For intervention and the client's comfort

## E. Documentation

### Record:

- Date and time of the procedure
- Number of sutures removed
- Appearance of the suture line and the level of healing
- The client's response during the procedure
- Presence of wound dehiscence and interventions taken

■ ■ ■

## 2.4-3: Care and Removal of Drains

### Definition:

This is the process of managing a patient who has a surgical/wound drain.

### Purpose:

To facilitate drainage and healing of the wound.

### Indications:

- Incision wounds
- Trauma
- Osteomyelitis
- Pleural effusion
- Ascites
- Pericardial effusion

## A. Assessment

Assess	Rationale
1. The condition of the patient	1. To establish suitability of the procedure
2. The suture line	2. To determine the extent of wound closure
3. The client's understanding of the need for removal of the drain	3. To identify education needs
4. Possible risks associated with the procedure	4. To identify previous problems /contraindications to the procedure
5. Equipment and assistance required	5. To promote efficiency
6. Appropriateness of the working environment	6. For both the client and the nurse's comfort
7. Location and purpose of the wound drain	7. To facilitate appropriate planning
8. Drainage present on the patient's dressing	8. To determine the position of the drain
9. Type and number of drains	9. To facilitate planning for appropriate intervention
10. The drain system for proper functioning	10. For efficiency and safety

## B. Planning



### Self

- Review knowledge and skills of the procedure
- Assemble equipment



## Patient

Explain the procedure to the client/patient to obtain informed consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space
- Cleanliness of the room
- Adequacy of lighting and ventilation



## Requirements

A trolley with;

### Top shelf;

- Sterile dressing pack

### Bottom shelf;

Tray containing;

- Sterile gauze
- Jug for receiving drainage
- Adhesive tape
- Protective rack
- Sterile Gloves
- Clean gloves
- Sterile Stitch remover/scissors
- Artery forceps
- Appropriate antiseptic solution
- Specimen container (if required)

## C. Implementation

Steps	Rationale
<b>For Under Water Seal Drain (UWSD)</b>	
1. Position the patient in semi Fowler's position	1. To enhance lung expansion and drainage
2. Keep the bottle upright in a protective rack and ensure it is below chest level	2. For the client's comfort and aid drainage by gravity
3. Ensure the following: <ul style="list-style-type: none"> <li>• That the UWSD bottle has the required amount of water/saline e.g. 1000 ml</li> <li>• The tube from the client is 2 cm below water level</li> </ul>	3. <ul style="list-style-type: none"> <li>• To assess the amount of drainage</li> <li>• To maintain the seal; that will prevent air from drawing back to the pleural space</li> </ul>

Steps	Rationale
<ul style="list-style-type: none"> <li>If suction is connected, it is at recommended pressure</li> <li>The tubes are well secured, not kinked and patency is maintained</li> <li>The fluid is fluctuating</li> </ul>	<ul style="list-style-type: none"> <li>To prevent tension and injury to tissues</li> <li>To prevent backflow into the pleural space</li> <li>To verify effectiveness of the procedure</li> </ul>
4. Observe the volume, colour and type of drainage	4. To detect abnormalities and to assess progress
5. Observe the following on the client: <ul style="list-style-type: none"> <li>Change in respiratory status</li> <li>Oxygen saturation and vital signs</li> <li>Assess for pain</li> <li>Breath sounds, depth and regularity</li> <li>Ensure the drain remains well secured with suture and clean dressing</li> </ul>	5. <ul style="list-style-type: none"> <li>To verify lung expansion</li> <li>To ascertain effectiveness of the system and to detect abnormalities</li> <li>To determine the need for analgesia</li> <li>To ensure normal breathing sound is achieved and removal of secretions</li> <li>To ascertain effectiveness of the procedure</li> </ul>
6. To change the bottle: <ul style="list-style-type: none"> <li>Clamp the chest tube with 2 artery forceps</li> <li>Disconnect the bottle</li> <li>Connect a clean bottle with the prescribed amount of saline</li> <li>Remove artery forceps</li> <li>Observe fluctuation of the fluid in the tube</li> </ul> <p><b>NB:</b> For Vacuum Drains</p> <ul style="list-style-type: none"> <li>Follow steps as for UWSD</li> <li>Clamp the drainage tube before emptying the vacuum bottle</li> <li>Ensure the vacuum is present before recommencing drainage</li> </ul>	6. <ul style="list-style-type: none"> <li>To prevent pneumothorax</li> <li>For infection prevention and control</li> <li>To create a vacuum with a new bottle</li> <li>To facilitate communication between the drainage bottle and the pleural cavity</li> <li>To confirm the seal is maintained and is functional</li> </ul>
<b>For Corrugated and Rubber Drains</b>	
1. Position the client appropriately 2. Observe the following: <ul style="list-style-type: none"> <li>That drains are secure with sutures in place (A corrugated drain may have a safety pin to secure it).</li> <li>Colour and amount of drainage</li> <li>Absorbent dressings are secure</li> </ul>	1. To facilitate drainage and the client's comfort 2. <ul style="list-style-type: none"> <li>To maintain the security of the drain</li> <li>To detect any abnormalities</li> <li>To avoid leakage or exposure</li> </ul>
<b>To shorten corrugated/ rubber drain</b>	
3. Perform hand hygiene and don gloves	3. For infection prevention and control

Steps	Rationale
4. Remove absorbent material using stitch cutter, remove stitches on the drain	4. To facilitate withdrawal of the drain
5. Support the drain upwards with artery forceps and the patient's skin with gauze using non dominant hand	5. To facilitate shortening
6. Pull the drain as prescribed e.g. 3-5 cm and insert a sterile safety pin as close to the skin as possible, taking care not to stab the client	6. To allow it to lie neatly at the drain site
7. Cut off extra length of the drain	7. For infection prevention and control
8. Clean the skin around the drain with antiseptic. Apply absorbent dressing under and over the pin. Secure the dressing  <b>NB:</b> To remove drain, follow up to step 4, then gently pull out drain with gloved hand (if not slippery). Clean and dry as in steps 7-8	8. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The patient's condition by monitoring vital signs and oxygen saturation	1. To detect complications and facilitate early interventions
2. Amount and type of drainage	2. To determine the effectiveness of the drain
3. Dressing at the insertion site	3. To maintain the seal and firm dressing
4. Patency of the drainage tube	4. For effectiveness of the procedure
5. If the water seal is maintained	5. To avoid complications associated with the chest tube drainage and enhance effective drainage
6. The drainage for colour, consistency, odour and amount	6. For appropriate intervention
7. The drain insertion site for collection of fluid under the skin	7. For appropriate intervention
8. The patient's level of comfort	8. To determine the effectiveness of the procedure

## E. Documentation

### Record:

- Date and time
- Baseline vital signs and SPO<sub>2</sub>/SaO<sub>2</sub>, then subsequently 4 hourly
- Daily chest drainage output
- Type and amount of the drainage
- Integrity of the chest suction system
- Change of dressing
- Any complications observed and appropriate interventions taken

■ ■ ■

## 2.4-4: Central Venous Catheter Dressing

### Definition:

Changing of dressing around the central venous catheter insertion site using aseptic technique.

### Purpose:

For infection prevention and control on the catheter insertion site.

### Indications:

- Loose dressings from insertion site
- Dressings that have become wet
- Soiled dressing
- When there is bleeding or oozing at the catheter insertion site
- Within 24 hours of hospital admission or emergency insertion of the line
- For patients due for change of dressing site (depending on institutional policy)

## A. Assessment

Assess	Rationale
1. The site for bleeding, oozing, wetness or infectious process and integrity of any suture	1. To establish the need for dressing and identify the infectious process
2. The client's understanding of the need of change of dressing	2. To determine the need for education and to achieve co-operation
3. The client's possible risks associated with allergies to the material for dressing	3. To prevent complications related to the procedure
4. Equipment and assistance required	4. To promote efficiency
5. Appropriateness of the working environment	5. For both the client and the nurse's safety and comfort

## B. Planning



### Self

- Review knowledge and skills of the procedure
- Review principles of wound dressing techniques.
- Assemble equipment



### Patient

- Explain the procedure to the patient, assess the patient's understanding and obtain informed consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A trolley with:

### Top shelf;

- Sterile dressing pack

### Bottom shelf;

Clean tray containing:

- Sterile CVC dressing / bio-occlusive dressing
- Disposable mask(s) for the patient who is unable to turn their head away
- Sterile/clean gloves
- Antiseptic solution or alcohol for cleaning the site

## C. Implementation

Steps	Rationale
1. Explain the procedure to the client/patient	1. To allay anxiety and promote cooperation
2. Perform hand hygiene and put on clean gloves	2. For infection prevention and control
3. Remove dressings carefully and discard with gloves	3. To prevent unnecessary trauma
4. Observe the site for redness, swelling, discharge, integrity of sutures	4. To detect signs of infection and other abnormalities
5. Repeat hand hygiene	5. For infection prevention and control
6. Open the sterile dressing change kite	6. In readiness for the procedure
7. Put on mask and don sterile gloves	7 -9. For infection prevention and control
8. Use first alcohol swab stick to clean the skin around the catheter or needle insertion site, using firm circular motion beginning at the insertion site and moving outward. Include the entire area to be covered by the dressing	
9. Repeat cleansing in the same manner with the second alcohol swab	

Steps	Rationale
<p>10. Use the third swab stick to clean any catheter or tubing that will be covered by the sterile dressing</p> <p><b>NB:</b> When dressing central venous line follow the wound dressing procedure</p>	10. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Tolerance to the procedure	1. To determine effectiveness in patient preparation
2. The condition of the wound for healing and infection	2. To determine any interventions required to facilitate healing
3. The catheter for stability	3. To prevent complications and maintain a patent line

## E. Documentation

### Record:

- Date and time of the procedure
- The condition of the patient
- Time, date of the procedure and type of antiseptic used
- Findings of evaluation

■ ■ ■

## 2.4-5: Wound Irrigation

### Definition:

Wound irrigation is the steady flow of a solution across an open wound surface.

### Purpose:

To achieve wound hydration, remove deeper debris and pathogens contained in the wound exudates or residue from topically applied wound care products and to assist with the visual examination.

### Indications:

- Open wounds
- Flaps

### Contraindications:

- Wounds with exposed blood vessels, nerves, tendons or bone
- Active profusely bleeding wounds

## A. Assessment

Assess	Rationale
1. Condition of the client	1. To establish suitability of the procedure
2. The client's understanding of the need for wound irrigation	2. To identify education needs, allay anxiety
3. The client's possible risk/benefit associated with wound irrigation	3. To identify contraindications to the procedure
4. Equipment and required assistance	4. To promote efficiency
5. Appropriateness of the working environment	5. To ensure safety and comfort
6. Extent of the skin impairment and the drainage from wound (amount and colour)	6. To make a clinical decision on suitable solutions and equipment needed
7. The client for history of allergies to irrigation solution and materials	7. To avoid reactions and further skin breakdown
8. Need for analgesia	8. For pain control

## B. Planning



### Self

- Review knowledge and skills on the procedure of wound irrigation



### Patient

- Explain the procedure to the client/patient to obtain informed consent



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



### Requirements

A trolley with:

- Sterile and clean gloves
- Sterile irrigation kit (basin, 35ml piston irrigation syringe, 19-gauge needle or catheter, solution container)
- Prescribed Irrigation solution at room temperature
- Waterproof pad
- Sterile dressing material to redress the wound after the irrigation procedure, moisture-proof container or bag
- Sterile specimen bottle if needed
- PPE e.g. gown, goggles/shield, apron, boots

## C. Implementation

Steps	Rationale
1. Confirm the physician's prescription for wound irrigation; note the type and strength of the prescribed irrigation solution	1. For nursing action
2. Assess the client's pain level and medicate with analgesic 30 minutes before procedure if the medication is to be given orally or intramuscularly	2. To allow time for analgesic to take effect
3. Explain the procedure to the client	3. To promote the client's cooperation
4. Place a waterproof pad on the bed	4. To Prevent soiling of the linen
5. Assist the client onto the pad and into a position that will allow the irrigation fluid to flow through the wound and into the basin	5. For infection prevention and control
6. Perform hand hygiene and don the clean gloves. Remove and discard the old dressing	6. To allow for assessment of the status of the wound
7. Assess the appearance of the wound and note quantity, colour and odour of the drainage	7. To determine the status of the wound

Steps	Rationale
8. Remove and discard the disposable gloves and wash hands	8. For infection prevention and control
9. Prepare the sterile irrigation tray and dressing materials. Pour the irrigation solution into the solution container. Perform hand hygiene and don sterile gloves	9. For infection prevention and control
10. Position the sterile basin against the lower edge of the wound to receive the irrigation fluid	10. To prevent spillage and soiling of the environment
11. Fill the piston or bulb syringe with irrigation fluid and gently flush the wound. Refill the syringe and continue to flush the wound until the solution turns clear and no exudate is noted	11. For infection prevention and control
12. Dry the edges of the wound	12. To prevent maceration of tissues due to excess moisture
13. Assess the appearance of the wound and drainage	13. To provide indication of change in wound status
14. Apply a sterile dressing. Remove the sterile gloves and wash hands	14. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The wound for cleanliness (absence of debris, exudates and pathogens)	1. To determine the effectiveness of the procedure
2. The wound for hydration status	2. To enhance hydration status for faster cell regeneration and wound healing

## E. Documentation

### Record:

- Date and time of irrigation
- The characteristics of the wound, sloughing tissue or exudates
- Type of irrigant, skin care performed around the wound, dressing material applied.
- Any interventions done in the course of the procedure
- Tolerance of the client to the procedure

■ ■ ■

## 2.5: Emergency Care

### 2.5-1: Performing Basic Life Support

**Definition:**

Basic life support (BLS) is a combination of manoeuvres and skills that provides recognition and management of a person in cardiac or respiratory arrest without the use of technical adjuncts as advanced treatment is awaited.

The sequence of actions in BLS is known as cardiopulmonary resuscitation (CPR) (European Paediatric Advanced Life Support, 2016).

**Purpose:**

- Restore cardiopulmonary functioning
- Prevent morbidity and mortality from reversible causes
- Prevent irreversible brain damage from hypoxia

**Indications:**

- Conditions that lead to Respiratory failure and /or Respiratory Arrest e.g. Asphyxia, Sudden Infant Death Syndrome (SIDS), Chocking
- Conditions that lead to Cardiac arrest e.g. Electrocution, Anaphylaxis, Bleeding, Drowning, cardiac arrhythmias, Trauma

## A. Assessment

Assess	Rationale
1. Safety of both the patient and the staff	1. To determine timeliness of providing BLS or not
2. The patient's state of consciousness and airway patency	2. To confirm the need for resuscitation
3. For breathlessness and check for carotid and brachial pulse depending on the age of the patient	3. To establish need for CPR

## B. Planning



**Self**

- Review Knowledge and skills on current BLS practice
- Organize the resuscitation team/trolley



## Patient

- Explain the procedure to the patient/caretaker, reassure and obtain informed consent where applicable
- Ensure the patient is in a safe environment where BLS can be provided



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

Emergency trolley with:

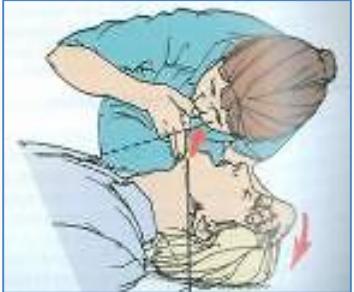
- Syringes – various sizes
- Needles - various sizes
- Intraosseous needles
- Working laryngoscope with assorted blades (adult and child)
- Extra Batteries for Laryngoscope
- Bag valve mask for adult and child, 500mls, 750 mls 1000mls, 1600mls, 2000mls).
- Face masks of various sizes (adult and child)
- Endotracheal tubes (all sizes)
- Oropharyngeal and Nasopharyngeal airways
- Tracheal introducer
- Torch
- Suction catheters including Yankuer (all sizes)
- Nasogastric tube; various sizes
- Lubricant
- Sterile throat packs
- Emergency medications
- Methylated spirit/an antiseptic
- Pillows/pads
- Hard board/fracture board
- Defibrillator pads or gel
- Infusion equipment
- Blood warmer (if required)
- McGil's forceps
- Scissors
- Cannulae (various sizes)
- Stethoscope
- Clean and sterile gloves
- Pulse oximeter

Other equipment

- Mechanical ventilator
- Cardiac monitor
- Defibrillator machine
- Suction machine
- Oxygen source

## C. Implementation

Steps	Rationale
1. Assess the working environment	1. To determine safety for self and the client/patient
2. Perform hand hygiene and don gloves	2. To protect self and the client/patient
3. Stimulate the patient	3. To assess the patient's level of responsiveness
4. If the patient is not responsive, Call for Help/ Activate the Emergency System	4. To improve the quality of interventions and the success of BLS
5. Lay the victim on a firm surface in supine position without pillows	5. For ease of external chest compression and cardiac massage
6. Open airway and ensure airway is clear using head tilt chin lift manoeuvre to a neutral position (infant) or sniffing position (child above one year or adult) or jaw thrust Manoeuvre especially when dealing with a traumatic injury with suspected spinal cord injury (Fig 2.17)	6. To establish and maintain patent airway thus facilitating ventilation
	
Figure 2.17 Using Chin Lift-Head Tilt to a Sniffing Position to Open Airway	
7. If the airway is blocked with mucus or frothy thick saliva, or blood, suction to the point you can see	7. To establish need for suctioning
8. Assess breathing (Look for chest rise, Listen to any breath sounds and Feel for any air movement)	8. To determine need for initiation of effective oxygenation

Steps	Rationale
<p>9. If the patient is not breathing, immediately give rescue breaths with a BVM (5 rescue breaths in a child/ infant and 2 rescue breaths in an adult). Check for chest expansion as you give the rescue breaths</p>	<p>9. To improve oxygen reserves in the lungs</p>
<p>10. Palpate for carotid pulse in adult and children or brachial for infants for up to 10 seconds (Fig 2.18, 2.19)</p>	<p>10. To confirm restoration of cardiac activity</p>
 <p>Figure 2.18 Observe for Breathlessness (Adapted from Craven &amp; Hirnle,2000)</p>	 <p>Figure 2.19 Child Position for Chest Compression (Adapted from Craven &amp; Hirnle,2000)</p>
<p>11. If pulse is absent or less than 60b/min initiate chest compression:</p>	<p>11. To stimulate the heart thus initiate circulation</p>
<p><b>For Adults (Fig 2.18)</b></p> <p>12. Place the heel of one hand over lower third of sternum, the other hand on top, straighten elbows with shoulders perpendicular to the patient's chest one finger breath above the xiphisternum, Compress at 1/3 anterior posterior diameter(4cm)</p> <p>Give 30 compressions with 2 breaths for 1 minute then re-assess</p>	<p>12. To stimulate the heart and to take proper position for the procedure and avoid air in the abdomen</p> <p>To stimulate the heart thus initiate circulation and to determine the progress of the resuscitation</p>
<p><b>For Children (Fig 2.19)</b></p> <ol style="list-style-type: none"> <li>Place heel of one hand on lower third of the sternum above xiphoid process /one finger breath above the xiphisternum</li> <li>Maintain head tilt with the other hand on top, for an infant place index and middle finger of one hand on lower third of sternum above the xiphoid process</li> <li>Give 15 compressions for every 2 breaths for 1 minute then re-assess</li> </ol>	<ol style="list-style-type: none"> <li>-2. To stimulate the heart and to take proper position for the procedure and avoid air in abdomen</li> <li>3. To stimulate the heart thus initiate circulation</li> </ol>

Steps	Rationale
4. (one finger breadth above the xiphisternum)	
5. Reassess the following:- Breathing, Pulse, Oxygen Saturation (If possible), Distention of Abdomen	4. To determine the progress of resuscitation

## D. Evaluation

Evaluate	Rationale
1. Carotid pulse by observing every 2 minutes	1. To determine adequacy of perfusion to body tissues
2. For spontaneous return of respirations and/or heart rate	2. To assess the effectiveness of CPR
3. Neurological signs e.g. pupillary reaction to light, posturing and muscle tone	3. To assess adequacy of perfusion

## E. Documentation

### Record:

- Date
- Start Time
- Duration taken
- Action taken
- Medications given
- The patient's outcome
- Team involved in resuscitation
- Near miss/Sentinel Event
- NB: Always refer to resuscitation event report form in your facility when documenting

■ ■ ■

## 2.5-2: Performing The Heimlich Manoeuvre

### Definition:

A technique for removing foreign matter/body from the airway of a chocking victim.

### Purpose:

To dislodge the foreign matter/body from the airway in order to achieve a patent airway for gaseous exchange

### Indications:

- Upper Airway obstruction with foreign matter/body

## A. Assessment

Assess	Rationale
1. For air exchange, wheeze, stridor and clutching	1. To determine if obstruction is complete or partial. Partial airway obstruction will have some airway exchange
2. Ability of the client to cough	2. To allow for clinical judgment and the need for Heimlich Manoeuvre
3. For presence of stridor and drooling in a child	3. To determine the need for the Heimlich Manoeuvre

## B. Planning



### Self

- Review knowledge of anatomy and physiology of respiratory system and skills of the procedure



### Patient

- Explain the procedure to the client/patient and obtain informed consent if appropriate

## C. Implementation

Steps	Rationale
1. Encourage the client to forcefully cough (If there is good air exchange and the client is able to cough)	1. To enhance expulsion of foreign body
2. Perform five back blows between shoulder blades (Fig 2.20) alternate	2. To increase intrathoracic pressure forcing the foreign body out

Steps	Rationale
<p>with Heimlich Manoeuvre/abdominal thrusts</p>  <p>Figure 2.20 Back Blows between Shoulders</p>	
<p>3. Stand behind the client</p> <ul style="list-style-type: none"> <li>Wrap your hands around the client's waist (see Fig 2.21 below)</li> </ul>  <p>Figure 2.21 Wrap Both Arms around the Client's Waist</p> <ul style="list-style-type: none"> <li>Make a fist with one hand placing the thumb side of the fist against the client's abdomen. The fist should be placed midline below the xiphoid process and lower margins of the rib cage and above the navel. (Correct hand placement is demonstrated in Fig 2.22)</li> </ul>	<p>3. To provide an effective sub-diaphragmatic thrust.</p>  <p>Figure 2.22 Make a Fist. Place a Fist Below the Xiphoid Process, above the Client's Navel</p> <ul style="list-style-type: none"> <li>For effectiveness of the manoeuvre and for preventing internal organ damage</li> </ul>
<p>4. Perform a quick upward thrust to the client's abdomen; each thrust should be separate and distinct</p>	<p>4. To facilitate expulsion of the foreign body</p>
<p>5. Repeat this process until the client either expels the foreign body or loses consciousness</p>	<p>5. To remove persistent foreign body</p>

Steps	Rationale
<b>NB:</b> For Conscious Adult Client- may Sit or Stand for Heimlich Manoeuvre	
6. If procedure is not successful and the patient develops respiratory distress or complete blockage, activate emergency response for assistance	6. For teamwork as you continue with the resuscitation
7. If the patient becomes unconscious proceed to BLS ( <b>Refer to procedure 2.5-1, Performing Basic Life Support</b> )	7. For prevention of respiratory arrest
<b>Steps in infant airway obstruction;</b>	
1. Straddle infant over the forearm in the prone position with the head lower than the trunk. Support the infant's head, positioning a hand around the jaws and the chest	1. For ease of procedure (This is the recommended position for small children; the stride position may be used for bigger children. Proper positioning is essential for gravity to help push the foreign body out through the mouth)
2. Deliver five back blows between the infant's shoulder blades	2. To force the foreign body out
3. Keeping the infant's head down, place the free hand on the infant's back and turn the infant over, supporting the back of the child with your hand and thigh	3. To dislodge the obstruction
4. With your free hand, deliver five chest thrusts in the same manner as infant external cardiac compressions	4. To aid in dislodging the obstruction
5. Assess for a foreign body in the mouth of the unconscious and utilize the finger sweep only if a foreign body is visualized	5. To prevent pushing foreign object further into the air way increasing obstruction
6. Open airway and assess for respiration. If respirations are absent, attempt rescue breaths. Assess for the rise and fall of the chest; if not seen, reposition and attempt rescue breaths again	6. To allow for some oxygenation to the client
7. Repeat the entire sequence again: five back blows, five chest thrust, assessment for foreign body in oral cavity, and rescue breathing as long as necessary	7. To maintain the life-saving efforts
<b>Small child –airway obstruction (conscious, sitting or standing);</b>	
1. Assess air exchange and encourage coughing and breathing. Provide	1. To enhance expulsion of foreign body and reassure the child

Steps	Rationale
reassurance to the child that you are there to help	
<p>2. Ask the child if he or she is chocking. If the response is affirmative, follow the steps outlined below. In addition, if the child has poor air exchange (and infection has been ruled out), initiate the following steps:</p> <ul style="list-style-type: none"> <li>• Stand behind the child with your arms wrapped around his waist and administer six to ten sub-diaphragmatic abdominal thrusts</li> <li>• Continue until the foreign body is expelled or the child becomes unconscious</li> </ul>	<p>2. To confirm obstruction and in readiness for the manoeuvre</p> <ul style="list-style-type: none"> <li>• For proper positioning that is essential for success of the manoeuvre and prevention of other organ damage</li> <li>• To maintain life-saving efforts</li> </ul>
<b>Small child- airway obstruction (unconscious);</b>	
1. Position the child supine and kneel at the child's feet and gently deliver five sub-diaphragmatic abdominal thrusts. The sub-diaphragmatic abdominal thrusts are delivered in the same manner as for an adult but more gently	1. For proper positioning that is essential for success of the manoeuvre and prevention of other organ damage
2. Open airway by lifting the lower jaw and tongue forward. Perform a finger sweep- only if a foreign body is visualized	2. To allow visualization of the oral cavity
3. If breathing is absent, begin rescue breathing. If the chest does not rise, reposition the child and attempt rescue breathing again	3. To restore respiratory activity
4. Repeat this sequence as long as necessary	4. For the success of the manoeuvre
5. Perform hand hygiene	5. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
<p>1. The client's ability to demonstrate improved clinical status as evident by airway clearance or establishment of a patent airway If the client demonstrates improved gas exchange as evidenced by absence of signs and symptoms of partial or complete airway obstruction (e.g. cough, wheezing, stridor, loss of consciousness, cyanosis)</p>	<p>1. For normal gaseous exchange and respiratory process to take place</p>

Evaluate	Rationale
2. If the client experienced minimal discomfort during the Heimlich Manoeuvre or other method of airway clearance	2. For the comfort of the client leading to the success of the manoeuvre
3. If the client developed complications related to airway obstruction	3. To institute appropriate intervention

## E. Documentation

### Record:

- If the airway obstruction occurs in the health care setting, document the following in the patient's notes and in the emergency procedure notes if needed;
    - Time and date of onset of symptoms
    - Presentation including type of symptoms
    - Type (complete or partial) and cause of obstruction, if known
    - Interventions utilized to alleviate obstruction
    - Results of interventions
    - Other emergency support needed (e.g. emergency tracheotomy)
  - If the airway obstruction occurs in alternate setting (e.g., restaurant, home), provide the following information to the responding health care providers for documentation:
    - Presentation including onset and type of symptoms
    - Type (complete or partial) and cause of obstruction, if known
    - Interventions utilized to alleviate obstruction
    - Length of time with airway obstruction
    - Results of interventions
- ■ ■

## 2.5-3: Bag Valve Mask Ventilation

### Definition:

This is a process of assisted breathing by use of Bag Valve Mask via either artificial airways (Endotracheal or tracheostomy, laryngeal airway) or face mask.

### Purpose:

To assist positive airway ventilation to a client/patient with compromised respiratory effort.

### Indications:

- Patients who are either not breathing at all or those who have gasps (irregular breaths)
- Routinely in intubated patients who need suctioning

## A. Assessment

Assess	Rationale
1. The need to use manual ventilation	1. To establish the suitability of manual ventilation
2. For signs and symptoms that may indicate the need to provide manual ventilation	2. To guide on appropriate intervention
3. The client's present and past medical history	3. To determine intervention needed
4. The client's understanding and ability to cooperate with the procedure	4. To allay anxiety and enhance cooperation

## B. Planning



### Self

- Knowledge and skills on the use of Bag Mask Ventilation Device and technique of using artificial airways (existing tracheostomy tube, endotracheal tube or oropharyngeal airways)
- Assemble required equipment



### Patient

Explain procedure to patient and obtain informed consent where applicable



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A trolley with:

- Clean gloves
- Face shield, goggles, or other eye protection
- BVM with a reservoir bag
- Appropriate-size mask or endotracheal/tracheostomy tube adapter
- Oxygen source (if indicated)
- Oxygen connecting tubing (if indicated)
- Suctioning equipment
- Oropharyngeal airway (for unconscious client in cardiopulmonary arrest)

## C. Implementation

Steps	Rationale
1. Take the client's observations including vital signs	1. To provide a baseline for comparison after procedure, to assess tolerance and improvement in clinical status
2. Prepare, connect, and check functioning of necessary equipment; <ul style="list-style-type: none"> <li>• Oxygen supply/tubing</li> <li>• Suctioning equipment/supplies</li> <li>• Correct size adapter or mask</li> </ul>	2. To provide a safe organized approach to the procedure
3. Raise or lower the bed, table, to a suitable working height	3. To maintain good body mechanics for the nurse throughout the procedure
4. Perform hand hygiene, don gloves and face shield	4. For infection prevention and control
<b>5. For the client with an existing endotracheal or tracheostomy tube requiring suctioning or transfer:</b> <ul style="list-style-type: none"> <li>• Remove the current mechanical ventilation system.</li> <li>• For transfer, attach BVM to endotracheal or tracheostomy tube and compress bag to administer one breathe every 3 to 5 seconds. Compress the reservoir 20 times per minute to mimic a normal breathing pattern.</li> <li>• Adjust the flow meter to ensure adequate oxygenation.</li>   <li>• The BVM may be compressed with two hands if the existing airway tube is stable and the client is not fighting the procedure; otherwise the nurse may have to use the dominant hand to compress the BVM while</li> </ul>	5. <ul style="list-style-type: none"> <li>• To ensure readiness for BVM connection (Opens airway for BVM use).</li> <li>• To provide hyperinflation and increases oxygen levels,</li>   <li>• For adequate air flow necessary to fully inflate the lungs, thus preventing atelectasis</li> <li>• To provide adequate oxygenation to the lungs via existing airways</li> </ul>

Steps	Rationale
<p>stabilizing the airway tube during ventilation.</p> <ul style="list-style-type: none"> <li>The chest movement is assessed to verify air flow.</li> </ul> <p><b>NB:</b> If airways suction is required during this procedure follow suction procedure 2.2-2: Endotracheal and Tracheal Tube Suctioning</p>	<ul style="list-style-type: none"> <li>To determine adequacy of inspiratory effort and airflow into the lungs</li> </ul>
<p><b>6. For the client who is unconscious and not intubated;</b></p> <ul style="list-style-type: none"> <li>Assess appropriateness of use of BVM with mask or immediate intervention with intubations. The steps for the procedure include:</li> <li>Clear oral cavity of vomitus, mucus, or other debris</li> <li>Insert an oropharyngeal airway</li>   <li>Position the client using either the head-tilt/chin-lift method, or in the case of suspected or potential cervical spine injury, use the modified jaw-thrust Manoeuvre</li> <li>Position Ambu-bag over the client's nose and mouth using the non-dominant hand. The thumb and index finger are used to stabilize the seal between the mask and the client's face, while the remaining fingers maintain head position</li> <li>The dominant hand is used to deliver breaths to the client. Breath rate is administered according to cardiopulmonary resuscitation protocol</li> <li>The chest movement is assessed to verify adequate inspiration flow</li> <li>Assess for the need to insert a nasogastric tube</li>   <li>Suction as necessary</li> </ul> <p><b>NB:</b> An on-going assessment to be carried out to determine the progress as evidenced by:</p> <ul style="list-style-type: none"> <li>Endotracheal or tracheostomy secretions minimal and artificial airway patent</li> </ul>	<p>6.</p> <ul style="list-style-type: none"> <li>To establish suitability of use of bag valve mask with either face mask</li> <li>To help prevent aspiration into lungs.</li>   <li>To assist in maintaining airway patency and preventing the tongue from falling back into the oropharynx</li> <li>To align the airway for air flow into the lungs and maintain the head in a neutral position to avoid further cervical damage</li>   <li>To ensure adequate ventilation</li>     <li>To provide adequate oxygenation per cardiopulmonary resuscitation protocol</li>   <li>To determine patency of airway and adequacy of manual ventilation support</li> <li>To prevent aspiration during the ventilation</li> <li>To maintain a patent airway and prepare the oropharyngeal cavity for intubation if necessary</li> <li>To determine for the appropriate intervention</li> </ul>

Steps	Rationale
<ul style="list-style-type: none"> <li>• Client no longer coughing or bucking ventilation</li> <li>• Stable vital signs and haemodynamic status</li> <li>• Client no longer cyanotic</li> <li>• Return of spontaneous respirations</li> <li>• Decreased intracranial pressure</li> <li>• Use of alternative ventilation like mechanical ventilation if long ventilation is required</li> </ul>	
7. Remove the BVM and re-attach client to mechanical ventilatory system if client/patient has either endotracheal or tracheostomy tube	7. To maintain ventilation and adequate set oxygen support as necessary
8. It is preferable to have two health care providers performing the skill as BVM may be difficult to compress with one hand	8. To promote the client's comfort and safety
9. Suctioning may be required during this procedure so follow endotracheal or tracheostomy tube suctioning procedure	9. To assist in prevention of aspiration during the procedure and also clear the airways
10. Discontinue oxygen flow to the BVM	10. To prevent oxygen wastage
11. Reposition the client and return the bed and side rails to the original position	11. For the client/patient's comfort and safety
12. Dispose waste and clear other equipment as per institutional protocol, then perform hand hygiene	12. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The client has spontaneous respirations or is maintained on mechanical ventilation with stable vital signs	1. To determine the need/appropriateness for discontinuation of the manual ventilation
2. Laboratory tests and the client monitoring equipment indicate appropriate CO <sub>2</sub> and O <sub>2</sub> levels. <ul style="list-style-type: none"> <li>• The intracranial pressure is within normal limits</li> <li>• The client is able to maintain effective ventilation during transportation.</li> <li>• The client has improved airway clearance as evident by removal of secretions, or mucus plugs, from the endotracheal/tracheostomy tube.</li> </ul>	2. To demonstrate success of the procedure

Evaluate	Rationale
<ul style="list-style-type: none"><li>The client experienced minimal anxiety related to the procedure</li></ul>	

## E. Documentation

### Record:

- Date and time of the procedure
- The patient's condition before and after the procedure
- Vital signs and other physiologic or haemodynamic parameters
- Duration and the patient's tolerance to the procedure
- The patient's respiratory rate and volume of supplemental oxygen utilized
- A description of the secretions, including the amount and quality

■ ■ ■

## 2.5-4: Defibrillation and Cardioversion

### Definition:

Defibrillation is the process of terminating ventricular fibrillation/ pulse-less ventricular tachycardia by administering controlled un-synchronized electric shock to restore normal heart rhythm during CPR.

Cardioversion is synchronised administration of shock during the R waves of QRS complex of the cardiac cycle to terminate atrial and ventricular tachycardias and recover sinus rhythm.

### Purpose:

To deliver electrical current to the heart muscles to stimulate normal cardiac activities and to terminate fibrillation or pulse-less ventricular tachycardia.

### Indications:

- Treatment of ventricular fibrillation
- Pulse-less ventricular tachycardia
- Atrial flutter
- Atrial fibrillation
- Supraventricular tachycardia
- Ventricular tachycardia

## A. Assessment

Assess	Rationale
1. The client/patient's cardiac and respiratory pattern and rhythm	1. To determine the need for defibrillation
2. Environment for appropriateness of the procedure	2. For safety of the patient and the nurse
3. Equipment and assistance needed	3. For functionality; and efficiency of procedure

**NB:** The paddles or hands-free multifunction pads deliver a non-synchronized direct current charge to the myocardium. Patients with a temporary pacemaker will need to have their pacer wire disconnected from the pace maker generator prior to defibrillation. Familiarize yourself with defibrillator in your area.

## B. Planning



### Self

- Review knowledge, skills and current practice of CPR and defibrillation



## Patient

Explain the procedure to the client/ the caregiver



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A trolley with:

- Clean gloves
- Sterile internal paddles for internal defibrillation
- Zoll multifunction pads
- Adult Lawson
- Paediatrics Lawson
- Saf-D-Pads (for hard paddle adult defibrillation)
- Conductive gel for hard paddle use in infants and children
- 4x4 gauze
- Electricity source (socket or extension cable)

## C. Implementation

Steps	Rationale
1. Activate the emergency protocol and organize the resuscitation team	1. For efficiency and effectiveness of the procedure
2. Assist the patient to a supine position	2. For ease of the procedure
3. Place the chest leads appropriately and connect to the cardiac monitor: one electrode placed to the right of the upper sternum below the clavicle and place another one to the left lower chest in the mid-axillary line. (one marked positive and another marked negative)	3. To confirm cardiac rhythm and monitor the progress of the procedure
4. Check for wet surroundings or clothing and wipe any liquid from the patient's chest. No one should touch the patient or anything in contact with the patient e.g. The bed or giving sets, when attempting to deliver the shock. The person holding the paddle to deliver the shock must not touch any	4. To prevent accidental electrocution during the defibrillation

Steps	Rationale
part of the electrode surface and the electrode gel should not spread on the chest (if possible use gel impregnated pads)	
5. The paddle holder shouts “stand clear” and looks around to check that all staff have done so, before shocking. The person taking care of the airway must also ensure no oxygen is passing across the zone of defibrillation	5. To offer warning prior to the release of the shocks to prevent accidental electrocution
6. Place the paddles on the chest, one on the right electrode and the other one on the left electrode, and tell the team whether it is for monitoring or for charging. If it is for shock delivery, the assistant can adjust the energy setting and the one holding the paddle delivers the shock. If there is no assistant then the one holding the paddles returns the paddles to the machine and adjusts the energy appropriately	6. To deliver the shocks appropriately to the cardiac muscle to evoke voluntary contractions
7. Use the same energy during the second shock if the patient does not improve with the first shock. Repeat the procedure as guided by the available medical specialist	7. To maximize safety during the defibrillation procedure

## D. Evaluation

Evaluate	Rationale
1. For achievement of normal rhythm on the monitor	1. To establish if the procedure was successful
2. The amount and sequence of energy joules used to shock the myocardium to resume activities. (maximum energy recommended 360J; starting with 200J second 200J then 3rd attempt with 360J)	2. To ensure that very high current is not delivered and the recommended current sequence is followed

## E. Documentation

### Record:

- Progress of the defibrillation or cardiversion procedure
- Any difficulty experienced during the CPR with the defibrillation
- Type of fibrillation shocked and the type of rhythm achieved after the procedure

### NB:

For Electrical Cardioversion: -

- The shock is delivered in synchrony with the R-wave (synchronized Cardioversion). This is achieved through dial of the synchronize button on the defibrillating machine
- The choice of energy is initially 1j/kg for the first shock which is doubled to 2j/kg for the second shock
- For the safety features and the patient's preparation, refer to the Defibrillation procedure  
**(Refer to procedure 2.5-4, Defibrillation and Cardioversion)**

■ ■ ■

## 2.5-5: Intraosseous Cannulation

### Definition:

This is the insertion of a needle in the proximal or distal ends of long bones.

### Purpose:

To obtain a rapidly vascular access in clinically unstable children.

### Indications:

- Intraosseous insertion (IO) is indicated in children, infants or new-born in any clinical situation where vascular access is urgently required but not immediately available via a peripheral vein e.g. shock, cardio respiratory arrest, status epilepticus and burns

### Contraindications:

- Osteogenesis imperfecta
- Haemophilia or any bleeding disorder
- Active infection at the insertion site
- A bone immediately distal to a fractured site

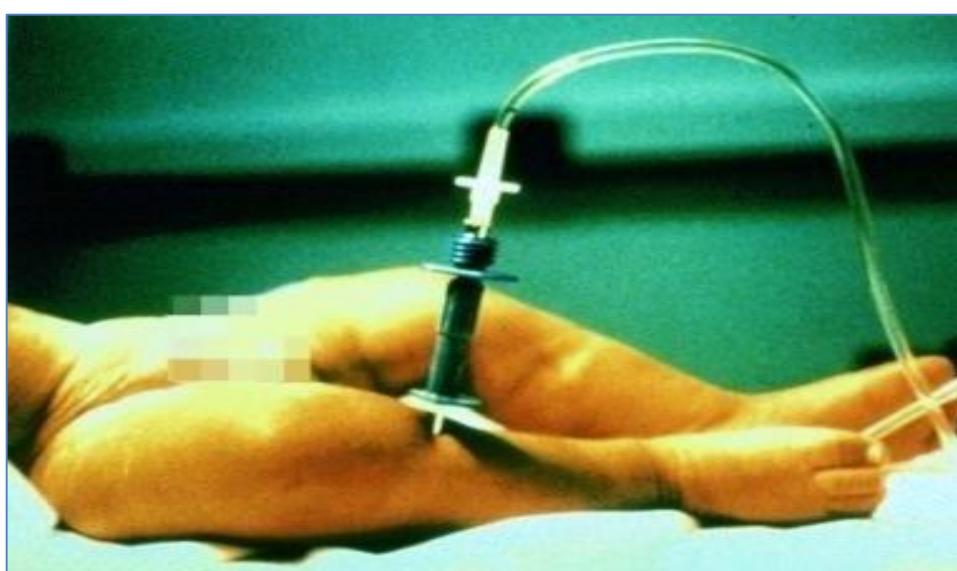


Figure 2.23: Proper position of Intraosseous Needle (Adapted from Epals, 2016)

## A. Assessment

Assess	Rationale
1. Assess the patient's condition	1. To enable the procedure to be performed in a safe manner and initiate appropriate interventions
2. Check for contraindications	2. To avoid risks of treatment complications

## B. Planning

### Self

- Review knowledge and skills of the procedure

### Patient

- Explain the procedure to the client/ the caregiver

### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space

### Requirements

A trolley with:

- Intraosseous needle/ Large bore cannula
- Alcohol-based skin preparation solution
- Three-way tap with an IV extension tubing
- Syringe (for aspirating bone marrow)
- Emergency medications and fluids
- Local anaesthetic agent (if needed)
- Clean and Sterile Gloves

**NB:** I/O insertion is a sterile procedure hence ensure high levels of sterility during the procedure

## C. Implementation

Steps	Rationale
1. Explain the procedure to the caregiver/ child (age appropriate)	1. To provide information, promote understanding of the procedure and ensure cooperation
2. Obtain informed consent from parents	2. For medical legal purposes
3. Perform hand hygiene, dry and wear appropriate Personal Protective Equipment	3. For infection prevention and control
4. Identify the site to be accessed (proximal tibia, distal tibia, Distal femur, Sternum, Humeral head)	4. For appropriate anatomical placement
<b>I/O Insertion Land mark-new-born, infants and small children:</b>	

Steps	Rationale
<ul style="list-style-type: none"> <li>Insertion site is located approximately 1cm (1 fingerbreadth) below and 1cm (1 fingerbreadth) medial to the tibial tuberosity on the anteromedial surface of the tibia.</li> </ul> <p><b>IO Insertion Landmark- older children and adolescents:</b></p> <ul style="list-style-type: none"> <li>2-3 cm below and medial to tibial tuberosity on anteromedial surface of the tibia</li> </ul>	
<p>5. Clean the skin around selected site with an alcohol-based solution from the centre outward</p>	<p>5. For disinfection of the access site</p>
<p>6. Infiltrate the skin through to the periosteum with local anaesthetic agent if appropriate</p>	<p>6. To minimize pain during insertion</p>
<p>7. Immobilize the limb with the non-dominant hand ensuring no hands are placed under the limb</p>	<p>7. To minimize movements</p>
<p>8. Using the dominant hand, grasp the needle and position it at 90° angle on the skin at the prepared site</p> <ul style="list-style-type: none"> <li>Using a firm rotation action, the needle should be advanced (approximately 1-2 cm) until loss of resistance is felt; 'this' give' indicates penetration of the cortex.</li> <li>Unscrew and withdraw the trochar</li> <li>Attach the 3-way tap and extension tubing and withdraw the bone marrow for samples.</li> <li>Flush the line with 2mls of 0.9% saline.</li> <li>Secure the line with adhesive tape</li> <li>Arrange for transportation of the specimen to the laboratory</li> <li>Give fluids and medications as indicated</li> <li>Perform hand hygiene</li> </ul>	<p>8. To prepare for cannula insertion</p> <ul style="list-style-type: none"> <li>To confirm placement of the cannula and collect samples for investigation</li> </ul> <p>s</p> <ul style="list-style-type: none"> <li>To confirm patency</li> <li>To avoid dislodging the line for analysis</li> <li>For analysis and reporting</li> <li>To correct shock</li> <li>For infection prevention and control</li> </ul>

## D. Evaluation

Evaluate	Rationale
<p>1. Patency of the line</p>	<p>1. To facilitate rapid delivery of medication and minimize pain</p>
<p>2. Improvement of patient's condition</p>	<p>2. To confirm appropriateness of intervention measures</p>

Evaluate	Rationale
3. Any discomfort especially pain	3. To ensure correct placement and prevent bone damage
4. Any complications e.g. extravasation, fractures, compartment syndrome and sepsis	4. To initiate appropriate intervention measures

## E. Documentation

### Record:

- Date and time of the procedure
  - The reason for intraosseous insertion
  - Any specimen taken to laboratory
  - Fluids/ medications given and the amount
  - Any complications and intervention
  - Condition of the patient
- ■ ■

## 2.6: Ophthalmology Procedures

### 2.6-1: Measuring Visual Acuity

**Definition:**

The process of determining angular measurement, relating testing distance to the minimal object size observed at that distance.

Sharpness of vision measured by this is the ability to discern letters or numbers at a given distance.

**Purpose:**

- To determine the integrity of the visual system

**Indications:**

- Routine examination for clients
- Routine physical check-up for patients complaining of eye problems
- Patients with a primary eye problem

## A. Assessment

Assess	Rationale
1. Ocular history	1. For baseline data
2. Ocular mobility and alignment	2. To determine visual acuity
3. For crusting and sticking	3. To establish extent of the damage
4. For ptosis (drooping of eyelids)	4. To assess extent of light obstruction
5. Ability of the patient to read	5. To ensure the right chart is utilized

## B. Planning



**Self**

- Review anatomy and physiology of the eye
- Review knowledge and skills on the procedure for measuring visual acuity



**Patient**

- Explain the procedure to the patient and obtain informed consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

Tray with:

- Sterile eye pack with; kidney dish, gallipot, clean gauze and cotton wool swabs
- Snellen's chart
- Torch
- Pinhole
- Receiver for dirty swabs
- Pointer
- Appropriate solution
- Clean and sterile gloves
- Tape measure

## C. Implementation

Steps	Rationale
1. Explain the procedure to the patient	1. To allay anxiety and enhance cooperation
2. Move tray to the examination room	2. For access of equipment
3. Measure 6 meters distance from the patient to chart	3. For accuracy in determining acuity
4. Ask the patient to close one eye then ask the patient to read the chart starting from the top to the bottom	4. To measure each eye separately and determine capacity
5. If the patient cannot see the top most in the chart move the chart 1m , 2m until 3 meters towards the patient	5. To establish the level of acuity independently for each eye that will inform appropriate interventions
6. If they still cannot see at 3 meters ask the patient to count at 3 meters, 2meters and 1 meter	6 -8.To determine the correct level of the patient's visual acuity
7. If they cannot count at 1m then wave your hand at 0.9m	
8. If the patient cannot see hand movement shine a torch next to the patients eyes	
9. Record the level at which the patient is able to read or notice the torch light	9. To note the acuity level
10. Repeat the steps 6 to 9 for the other eye	10. For appropriate visual correction for each eye

Steps	Rationale
<b>NB:</b> Note any discrepancies in visual acuity between the two eyes	
11. Position the patient appropriately, clear equipment, dispose waste and perform hand hygiene	11. For clean and safe environment, the patient's comfort, and for infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Patient's experience during assessment	1. To determine if pre-assessment preparation was adequate

## E. Documentation

### Record:

- Date and time
- Visual acuity for each eye
- Difficulties encountered in use of the pinhole
- Date of the procedure

■ ■ ■

## 2.6-2: Eye Swabbing

### Definition:

This is the process of cleaning the eyes with a sterile swab.

### Purpose:

- To clean the eye
- To obtain a specimen

### Indications:

- Eye examination
- Medication installation
- Before and after surgery
- Eye infections
- Diagnostic purposes

## A. Assessment

Assess	Rationale
1. The condition of the eye	1. For planning purposes
2. Ability of the patient to cooperate	2. To determine need for assistance
3. The patient's visual acuity	3. For baseline data

## B. Planning



### Self

- Review knowledge of anatomy and physiology of the eye
- Review knowledge and skills on the procedure of eye swabbing
- Assemble equipment and ensure good working space and ample lighting
- Establish need for assistance



### Patient

- Explain the procedure to the patient and obtain informed consent



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A clean trolley with:

### Top shelf;

Sterile tray containing:

- Sterile cotton wool and gauze swabs
- Kidney dish
- Gallipot

### Bottom shelf;

Clean tray containing:

- Normal saline solution
- Warm bowl of water
- Medication e.g. eye drops
- Receiver for dirty swabs
- Sterile eye pad
- Adhesive tape
- Sterile and clean gloves

## C. Implementation

Steps	Rationale
1. Explain the procedure to the patient	1. To allay anxiety and gain cooperation
2. Wheel trolley to the bed side	2. For accessibility to the instruments
3. Ask the patient to lie in dorsal position and ensure enough lighting	3. For comfort and visibility during the procedure
4. Perform hand hygiene and don gloves	4. For infection prevention and control
5. Ask the assistant to open the tray	5. To expose the sterile items
6. Ask the assistant to pour the solution into the gallipot	6. For infection prevention and control and ease of the procedure
7. Arrange the swabs in the kidney dish. Dip each swab in the solution and swab the unaffected eye from the inner canthus to the outer canthus. Using each swab once, swab the upper eye lid, lower eyelid, the midline followed by the eye brow	7. To prevent contamination and cross infections
8. Repeat the procedure in the other eye  <b>NB:</b> If both eyes are affected start with the right eye	8. To ensure that both eyes are clean
9. Clear the equipment, discard waste as per waste disposal procedures and leave the patient comfortable	9. To ensure a clean environment and enhance the patient's comfort
10. Perform hand hygiene	10. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The condition of the eye after swabbing	1. To determine the success of the procedure
2. The patient's tolerance to the procedure	2. To determine the patient's comfort

## E. Documentation

**Record:**

- When the procedure was done
- Outcome of the procedure
- The medication instilled
- The patient's condition
- Follow up care

■ ■ ■

## 2.6-3: Eye Irrigation

### Definition:

The process of cleaning the eye with copious amounts of normal saline.

### Purpose:

- To flush out chemicals, secretions and foreign bodies from the eye

### Indications:

- In chemical burns
- Severe eye discharge e.g. corneal ulcers, ophthalmia neonatorum
- Foreign bodies in the fornices
- Exposure of the eye to body fluid

### Contraindications:

- Ruptured globe

## A. Assessment

Assess	Rationale
1. The client's clinical status by taking history and performing physical examination	1. To provide baseline data for planning
2. The type of offending chemical	2. If alkaline cold water is used to avoid further seepage into ocular tissues
3. The eye and the extent of the burn	3. To identify damaged ocular tissues for planning of care
4. The patient's understanding of the procedure	4. To allay anxiety and gain the patient's cooperation

## B. Planning



### Self

- Review knowledge on anatomy and physiology of the eye
- Review the procedure of eye irrigation
- Assemble the required equipment and supplies
- Perform hand hygiene



## Patient

- Explain the procedure to the patient and obtain informed consent
- Assist the patient to a chair or ask them to lie on the couch



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A clean trolley with:

- Mackintosh and bath towel
- Adhesive tape
- A water jug with spout or giving set
- Eye medications
- Lid retractors
- Receiver for used swabs
- Litmus (PH) paper
- A bowl of warm water
- Torch/ophthalmoscope
- Pair of scissors
- Appropriate topical ocular anaesthetic agent
- Slit lamp
- Cotton tipped applicators
- Sterile and clean gloves
- Normal saline

## C. Implementation

Steps	Rationale
1. Explain the procedure to the patient	1. To gain cooperation and allay anxiety
2. Wheel the trolley to the bedside	2. For ease accessibility of items
3. Position the patient with the head tilted towards the affected eye. (If it is only one eye that is affected)	3. To prevent the fluid from draining to the unaffected eye
4. Perform hand hygiene and don gloves	4. For infection prevention and control
5. Test the PH of the tears with a litmus paper and continue checking between irrigation (intermittently)	5. Improvement in PH indicates chemical wash out is working
6. Gently insert the lid retractors by separating the upper and lower eye lids with your non dominant hand	6. To anesthetize sensitive cornea and reduce discomfort

Steps	Rationale
7. Drape with a Mackintosh and towel below the eye but between the ears. Ask the patient to hold the kidney dish below the eyes throughout the procedure	7. To prevent spillage and soiling of the environment
8. Hold the irrigating jug above the eye directing the stream from the nasal edge to avoid hitting the cornea. (If both eyes have the chemical irrigate them simultaneously)	8. For accuracy of the procedure
9. In between the irrigation ask the patient to look up, down and side ways to roll the eyes	9. To be able to clean out as many foreign objects/chemicals from the fornices and ocular tissues as possible
10. Continue irrigating until the pH is between 7.2-7.8 or foreign bodies are all out	10. To allow for maximum removal of chemical/foreign bodies
11. Remove the lid retractors and dry the eye lid with sterile cotton wool	11. To leave the patient comfortable
12. Instill the prescribed medication	12. For continuity of care
13. Clear waste, decontaminate the used equipment and perform hand hygiene	13. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The PH of the tears	1. To determine if all chemicals are cleared
2. For any loss of vision	2. To indicate the extent of damage
3. The state of the cornea	3. To rule out corneal ulcers
4. Client's level of comfort	4. To determine whether there were other injuries or residual chemical

## E. Documentation

### Record:

- The eye affected (left, right/both)
- Visual acuity
- Time irrigation was done
- Type of solution used
- PH of the tears
- State of the cornea
- Vital signs
- The patient's tolerance to the procedure
- Any medications instilled

■ ■ ■

## 2.6-4: Application of Eye Compress

### Definition:

Application of either cold or warm compression to an affected eye.

### Purpose:

- To relieve pain
- For soothing and therapeutic effects
- Control muscle spasms
- Improve circulation

### Indications:

- Injury to the eye
- Inflammatory conditions of the eyes
- Ocular allergies

### Contraindications:

- Warm Compress
  - Active bleeding
  - Acute inflammatory conditions of the eyes
- Cold Compress
  - Hypersensitivity to cold
  - Cryoglobulinaemia

## A. Assessment

Assess	Rationale
1. The condition of the eye	1. To help choose the type of compression to apply
2. The client's understanding of the procedure	2. To determine educative needs of the patient

## B. Planning



### Self

- Review knowledge and skills of the procedure
- Perform hand hygiene



### Patient

- Explain the procedure to the patient and obtain informed consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

A clean trolley with:

- Sterile Eye pack with kidney dish, gallipot, sterile gauze and cotton swabs
- Clean gloves
- Prescribed solution e.g. warm normal saline
- Optional: Ophthalmic ointment and sterile eye pad
- Receiver for dirty swabs
- Small towels
- Adhesive tape

Additional equipment for cold compress

- Sterile gloves
- Ice chips/cubes

## C. Implementation

Steps	Rationale
1. Check the prescribed solution, frequency and duration of treatment	1. To ensure right prescription for the right patient
2. Explain the procedure to the client	2. To gain co-operation
3. Screen the patient	3. To maintain privacy
4. Perform hand hygiene	4. For infection prevention and control
5. If the patient has an eye patch already put on gloves and remove it	5. To prepare the patient for the replacement
6. Remove the gloves and clean your hands again	6. For infection prevention and control
7. Position the patient in supine, support the head with a pillow and turn the head on the unaffected side	7. To help hold the compress in position
8. Drape a towel around the patient's shoulders	8. To avoid soiling the patient's clothes in-case of any spills
9. Moisten the sterile gauze with the normal saline	9. To help conduct the cold from the ice pack
10. Instruct the client to close his/her eyes and place the moist gauze on the affected eye and place the ice pack on the gauze pad and tape it in place.(if	10. To start the cold compress

Steps	Rationale
the patient complains of pain remove the ice pack)	
11. Keep the pack for about 15-20 minutes or as per the order then remove and discard	11. To observe for any adverse reaction
12. For a warm compress take two gauze pads from a basin of warm solution, squeeze out excess solution and instruct the client to close the affected eye then apply the warm gauze pads one on top of the other	12. To start the warm compress
13. Change the compress as necessary for the prescribed period of time	13. To allow time for therapeutic effect
14. Apply ophthalmic ointment or an eye patch as prescribed	14. To continue with management
15. Clear waste and perform hand hygiene	15. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The affected eye for adverse reaction to either cold or heat	1. To take appropriate intervention
2. The patient's response to treatment	2. To determine the therapeutic effects

## E. Documentation

### Record:

- The date, time and the duration of the procedure
- The condition of the eye before and after the treatment
- The patient's tolerance to the procedure
- Health education given e.g. use of separate basins when doing the compresses at home
- Any ointments used

■ ■ ■

## 2.7: Specialized Procedures

### 2.7-1: Pre and Post-Operative Care

#### 2.7-1.1: Pre-Operative Care

**Definition:**

Pre-operative care is the care given to a patient from the time when the decision for surgical intervention is made to when anaesthesia is administered.

**Purpose:**

To ensure the client is in the best possible condition for surgery through careful assessment and thorough preparation. (Fundamentals of Nursing standards and practice 6th Ed).

**Indications:**

- Patients requiring surgical operations

## A. Assessment

Assess	Rationale
1. The type of surgical procedure	1. To determine the type of preparation required
2. The patient's needs: <ul style="list-style-type: none"> <li>• Physical/Physiological</li> <li>• Emotional/Psychological</li> <li>• Spiritual/Social</li> </ul>	2. <ul style="list-style-type: none"> <li>• To allay anxiety and ensure the patient's comfort</li> <li>• To ensure homeostatic balance and prevent post-operative complications</li> <li>• For support, rehabilitation and follow up care</li> </ul>
3. The patient's status by carrying out a focused physical examination	3. For baseline data, for comparison at the end of the procedure and to determine the patient's suitability for surgery
4. The patient's and family members' understanding of his /her condition and the ability to follow instructions	4. To determine the patient's and family members' knowledge on the surgical procedure, potential complications and for informed consent

## B. Planning

### Self

- Knowledge and understanding of preoperative care and the type of surgery to be done
- Assemble the equipment required for preparing the patient
- Ensure the medications required are available
- Review the procedure on preoperative care as per institutional policy

### Patient

- Explain the procedure to the patient and obtain informed consent

### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space

### Requirements

A clean trolley with:

#### Top shelf;

- Thermometer (as per Institutional policy)
- Sphygmomanometer
- Stethoscope
- Watch with second hand
- Pulse oximeter
- Gallipot
- Methylated spirit/alcohol based swabs
- Clean gloves
- Lubricant (for rectal temperature)
- Observation charts
- Notebook/paper to record the patient's findings
- Premedication medications where indicated

#### Bottom Shelf;

- Decontaminant in a container
- Receiver for soiled swabs

## C. Implementation

Steps	Rationale
1. Explain the surgical procedure to the patient	1. To allay anxiety and promote co-operation
2. Ensure the patient has an identification band	2. To facilitate identification of the patient

Steps	Rationale
3. Ensure the patient has given informed consent for the operation	3. For medical-legal purposes
4. Ensure all investigation orders are done and results are available	4. To determine suitability for surgery and identify risk factors for appropriate intervention
5. Give medication and treatment as prescribed	5. For therapeutic purposes e.g. relieving pain and allaying anxiety
6. On the night prior to surgery, ensure the patient is settled and sleeps well. Administer the prescribed medication	6. To allay pre-operative anxiety to maintain therapeutic levels
7. Ensure the patient is nil per oral 6-8hours before surgery	7. To prevent gastric reflux and aspiration during surgery
8. On the morning of the surgery, prepare the client/patient by performing the following: <ul style="list-style-type: none"> <li>• Remove all jewelry</li> <li>• Remove nail polish</li>   <li>• Ensure availability of blood for transfusion 30 to 60 minutes before surgery</li> </ul>	8. <ul style="list-style-type: none"> <li>• To ensure the patient's safety</li> <li>• To allow for good visualization of nail beds and monitoring of oxygen status using the pulse oximeter</li> <li>• To facilitate intra-op transfusions should need arise</li> </ul>
9. Check the patient's identification band	9. Confirming the patient's identity ensures that the right patient undergoes surgery
10. Encourage the patient to void	10. For the patient's comfort and prevention of accidental bladder injury
11. Obtain vital signs	11. To establish pre-op baselines
12. Administer ordered pre-operative medication	12. To induce mild sedation and prevent anaesthetic complications
13. Place an arm band on the patient's dominant hand in line with national patient safety guidelines	13. To identify the patient to be at risk of post sedation effects
14. Raise the bed side rails	14. To restrain the patient in bed and prevent falls
15. Place call bells within reach and instruct the client to call for assistance	15. To facilitate communication and safety
16. Encourage the guardian and significant others to stay with the patient	16. To decrease anxiety
17. Transfer the client gently to the stretcher; ensure his/her comfort and safety	17. To ensure readiness for transportation to the theatre and for the security of the patient

Steps	Rationale
18. Ensure the patient's notes are complete: a. Complete and signed Pre-operative checklist b. A signed informed consent c. All preoperative charts are present d. All required laboratory and radiological results are present e. Ensure availability of blood and blood products if needed	18. For continuity of the patient care
19. Accompany the patient to the theatre with his/her appropriate notes	19. To ensure the patient safety and legality of the procedure

## D. Evaluation

Evaluate	Rationale
1. The patient's understanding and readiness for the procedure	1. To allay anxiety
2. Completeness of the patient's surgical procedure requirements	2. To ensure efficiency and effectiveness of the surgical procedure

## E. Documentation

### Record:

- Date and time
- Completed pre-operative check list

■ ■ ■

## 2.7-1.2: Immediate Post-Operative Care

### Definition:

- This is the care given to the patient immediately after surgery within the first 24 hours.
- Care given in the Post Anaesthetic Care Unit (PACU) for the first 24 hours.

### Purpose:

To prevent morbidity and mortality after surgery and to facilitate recovery.

### Indications:

- Patients who have undergone surgery.

## A. Assessment

Assess	Rationale
1. The equipment for post-operative care: i.e. Surgical bed, resuscitation equipment	1. To ensure readiness
2. The possible post-operative complications	2. For prompt intervention
3. The appropriate human resource	3. For efficiency and minimize delays
4. The patient's airway patency	4. To ensure effective breath
5. Vital signs	5. To detect any abnormalities
6. Level of consciousness	6. To test the effect of anaesthesia
7. Pain status	7. To allow controlling pain and encourage early mobility
8. Nausea/vomiting	8. To avoid pressure on suture line
9. Surgical site	9. To establish any signs of overt bleeding

## B. Planning



### Self

- Knowledge and skills of the procedure for specific post-operative care for the surgical intervention



### Patient

- Explain the procedure to the patient and obtain informed consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

- Sterile postoperative tray
- Sterile and clean gloves
- Stretcher
- Assemble appropriate equipment required and ensure they are in good working condition e.g. postoperative surgical bed (See procedure for Making a Surgical Bed), suction machine, oxygen delivery devices, IV drip stand and IV fluids. Emesis bowl.
- Assemble appropriate resources e.g. room preparation and observation charts
- Assemble equipment necessary for care provision depending on type of surgery e.g. cardiac monitors, respirators, orthopaedic appliances
- Items for infusion fluids
- Packs for changing dressings
- Emergency tray equipment
- Receivers for vomiting

## C. Implementation

Steps	Rationale
1. Perform hand hygiene and organize supplies	1. For infection prevention and control and ensures efficiency
2. Make the initial observations about the following: <ul style="list-style-type: none"> <li>• Vital signs</li> <li>• Level of consciousness</li> <li>• Operation site for any bleeding or discharge</li> </ul>	2. To provide information on post-operative status
3. Receive report of the surgery done and post-operative prescriptions	3. To help in planning postoperative interventions
4. Gently transfer the patient from the stretcher to the bed	4. To minimize trauma and ensure safety of the patient during transportation to the ward
5. Ensure position of the head is tilted as indicated	5. To maintain a patent airway and allow for easy flow of secretions
6. Ensure the postoperative tray is within reach	6. For easy access to the tray if there is need for resuscitation
7. Transfer the patient to the ward while ensuring the patient's head is on the nurse's side	7. To monitor the patient's condition

Steps	Rationale
8. In the ward, lift the patient carefully from stretcher to the bed	8. To ensure safety of the patient
9. Position the patient appropriately on the bed	9. To facilitate flow of secretions and prevents chest compression
10. Cover the patient using the prepared linen carefully while removing the theatre linen and ensure the bedside rails are in place	10. To promote the patient's comfort and safety
11. Connect appliances e.g. oxygen, vacuum drainage, nasogastric tube, IV. lines, urine bags etc. as indicated	11. To promote oxygenation, elimination and corrects fluid volume imbalance
12. Take and record vital signs, immediately and half hourly, until the patient is fully awake as prescribed	12. To detect complications and adverse reactions
13. Observe for bleeding at the site of operation and any postoperative complications	13. To allow for detection of factors that may interfere with recovery process and for interventions
14. Administer the prescribed treatment and fluid regimen ( <b>Refer to procedure 1.4-2.4, Administering Intravenous (IV) Medications</b> )	14. To promote healing; correct fluid volume imbalances
15. Observe catheters and drainage systems for: <ul style="list-style-type: none"> <li>• Patency/obstruction</li> <li>• Characteristics and amount of drainage</li> </ul>	15. To monitor progress of I.V. fluids <ul style="list-style-type: none"> <li>• To monitor fluid output and any signs of urinary and other complications</li> <li>• To ensure effective functioning of the system, detect excessive bleeding and other complications</li> </ul>
16. Allow the guardian and significant others at bedside as soon as possible	16. To provide support to the patient and allay anxiety
17. Care for pressure areas as appropriate	17. To maintain the patient's skin integrity
18. Encourage exercise and ambulation	18. To prevent muscle disuse atrophy and deep venous thrombosis
19. Change of wound dressing and/or remove stitches /clips/skin staples as appropriate	19. To monitor progress, aid recovery, detect any complications and to facilitate wound healing
20. Give health education as appropriate	20. To promote compliance

## D. Evaluation

Evaluate	Rationale
1. The patient's outcome following the surgical procedure	1. To determine effectiveness and efficiency of care
2. If post-operative recovery is within the expected time	2. To determine the quality of care given

## E. Documentation

### Record:

- Date and time received from the theatre and outcome of the surgical procedure
  - Vital signs, level of consciousness
  - Treatment and fluid administered
  - Postoperative care
  - State of the operation site e.g. any bleeding/discharge postoperative complications
  - Health education given
- ■ ■

## 2.7-2: Care of a Patient with Abdominal Paracentesis

### **Definition:**

Nursing care provided to a patient who is to undergo abdominal tap so that fluid from the abdominal cavity can be removed.

### **Purpose:**

- To obtain a specimen of fluid
- To relieve pressure in the abdomen

### **Indications:**

- Abdominal pain or pressure secondary ascites
- Respiratory compromise as a result of ascites
- Diagnosis of cancer or bacterial peritonitis

## A. Assessment

Assess	Rationale
1. The history of the condition including known allergies	1. To avoid medication reactions
2. Vital signs	2. For baseline data
3. The effect of the condition on the respiration and measure abdominal girth	3. To determine urgency of the procedure
4. The patient's understanding of the condition	4. To identify knowledge gaps and determine how much information to give

## B. Planning



### **Self**

- Review knowledge and skills of the procedure
- Prepare the working area and assemble the requirements



### **Patient**

- Explain the procedure to the patient and obtain informed consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

Sterile paracentesis pack containing:

- Kidney dish (1)
- Gallipot (1)
- Swab holder (1)
- Cotton wool swabs
- Scalpel (1) and a surgical blade
- Various abdominal paracentesis trochars
- Abdominal paracentesis tubings
- Drainage tubing (1)
- Needle holder (1)
- Toothed dissecting forceps (1)
- Cutting needle and suture
- Split towel
- Pair of gloves
- Hand towel
- Suture scissors (1)

Others:

- Local anaesthetic without epinephrine
- 2cc syringe and IM needles (sterile)
- A measuring jug
- Cleaning lotion
- Extra sterile cotton wool swabs and gauze
- Sterile empty bottle (if needed)/or receiving bag
- Specimen bottles (2)
- Abdominal binder
- Adhesive tape
- Mackintosh
- Safety pin
- Container for clinical waste
- Sharp containers

## C. Implementation

Steps	Rationale
1. Explain the procedure to the patient	1. To gain co-operation
2. Ensure the patient's privacy	2. To maintain dignity and self esteem
3. Ask the patient to empty the bladder	3. For comfort and to avoid bladder injury
4. Bring equipment to the bedside	4. For ease of access

Steps	Rationale
5. Position the patient in Semi-Fowlers position or Fowlers position	5. To reduce pressure of diaphragm
6. Encourage pooling of fluid in the lower position of the peritoneal cavity	6. For infection prevention and control
7. Expose the site and cover the chest	7. For accessibility
8. Perform hand hygiene and ask the assistant to open the sterile pack, pour antiseptic solution into the sterile gallipot	8. For infection prevention and control
9. Label the specimens	9. To ensure the right specimen for the right patient
10. Ensure that the tubing is draining into a sterile closed system	10. To prevent infection
11. Control the rate of flow	11. To avoid sudden reduction in intraabdominal pressure
12. Observe the patient throughout the procedure	12. To detect any adverse reactions
13. Apply sterile dressing and strapping, secure tubing and drainage bag with safety pins or tape or holder	13. To ensure safety of the patient, avoid pulling out of the cannula and prevent interference with the procedure
14. Maintain the patient in Semi-Fowlers position throughout the procedure	14. To promote drainage of fluids
15. Dispose waste, disinfect and sterilize the linen and equipment as per policy	15. For infection prevention and control
16. Perform hand hygiene	16. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Vital signs	1. To verify the patient's physiological status
2. Urine colour and output for 24 hours	2. To assess for haematuria which may indicate bladder trauma
3. The dressing over the cannula site	3. To assess for bleeding or leakage
4. Abdominal girth and weight	4. To determine change after drainage
5. The amount of abdominal fluid drained	5. To detect any abnormality for appropriate action

## E. Documentation

### Record:

- Date and time of the procedure
- Vital signs, weight and abdominal girth before and after the procedure
- The patient's ability to tolerate the procedure
- Amount, colour and consistency of the urine passed

■ ■ ■

## 2.7-3: Caring for a Patient During a Bone Marrow Procedure

### Definition:

This is the nursing care given to a patient during insertion of a needle into the bone to extract bone marrow cells for laboratory analysis.

For example:

- **Bone marrow biopsy:** the removal of a core of bone marrow cells by a biopsy needle
- **Bone marrow aspiration:** removal of a small amount of organic material from the medulla of certain bones by a large bore needle.

### Purpose:

- To obtain bone marrow cells for examination and diagnosis

### Indications:

Patients in which the following conditions are suspected;

- Leukaemia
- Anaemia
- Thrombocytopenia
- Hodgkin lymphoma and non- Hodgkin lymphoma
- Multiple myeloma

## A. Assessment

Assess	Rationale
1. Vital signs	1. For baseline data for comparison during and after the procedure
2. The patient's understanding of the procedure and its purpose	2. To identify and fill in the knowledge gaps about the procedure. Ensures cooperation and allays anxiety
3. The patient's ability to remain still in required position	3. To determine if any extra assistance or any other intervention will be required
4. If the consent form is signed	4. For medical-legal requirement for the procedure
5. For history of bleeding disorders	5. To determine if the reason to control bleeding is required
6. History of allergies	6. To prevent exposure to allergens

## B. Planning

### Self

- Assemble the equipment required for the procedure
- Liaise with the technician who will perform the procedure

### Patient

- Explain the procedure to the patient and obtain informed consent
- Give premedication if necessary
- Ensure the patient empties the bladder

### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space

### Requirements

Clean trolley with;

#### Top Shelf;

- A clean tray containing:
  - Sterile bone marrow/ biopsy tray containing
    - Dressing forceps
    - Gallipot
    - Biopsy needles

#### Bottom Shelf;

- Narrow blade and handle
- Marrow puncture needle and aspiration syringe
- Dressing towels and swabs
- Small dressing towel
- Intravascular needles
- Hand towels
- A pair of towels
- Antiseptic lotion
- Blood slides
- Collodion
- Local anaesthetics
- Antiseptic solutions – povidine and methylated spirit
- Pair of scissors
- Receiver for used instruments
- Adhesive tape
- Masks
- Clean and sterile gloves
- Intravascular needles
- Appropriate syringes

- Sterile surgical blades
- Receiver

## C. Implementation

Steps	Rationale
1. Reassure the patient	1. To allay anxiety and gain cooperation during the procedure
2. Wheel the trolley to the bed side and screen the bed	2. For easy access to the equipment and to ensure privacy
3. Perform hand hygiene	3. To reduce risks for infections
4. Administer analgesic/anaesthetic agent if required	4. To prevent pain and discomfort
5. Position the patient appropriately and expose the puncture site	5. To ensure convenience during the procedure
6. The physician performs the procedure	6. To ensure the safety of the procedure
7. Observe the patient's condition	7. To monitor any complications arising out of the procedure
8. Ensure the specimen is placed on glass slides or on the test tubes, well labelled and taken to the laboratory	8. For accurate results identification in the laboratory
9. Apply anaesthetic ointment and gauze dressing	9. For pain control and infection prevention and control
10. Leave the dressing intact for two days	10. To prevent bleeding and for infection prevention and control
11. Assist the client to a suitable position	11. To promote comfort and facilitate recovery
12. Dispose waste and clear equipment according to hospital guidelines then perform hand hygiene	12. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Vital signs $\frac{1}{4}$ hourly the first one hour and then 4 hourly thereafter	1. To detect any deviation from the normal
2. Dressing site for any leakage	2. To detect any active bleeding from the puncture site
3. If the procedure was successful	3. To confirm effectiveness of the patient's preparation for the procedure

## E. Documentation

### Record:

- The time, date of the procedure
- Vital signs and patient's conditions before, during and after the procedure
- Location of the puncture site
- The patient's tolerance to the procedure
- Whether specimen was obtained and taken to the laboratory
- The type of ointment and dressing applied
- Any bleeding and pain at the site
- Condition of the skin at the site

■ ■ ■

## 2.7-4: Care of a Patient for Peri-Radiological Examination

### Definition:

Nursing care given to patients/clients before, during and after radiological imaging procedures.

### Purpose:

- To confirm diagnosis and results of treatment

### Indications:

- Trauma
- Suspected internal organ disease
- Suspected foreign bodies

## A. Assessment

Assess	Rationale
1. The patient's condition	1. To determine requirements for examination
2. Whether all instructions have been followed e.g. Starving, enema, premedication, omitting certain medications, full bladder	2. To determine the patient's readiness for examination
3. For any contraindications e.g. Pregnancy, allergies, age, the patient's condition etc	3. To promote safety for the client
4. The patient's ability to tolerate and cooperate during examination	4. To determine any assistance required
5. For any post examination requirements and instructions	5. To facilitate clinical judgment for effective communication
6. If the patient has any implants	6. To identify contraindications

## B. Planning



### Self

- Ensure all the required forms are ready
- Confirm appointment time
- Ensure informed consent has been obtained



### Patient

- Explain the procedure to the patient
- Cannulate and/or Give any prescribed medications

- Ensure the patient removes all ornaments



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



### Requirements

- Necessary request forms
- The patient's notes
- Previous x-rays if required
- Protective gear

## C. Implementation

Steps	Rationale
1. Explain the procedure to the patient	1. To allay anxiety and gain cooperation
2. Ensure the patient has correct identification band and is in appropriate gown	2. For positive identification
3. Ensure the patient is escorted to the examination room	3. To promote the client's safety
4. Ensure a properly filled request form	4. To avoid errors and accountability
5. Assist with the radiological procedure where necessary	5. To ensure success of the procedure
6. Escort the patient gently back to the ward	6. For continuity of care
7. Follow the post procedure instructions	7. To avoid any complications
8. Ensure all results are interpreted and taken back to the clinician	8. To help in planning of care

**NB:** Where the patient is very ill and needs special care e.g. suction and oxygen, the care is continued and the examination done in the ward e.g. portable x-ray

- Emergency tray should be carried for patients going for radiological examination e.g. Bronchoscopy for use in emergency care as necessitated.
- Ensure close observation of the patient throughout the procedure

## D. Evaluation

Evaluate	Rationale
1. The patient's condition after the procedure	1. To rule out any complications and intervene as appropriate

## E. Documentation

### Record:

- Date and time of investigations, outcomes and post examination instructions.
- The patient's vital signs

■ ■ ■

## 2.7-5: Care of a Client/Patient for Magnetic Resonance Imaging (MRI)

### **Definition:**

Nursing care given to patients/clients before, during and after radiological imaging procedures that use magnetism, radiowaves and computers to produce images of the body structure.

### **Purpose:**

- To confirm diagnosis and results of treatment

### **Indications:**

- Trauma
- Suspected internal organ disease
- Suspected foreign bodies
- Monitoring of treatment

## A. Assessment

Assess	Rationale
1. The client's understanding of procedure	1. To allay anxiety and enhance cooperation
2. The client's/ patient's weight	2. To determine contraindication (in clients over 136 kg)
3. The client for presence of cardiac pacemaker, aneurysm clips and history of valve replacement or other metal objects in the body	3. To prevent movement of metal or electronic objects
4. The client's/ patient's for claustrophobia as the electromagnet is a large tube that does not allow for any movement	4. To prevent movement by sedating the patient as needed
5. The client/patient for pregnancy	5. To prevent radiological effect on the foetus
6. The client's/ patient's ability to remain still for 30-90 minutes during the procedure	6. To ensure accuracy as movement results in blurred images
7. The client's/ patient's for allergies to dye or contrast medium	7. To avoid anaphylactic reaction
8. The client's/ patient's for adequate venous access	8. For injection of the contrast medium

## B. Planning

### Self

- Review knowledge on the procedure

### Patient

- Ensure availability of informed consent
- Take the client's weight
- Provide information on what is expected of the patient during and after the examination

### Environment

- Ensure that the imaging room is restricted to unauthorized individuals
- Ensure that the imaging room is free from metallic items to avoid adverse effects
- Ensure cleanliness

### Requirements

- Contrast the medium ordered by the physician or the qualified practitioner
- Magnetic resonance imaging scanner
- Clean gloves
- Weighing scale

## C. Implementation

Steps	Rationale
1. Explain the procedure	1. To allay anxiety and fear of the unknown
2. Have the client remove all metallic objects, such as watch, rings, coins, keys, hair pins, credit cards, dentures containing metal and external prosthesis	2. To reduce artefacts on the scan for accuracy
3. Instruct the client to void	3. To ensure the client's comfort and avoid movement during procedure
4. Assist the client onto padded electromagnetic table <ul style="list-style-type: none"> <li>• Secure the client on the table with velcro straps</li> <li>• Provide the client with earplugs, intercom or earphones</li> <li>• If the head is to be scanned put some special helmet around the head</li> </ul>	4. To provide correct positioning for the procedure <ul style="list-style-type: none"> <li>• To keep the client from moving during the procedure</li> <li>• To decrease noises of machines and provide communication between the client and technologist</li> <li>• To provide adequate imaging</li> </ul>

Steps	Rationale
5. Observe the client for signs of claustrophobia or inability to remain still	5. To determine need for sedation
6. If contrast medium is injected, during the procedure assess for an allergic reaction	6. To provide immediate detection of life threatening emergency
7. The technologist performs the MRI	7. For safety and accuracy of the procedure
8. After the study is completed, assist the client to a sitting position	8. To decrease risk of orthostatic hypotension
9. Perform hand hygiene	9. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The client's tolerance to the procedure	1. To determine success of preparation
2. If the client remained still during the procedure	2. To determine success of the procedure
3. Any complications during the procedure	3. To determine appropriate interventions

## E. Documentation

### Record:

- Date, time, length and place of the procedure
- The client's tolerance to the procedure
- Any complications during the procedure
- The client's condition after the procedure
- Medications administered before or during the procedure

■ ■ ■

## 2.7-6: Care of a Patient for Computed Tomography (CT) Scan

### **Definition:**

Nursing care given to a client/patient before, during and after a special radiological imaging procedure conducted to provide a more detailed information than a plain x-ray on body tissues and organs to aid in diagnosis, guide further treatments or monitor for specific conditions.

### **Purpose:**

- To facilitate effectiveness of the procedure
- To optimize the patient health outcomes following the procedure

### **Indications:**

- Trauma
- Suspected internal organ disease
- Suspected foreign bodies
- Diagnosis of disease, trauma or abnormality
- A guide in interventional or therapeutic procedure
- Monitoring the effectiveness of therapy e.g. cancer treatment

## A. Assessment

Assess	Rationale
1. Confirm the patient's identity	1. To confirm the right patient for the procedure
2. The need for informed consent	2. To ensure that institutional and legal regulations are followed
3. The patient's ability to remain still, supine for up to 1 hour	3. To establish need for sedation
4. The patient for feelings of claustrophobia	4. To prevent anxiety due to confinement in the scanner during the procedure
5. The patient for allergy to iodine or other contrast agents	5. To prevent adverse reactions to contrast agents
6. For history of compromised renal function	6. Contrasts are contraindicated in patients with renal injury
7. The patient's need for sedation during procedure	7. For planning for necessary intervention

## B. Planning

### Self

- Review knowledge on the procedure

### Patient

- Explain the procedure and obtain consent
- Provide detailed information on the patient's role and what to expect before, during and after the procedure

### Environment

- The environment should have shielded walls to avoid scattering of radiation
- Minimum lighting
- Cleanliness of the room

### Requirements

- Sterile needles
- Assorted syringes
- Contrast dye if ordered
- CT scanner
- Clean gloves

## C. Implementation

Steps	Rationale
1. Prepare the patient for the procedure as per instructions	1. To reduce anxiety and facilitate compliance
2. Have the patient remove all metallic objects, such as watch, rings, coins, keys, hair pins, credit cards, dentures containing metal and external prosthesis	2. To reduce artefacts on the scan. Avoids damage to some metal objects by the magnetic field
3. Instruct the patient to void	3. For comfort during the procedure
4. Assist the patient onto padded CT scan table. Secure the client on the table with velcro straps	4. To ensure the client's comfort and avoid movement during procedure
5. Observe the patient for signs of claustrophobia or inability to remain still	5. To determine the need for sedation
6. If contrast medium is injected, during the procedure assess for an allergic reaction	6. For immediate detection of life threatening emergency
7. Technologist performs CT scan	7. For safety and accuracy of the procedure

Steps	Rationale
8. After the study is completed, assist the client to a sitting position	8. To decrease risk of orthostatic hypotension
9. Perform hand hygiene	9. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Vital signs as required	1. To monitor patient's condition
2. If all results are interpreted and taken back to the clinician	2. To help in planning of care
3. The patient's tolerance to the examination	3. To detect any complications

## E. Documentation

### Record:

- Date, time, duration and place of the procedure
- The patient's tolerance to the procedure
- Medication administered
- Findings of the examination

■ ■ ■

## 2.7-7: Care of a Patient Peri-Haemodialysis

### Definition:

Haemodialysis is a type of renal replacement therapy where an artificial membrane is used to correct electrolyte imbalances, remove excess fluid and solutes from the blood of a patient.

### Purpose:

- To facilitate effectiveness and efficiency of haemodialysis and optimize the client health outcomes

### Indications:

- Acute Kidney injury
- Chronic kidney disease
- Pulmonary oedema
- Electrolyte imbalance
- Metabolic acidosis
- Uraemia

## A. Assessment

Assess	Rationale
1. The patient's condition	1. To determine the right renal replacement therapy for the particular patient and duration of treatment
2. The patient's preparedness	2. To allay anxiety, for ease of the procedure and give informed consent

## B. Planning



### Self

- Review knowledge and skills on the procedure
- Assemble all the equipment
- Assign roles to the assistant



### Patient

- Explain the need, benefits and risks of the procedure to obtain informed consent
- Provide a detailed information regarding the patient's role during and after the procedure

## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space

## Requirements

- Trolley
- Water treatment plant
- Haemodialysis access
- Dialysis machine and dialyzer with semi-permeable membrane
- Bloodline tubing
- Appropriate dialysate bath
- Anticoagulant depending on the hospital policy
- 2ml, 5ml, 10ml, 20ml syringes
- Sterile Basic dressing pack
- Sterile and clean gloves
- Appropriate Fistula needles
- Personal Protective Equipment (PPEs) e.g. goggles, gown, mask
- Povidine solution
- Adhesive tape
- Normal saline
- Sphygmomanometer
- Weighing scale
- Stethoscope

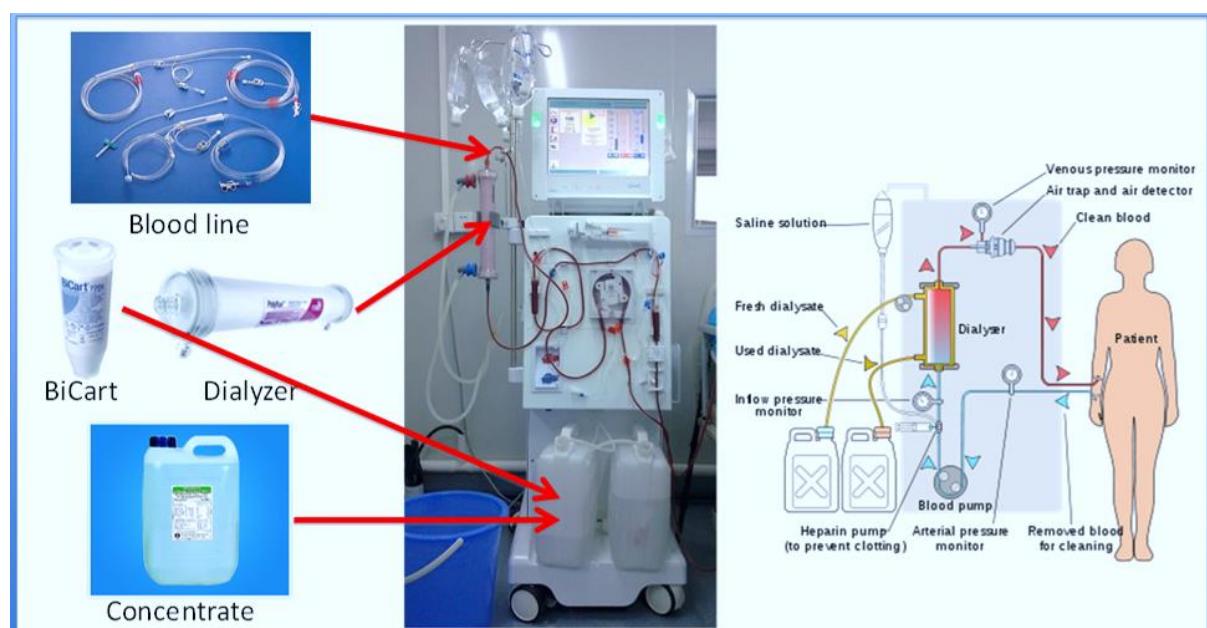


Figure 2.24 Dialysis Machine



Figure 2.25 Patient undergoing Haemodialysis

## C. Implementation

Steps	Rationale
1. Weigh the patient and take other vital signs	1. To determine the amount of fluid to remove from the patient
2. Connect the dialysis tubings and the dialyzer	2. To establish a complete circuit and to thread the machine
3. Run normal saline to prime the circuit	3. <ul style="list-style-type: none"> <li>• To remove air to minimize chances of clotting</li> <li>• To rinse the tubes off the preservatives to prevent adverse reaction</li> <li>• To open up the membranes to increase the surface area of contact between the blood and the dialysate compartment</li> </ul>
4. Set machine parameters	4. To enable the machine to program the anticipated parameters and the desired treatment outcome
5. Prepare the patient's access site <b>5.1. Catheter (subclavian, jugular, femoral)</b> <ul style="list-style-type: none"> <li>• Clean and apply dressing on the catheter site</li> <li>• Aspirate the heparin lock, check for clots and check for patency</li> <li>• Administer a loading dose of heparin/appropriate anticoagulant</li> </ul>	5. <ul style="list-style-type: none"> <li>• To prevent infection and establish whether there is infection and take necessary interventions</li> <li>• To ensure prevention of thromboembolism</li> <li>• To prevent clotting by thinning the blood</li> </ul>

Steps	Rationale
<p><b>5.2.</b></p> <ul style="list-style-type: none"> <li>• Flush the fistula needles with normal saline</li> <li>• Cannulate the arterial fistula, Check for patency by observing for pain expression and swelling at the cannulation site</li> <li>• Cannulate the venous fistula, check for patency and give the loading dose of heparin</li> </ul>	<ul style="list-style-type: none"> <li>• To remove air and rinse any preservatives</li> <li>• To gain access to the patient's system</li> <li>• To prevent clotting by thinning the blood</li> </ul>
<p>6. Initiate dialysis starting with a low flow rate for 15 minutes. Increase the flow rate to maximum within 30 minutes</p>	<p>6. Prevent hypotensive shock</p>
<p>7. <b>Intradialysis</b></p> <ul style="list-style-type: none"> <li>• Measure the patient's vital signs hourly</li> <li>• Monitor Transmembrane Venous and Arterial Pressure</li> <li>• Monitor Conductivity and heparinization</li> </ul>	<ul style="list-style-type: none"> <li>• To identify complications promptly and initiate necessary interventions</li> <li>• To determine any adjustments required</li> </ul>
<b><i>Disconnection of patient from dialysis (At the end of treatment time)</i></b>	
<p>1. Explain the procedure to the patient</p>	<p>1. To gain cooperation of the patient and allay anxiety</p>
<p>2. Perform hand hygiene and don gloves</p>	<p>2. For infection prevention and control</p>
<p>3. Reduce the blood flow rate</p>	<p>3. To maintain hemodynamic stability of the patient</p>
<p>4. Stop the pump</p>	<p>4. To enable disconnection process</p>
<p>5. Clamp, disconnect the arterial line, connect to normal saline bottle and restart the pump</p>	<p>5. To clear blood from the circuit to the patient's system</p>
<p>6. Allow the machine to run its course until it clamps and then disconnect the venous line</p>	<p>6. To allow disconnection from the machine</p>
<p>7. Lock arterial and venous ports with heparin (quantity depending on the manufacturer's instructions)</p>	<p>7. To prevent clotting and establish need for bolus infusion in case of hypotension</p>
<p><b>NB:</b> Take the patient's blood pressure before locking the venous port</p>	
<p>8. Dress the access point</p>	<p>8. To cover and prevent infection at the access point</p>
<p>9. Take vital signs</p>	<p>9. To establish the client/patient's stability and initiate necessary interventions</p>

Steps	Rationale
10. Take the patient's post dialysis weight leaving the client comfortable	10. To assess the patient and confirm achievement of dry weight
11. Perform hand hygiene	11. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Signs of intradialytic complications	1. To institute appropriate interventions promptly
2. Achievement of dry weight, solute clearance and electrolyte balance	2. To determine the therapeutic effects

## E. Documentation

### Record:

- The actual treatment duration, date and time
  - Vital signs
  - Amount of ultra-filtrate achieved
  - Any intradialytic complications and the interventions taken
  - Recommendations for subsequent dialysis
  - Name and signature of the nurse
  - The patient's reaction to dialysis
- ■ ■

## 2.7-8: Care of a Patient on Peritoneal Dialysis

### Definition:

This is the process of correcting electrolyte imbalances, removing excess fluid and solutes from a patient's blood using natural (peritoneum) membrane.

### Purpose:

- To remove waste products, excess fluid and correct electrolyte imbalances

### Indications:

- Acute kidney injury
- Acute intoxication
- End stage renal disease
- Patients with vascular access failure
- Chronic heart failure
- Ischemic heart failure
- Children aged below 5 years
- Patient preference

### Contraindications:

- Patients with extensive abdominal or bowel surgery and abdominal trauma
- Severe vascular disease
- Severe respiratory distress
- History of severe peritonitis
- Patient with multiple abdominal adhesions
- Patients with mental disorder e.g. dementia, depression

## A. Assessment

Assess	Rationale
1. The patient's knowledge	1. To determine the patient's ability to manage the procedure
2. The patient's condition	2. To ascertain the patient's suitability for the procedure
3. Peritoneal dialysis access	3. To ascertain readiness for the procedure

## B. Planning



### Self

- Review knowledge on the procedure
- Assemble all the equipment
- Assign roles to the assistant



### Patient

- Explain the need, benefits of the procedure to the patient/guardian and obtain informed consent
- Encourage the patient to empty the bladder and open the bowel



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



### Requirements

Clean and arrange a trolley with;

- Dialysate with accessories depending on the manufacturer
- Fluid warmer
- Catheters
- Anticoagulant according to institutional policy
- Appropriate antiseptic solution e.g. frekaderm and frekasept
- Sterile dressing pack
- Sterile and clean gloves
- A measuring jug
- A weighing scale
- Personal protective equipment e.g. face masks, goggles and gown
- Adhesive tape
- Syringes and needles
- IV Pole

## C. Implementation

Steps	Rationale
1. Verify the doctor's order for dialysis and Dialysate to be used	1. To ascertain the right order for the right patient
2. Explain the procedure to the patient	2. To allay anxiety and increase cooperation
3. Obtain and record the patient's vital signs, weight and abdominal girth	3. To establish baseline data
4. Verify the dialysate for the following: glucose concentration, amount, expiry date, leakages and sediments	4. To confirm safety for usage
5. Warm the dialysate to body temperature and bring to the bedside	5. To increase rate of urea removal and prevent discomfort and excessively lowering the core body temperature
6. Wash hands and don clean gloves	6. For infection prevention and control

<b>Steps</b>	<b>Rationale</b>
7. Place the patient in semi fowlers position	7. For comfort and adequate room for peritoneal expansion
8. Assemble the dialysate bag and remove the outer cover	8. To prepare for the procedure
9. Scrub hands, dry and don gloves	9. For infection prevention and control
10. Establish a sterile field under the end of the peritoneal catheter using the sterile drape	10. To provide a sterile surface for cleaning the catheter for infection prevention and control
11. Ask your assistant to spray the ports of the dialysate bag using the antiseptic solution	11. For infection prevention and control
12. Remove the cap from the dialysate bag, disconnect the effluent bag and connect the transfer set to the dialysate bag	12. To ensure readiness for the initiation of the procedure
13. Add any prescribed medication to the dialysate using strict sterile technique	13. For proper treatment and to avoid contaminating the dialysate
14. Hang the bag on the IV pole, break the spike and open the roller clamp and run in the dialysate for 5-10 minutes. Once complete close the roller clamp	14. To support the bag and to promote inflow by gravity
15. Assess the client for pain	15. To intervene and ensure the patient's comfort
16. Clamp, disconnect, discard the bag and roll up the transfer set to the patients comfort	16. To prevent air entry into the tubing
17. Allow the solution to dwell as per the prescribed time	17. To ensure the dialysate remains in the abdomen for osmosis and diffusion to occur from the blood into the dialysate
<b>For subsequent exchange</b>	
18. Unclamp the line to the drainage bag for 20 to 30 minutes	18. To allow the effluent to drain out
19. Compare the volume drained versus dwell volume	19. To determine completeness of emptying of the effluent
20. Measure the effluent, look at its consistency: bloody, cloudiness, presence of fibrins	20. To determine the need for any intervention
21. Discard the effluent, clean and apply dressing on the exit site	21. For the patient's comfort and infection prevention

## D. Evaluation

Evaluate	Rationale
1. The patient's outcome in comparison to general condition prior to treatment	1. To determine response to the treatment and guide on plan of action
2. The patient for intradialytic complications	2. To determine appropriate intervention

## E. Documentation

**Record:**

- Inflow and out flow time
- Amount of dialysate infused and the amount drained out
- Medications added to the dialysate
- Effluent: amount and consistency
- The patient's condition before, during and after the dialysis exchange

■ ■ ■

## 2.7-9: Care of a Patient Undergoing Brachytherapy (Internal Radiation Therapy)

### **Definition:**

This is the care given to a patient undergoing internal sealed or closed radiation therapy where radioactive isotopes are placed within the body or the body cavity.

### **Purpose:**

To optimize benefit to patients undergoing this treatment in:

- Early stage of cancer
- Palliative cancer care
- Prophylaxis cancer treatment in those at risk of developing tumour

### **Indications:**

- Cancer of any part of the body

### **Contraindications:**

- History of transurethral resection of the prostate (TURP)
- Recurrent hematuria
- Distant metastases
- Obstructive symptoms in prostate cancer

## A. Assessment

Assess	Rationale
1. The condition of the client	1. To ascertain suitability of the procedure
2. The patient's understanding of the purpose and plan of the procedure	2. To determine educative needs of the patient
3. The patient for signs of claustrophobia	3. To prevent anxiety
4. The patient for presence of pregnancy	4. To determine for contraindications
5. The vital signs	5. To provide baseline data

## B. Planning



### **Self**

- Review knowledge of the procedure
- Perform hand hygiene



### **Patient**

- Explain the procedure to the patient and obtain informed consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

- Trolley with;
  - Radiation caution labels
  - Long handle forceps and lead container with a lid
  - Radioisotope as ordered by the physician
  - Urinal and / or bedpan
  - Radiotherapy monitoring devise
  - Lead apron
  - Sterile and clean gloves
  - Sterile gauze packs
- Dry foods e.g. processed cereals and water/ juice enough to cover the hour/ days of treatment
- Private room and bath

**NB:** Insertion of the radioactive isotope (e.g. Cesium for cancer of the cervix is done in the Brachytherapy Theatre thereafter the client is transferred to the designated isolation room.

## C. Implementation

Steps	Rationale
1. Explain the procedure to the client and ensure informed consent is obtained	1. To allay anxiety, gain co-operation and ascertain the client's acceptance. For legality of the procedure
2. Ensure the client's privacy	2. To maintain dignity and self esteem
3. Observe vital signs	3. To provide baseline data
4. Ask the client to empty bladder	4. For comfort and to avoid bladder injury
5. Prepare the client preoperatively for theatre	5. Insertion of the isotope is a surgical procedure
6. Assemble the requirements in the designated isolation room	6. For accessibility to the client
7. Ensure the client has fully recovered from theatre and escort him/her to the designated room	7. To ensure safety and warmth
8. Label the door with radiation caution label and with specific instructions for the radioisotope used	8. To alert and protect others that radiation is in progress

Steps	Rationale
<p>9. Precautions to be taken when nursing the patient:</p> <ul style="list-style-type: none"> <li>• Organize nursing tasks to take the shortest time in the radiation room</li> <li>• Wear a lead shield/apron</li> <li>• Rotate assignments to ½ an hour per shift with one nurse caring for only one patient</li> <li>• Pregnant nurses and those under 16 years should not be allowed into the room</li> <li>• Visitors to be limited to take only ½ an hour per day</li> </ul> <p><b>NB:</b> When the implant dislodges accidentally:</p> <ul style="list-style-type: none"> <li>• Use some long handle forceps to place it in a lead container and call the physician.</li> <li>• If unable to locate it, bar visitors from entering the room and notify the physician</li> </ul>	<p>9. To minimize the exposure and transmission of radiation</p>

## D. Evaluation

Evaluate	Rationale
1. If the procedure was tolerated by the client	1. To confirm effectiveness of preparation
2. Radiation safety compliance	2. For protection of self and others

## E. Documentation

### Record:

- Vital signs and the client's condition before and after the procedure
- Time, date, location and type of isotope(s) used and the manufacturer's specific instructions.
- The client's tolerance to the procedure

■ ■ ■

## 2.7-10: Care of a Patient Before, During and After Lumbar Puncture

### Definition:

It is the nursing care given to a patient, before during and after undergoing the invasive procedure in which a spinal needle is inserted into the sub-arachnoid space of the lumbar spine.

### Purpose:

To prepare the patient for the procedure and prevent complications during and after the procedure

### Indications:

- Suspected bacterial meningitis
- Sub Arachnoid haemorrhage
- Suspected cerebral malaria
- Trauma involving the central nervous system
- Intrathecal medication administration
- Central nervous system diseases e.g. Guillain Barre Syndrome

### Contraindications:

- Raised intracranial pressure
- Thrombocytopenia
- Suspected spinal epidural abscess

## A. Assessment

Assess	Rationale
1. The patient's understanding of the procedure	1. To allay anxiety and gain the patient's cooperation
2. Baseline observations	2. To ascertain the suitability of the patient for the procedure

## B. Planning



### Self

- Review the anatomy and physiology of nervous system
- Review knowledge of the procedure



### Patient

- Explain the need, risk, benefit and role of the patient during and after the procedure and obtain informed consent

- For a child, use age appropriate communication skills to enhance understanding and cooperation and obtain informed consent from the parent or the guardian
- For children, involve the parent as appropriate



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



### Requirements

Disinfected trolley;

#### **Top Shelf;**

- Sterile Lumbar puncture tray with:
- 2 gallipots – one with cotton wool swabs
- 2 kidney dishes
- Sterile draping towel
- Sterile gown

#### **Bottom Shelf;**

- Disinfected tray containing:
- Face masks
- Local anaesthetic agent
- Plastic dressing spray or dressing
- Adhesive tape
- A pair of scissors
- Receiver for dirty swabs
- Antiseptic solution
- Mackintosh and draw sheet if necessary
- Prepared medication
- Clean and sterile gloves
- Sterile lumbar puncture needles (assorted sizes)
- Additional package of sterile gauze
- Assorted syringes and needles
- 3 sterile specimen bottles

## C. Implementation

Steps	Rationale
1. Explain the procedure to the patient/guardian	1. To gain the patient's cooperation
2. Screen the bed	2. To provide privacy
3. Wheel the trolley and set up the requirements	3. To ensure readiness for the procedure

Steps	Rationale
4. Observe and record vital signs and condition of the patient prior to the procedure	4. To obtain baseline data to monitor the patient's condition during and after the procedure
5. Perform hand hygiene and don appropriate PPEs	5. For infection prevention and control
6. Position the patient on the side with both knees and head flexed at an acute angle with a pillow under the neck	6. To allow maximum lumbar flexion and separation of interspinous space and thus easier access to the subarachnoid spaces
7. The nurse's assistant should support the patient in this position to prevent sudden movement during the procedure and observe the patient throughout the procedure	7. To maintain the patient's safety and to detect change in the patient's condition during the procedure
8. Assist the doctor to seal the puncture site	8. To prevent loss of spinal fluid through the dura matter and minimize infection through the punctured site
9. Leave the patient comfortably lying flat on his back for 2-3hours	9. To prevent spinal fluid leakage and thus minimize headache and backache commonly associated with the procedure
10. Take vital signs $\frac{1}{2}$ hourly, check the site for bleeding and leakage and ask the patient if they have severe headache or pain for the first 12 hours	10. To identify any complications and intervene as appropriate
11. Decontaminate and clean equipment and dispose waste as necessary(follow institution policy) then perform hand hygiene	11. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Adequacy, type and colour of specimen obtained	1. To confirm diagnosis and institute appropriate treatment
2. The patient's tolerance to the procedure	2. To confirm adequacy of preparation and effectiveness of the procedure
3. Vital signs	3. To establish the status of the patient after the procedure

## E. Documentation

### Record:

- Time and date the investigation was done
- Medications given
- All observations
- Any complications and appropriate intervention taken
- Planned follow up care

■ ■ ■

## 2.7-11: Care of a Patient with a Stoma

### Definition:

Nursing care given to a patient with an ostomy (a surgically created opening from the trachea, urinary tract or intestines).

### Purpose:

To reroute fecal matter, urine or mucous to the outside of the body

### Indications:

- Obstructive condition
- Impaired respiratory function – bulbar poliomyelitis
- Congenital anomaly e.g. laryngeal hypoplasia
- Injuries – penetrating
- Tumors
- Diseases e.g. diverticular disease

### Contraindications:

- Laryngeal carcinoma

## A. Assessment

Assess	Rationale
1. The patient's understanding of the procedure	1. To allay anxiety and gain the patient's cooperation
2. Baseline observations	2. To ascertain the suitability of the patient for the procedure
3. The skin integrity around the stoma and general appearance	3. To establish the skin breakdown or leaking of the pouch
4. The amount and character of effluent in the pouch	4. To establish functionality of the stoma

## B. Planning



### Self

- Review knowledge and skills of the procedure
- Identify the type & location of ostomy in the patient
- Prepare the working area and assemble the requirements



### Patient

- Explain the procedure to the patient and obtain informed consent



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

- A clean tray containing:
  - Mackintosh with draw sheet
  - Kidney tray
  - Pair of clean gloves
  - Collecting bag
  - Clamp or clip
  - Receiver
  - Normal saline / basin with warm tap water
  - Gauze piece
  - Gauze pad / tissue paper
  - Skin barrier
  - Stoma measuring guide
  - Pen or pencil and scissors
- Colour coded waste bins

## C. Implementation

Steps	Rationale
1. Wash hands and wear gloves	1. For infection prevention and control
2. Spread Mackintosh and draw sheet	2. To protect linen
3. Remove used pouch & skin barrier gently by pushing the skin away from the barrier	3. Reduces trauma, jerking, irritates skin and can cause tear
4. Remove flange by gently pulling it toward the stoma. Support the skin with your other hand. An adhesive remover may be used.	4. To prevent skin tears
<b>NB:</b> If a rod is in situ, do not remove	
5. Remove the clamp and empty the contents into the receiver, rinse the pouch with tepid water or normal saline	5. To minimize the odour and growth of microbes
6. Discard the disposable pouch in the relevant colour coded bin	6. For infection prevention and control
7. Observe stoma for colour, swelling, trauma and healing. Stoma should be moist and pink	7. To detect any deviation from normal

Steps	Rationale
8. Cover the stoma with a gauze piece	8. To prevent the effluent from contacting with the skin
9. Clean peristomal region gently with warm tap water using gauze pad. Do not scrub the skin, dry completely by patting the skin with gauze	9. Stoma surface is highly vascular. Skin barrier does not adhere to wet skin
10. Remove dressing, clean stoma with gauze and pat dry	10. For easy adherence of the pouch to the skin
11. Measure the stoma using measuring guide	11. To ensure accuracy in determining correct pouch size needed
12. Trace same circle behind the skin barrier, using scissors, cut an opening 1/16th to 1/8th inch larger than stoma before removing the wrapper over adhesive part	12. For accurate fitting onto stoma
13. Put skin barrier and pouch over the stoma, and gently press on to the skin, for 1-2 minutes	13. To prevent irritation to the skin
14. If the pouch is drainable, use a clamp or clip	14. To prevent leakage
15. Leave the patient comfortable	15. To enhance the patient's comfort
16. Clear all used equipment appropriately	16. To ensure safety and tidiness of the environment
17. Perform hand hygiene	17. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Vital signs	1. To verify the patient's physiological status
2. Effluent colour and consistency	2. To detect deviation from normal
3. The amount of effluent fluid drained	3. To determine functionality of stoma
4. Stoma and peristomal skin	4. To determine any irritation
5. The dressing over the stoma site	5. To establish any leakage

## E. Documentation

### Record:

- Date and time of the procedure
- Stoma and peristomal skin
- Vital signs before and after the procedure
- The patient's ability to tolerate the procedure
- Amount, colour and consistency of the effluent drained
- Health messages shared

■ ■ ■

## 2.7: Male Circumcision

### Definition:

The surgical removal of the foreskin, the fold of skin that covers the glans penis by a trained and certified health care worker.

### Purpose:

- To remove appropriate foreskin
- To prevent blood loss
- To prevent infection
- To eliminate pain

### Indications:

- Treatment of specific medical problems
- Clients own request
- Partial prevention of HIV transmission to reduce the risk of acquiring some infections and related complications

## A. Assessment

Assess	Rationale
1. The client's history	1. The client's history
<ul style="list-style-type: none"> <li>• Present and past medical and surgical history</li> <li>• The client's history of allergies to anesthetic and antiseptic solution</li> </ul>	<ul style="list-style-type: none"> <li>• To determine the client's suitability for the procedure</li> <li>• To avoid reaction and skin breakdown. To determine the type of antiseptic and anesthetic agent to use</li> </ul>
2. Targeted physical examination	2. To determine the clients suitability for the procedure
3. Vital Signs (Blood Pressure, Temperature, Pulse Rate)	3. To obtain baseline data for comparison during and after the procedure
4. The client's weight	4. To determine dosage of the anesthetic agent
5. The client's understanding of the procedure	5. To identify and fill in the knowledge gaps about the procedure
6. The client's willingness to undergo male circumcision procedure and ensure consent form is signed	<ul style="list-style-type: none"> <li>6.           <ul style="list-style-type: none"> <li>• To ensure co-operation and allays anxiety</li> <li>• To avoid coercion of the client</li> <li>• Medical Legal requirement for the procedure</li> </ul> </li> </ul>
7. Appropriateness of the working environment	7. To determine the safety and privacy of both the client and the nurse.

Assess	Rationale
8. The client's possible risk associated with male circumcision	8. To identify contraindications to the procedure
9. Availability and functionality of required Equipment	9. To promote efficiency

## B. Planning



### Self

- Review knowledge and skills on Male Circumcision Procedure
- Assign roles to the assistant
- Perform scrubbing, gowning (where applicable) and hand hygiene



### Patient

Explain the procedure to the client and/or guardian to obtain an informed consent



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



### Requirements

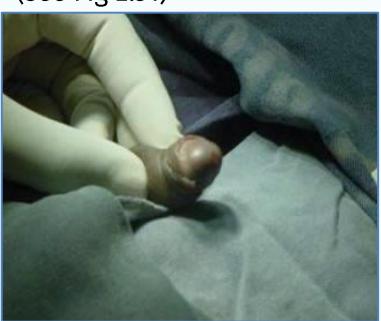
Mayo Tray with;

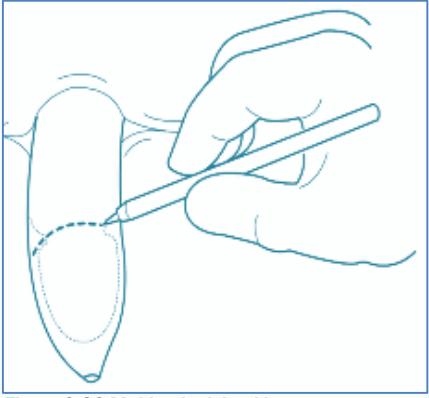
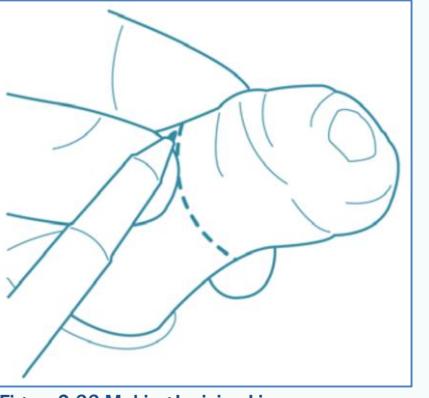
- **Sterile male circumcision Pack –**
  - 1 Kidney dish (medium)
  - 1 Gallipot (medium)
  - 1 Sponge holding forceps (7")
  - 2 Straight Artery forceps (6")
  - 1 Kocher's clamp (7")
  - 1 Alley's forceps (6")
  - 6 Artery tissue forceps (5")
  - 1 metzenbaum (Curved) scissors (5.5")
  - 1 Straight Scissors (6")
  - 1 Blade Holder (5")
  - 1 Needle holder (6")
  - 1 Centre "O" (40 x 33")
  - 2 Wrappers (33x30")
  - 1 Dissecting forceps (5")
  - 2 hand towels
  - 15 pieces of sterile gauze (10x10cm)

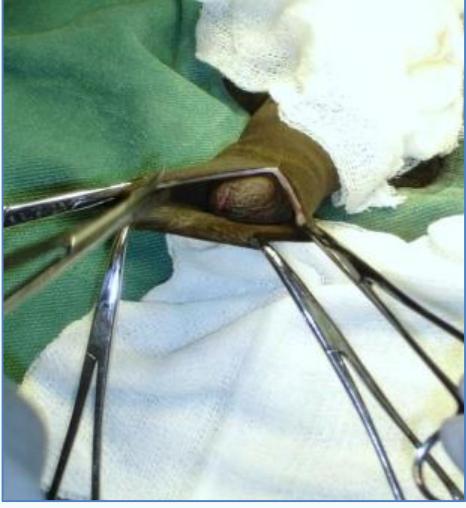
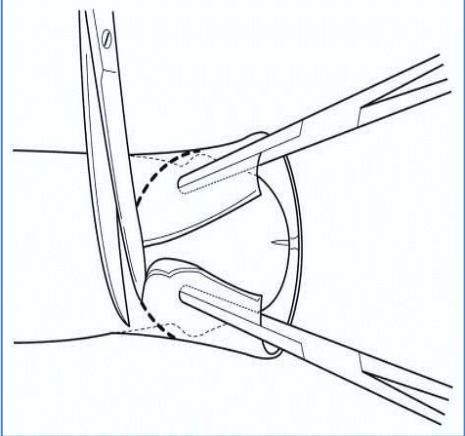
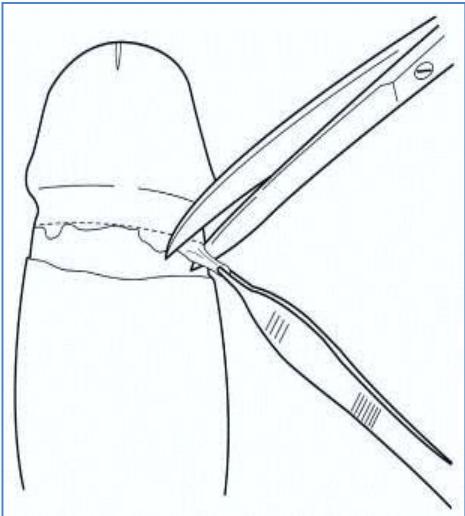
- **Trolley with:**
  - Sterile gloves sizes
  - Clean gloves
  - Personal Protective Equipment – sterile and clean gloves, face mask, goggles
  - Vaseline gauze (sufratulle)
  - Povidone iodine (Betadine) or Chlorhexidine solutions
  - Lignocaine 2% without epinephrine
  - Analgesics (Medications)
  - Surgical Blade
  - Normal saline
  - Elastic Cohesive tape
  - Chromic catgut No. 3/0
  - Syringes 10 and 20 mls and needles (gauge 21 and 23)
  
- **Emergency box with:**
  - 2 Ambu bags with a reservoir bag (pediatric and Adult)
  - Endotracheal tube Appropriate-size (pink/red, green and yellow)
  - Emergency Medications (Atropine, Aminophylline, Adrenaline, Vitamin K)
  - Cannulas (size 16,18, 22 and 24)
  - BP machine
  - Stethoscope
  - Thermometer
  - Adhesive tape
  - Alcohol swaps
  - 20ml 50% dextrose
  - Oropharyngeal airway (pediatric and adult)
  - Suctioning tubes
  - Surgical Gloves
  - Syringes 2mls and 5mls
  - Updated check list for all emergency supplies and equipment
  
- **Other requirements:**
  - 1 Adjustable Operating Table
  - 1 Stepping stool
  - 3 Colour coded Peddle bins
  - 2 Mackintoshes
  - 1 Wall clock
  - 1 Lockable medicine cabinet

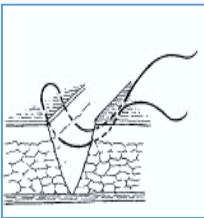
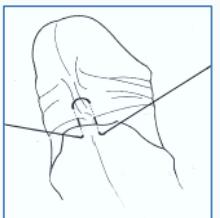
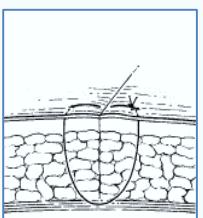
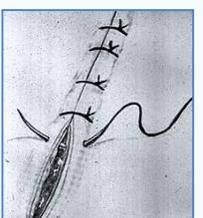
## C. Implementation

Steps	Rationale
1. Explain safe male circumcision procedure to the client	1. To reduce anxiety and enhance the client's cooperation during the procedure
2. Prepare the client for the procedure as per male circumcision training manual	2. To ensure effectiveness and efficiency in performance of the procedure
3. With the client on the couch perform skin preparation and draping (see Fig 2.26-2.28 below)	3. To ensure aseptic technique and maintain the sterile field

Steps	Rationale
	
<p>Figure 2.26 Performing Skin Preparation</p> 	
<p>4. Administer local anesthetic agent (see Fig. 2.29–2.30)</p> 	<p>4. To eliminate pain hence enhance client comfort</p> 
<p>5. Assess and separate adhesions if any (see Fig 2.31)</p> 	<p>5. Reduce the risk of accidental injury to the glans and ensure adequate skin removal</p>

Steps	Rationale
<p>6. Mark the intended incision line using surgical marker pen or gentian violet (see Fig 2.32- 2.33)</p>  <p>Figure 2.32 Making Incision Line</p>	<p>6. To ensure not too much or too little skin is removed and ensure good cosmetic effect</p>  <p>Figure 2.33 Making Incision Line</p>
<p>7. Perform the surgical procedure using Dorsal Slit technique.</p> <ul style="list-style-type: none"> <li>Position the Straight artery forceps at 3 and 9 o'clock positions and the 2 artery forceps at 1 and 11 o'clock positions (see Fig. 2.34)</li> </ul>  <p>Figure 2.34 Positioning the Artery Forceps</p>	<ul style="list-style-type: none"> <li>To bring the penis into symmetry and help in traction (pulling of foreskin)</li> </ul>
<ul style="list-style-type: none"> <li>Using straight forceps clamp the foreskin for about 30 seconds before making the slit</li> <li>Make a dorsal slit at 12 o'clock up to the mark line (see Fig 2.35) then perform circumferential incision using curved scissor (see Fig 2.36)</li> </ul>	<ul style="list-style-type: none"> <li>To help in minimization of blood loss</li> <li>To avoid injury to the glands and remove the foreskin</li> </ul>

Steps	Rationale
	
<p>Figure 2.35 Making a Dorsal Slit</p> <ul style="list-style-type: none"> <li>Trim any skin tag/rugged edges on the inner preputial edge to leave approximately 5mm of the preputial skin proximal to the corona (see Fig. 2.37)</li> </ul>  <p>Figure 2.37 Trimming Rugged Edges of Incision Line</p> <ul style="list-style-type: none"> <li>Stop bleeding using compression, ligation and under running stitches</li> <li>Close the incision site using horizontal mattress (see Fig. 2.38) at 6 o'clock, vertical mattress (see Fig. 2.39) at 12, 3 and 9 o'clock and with simple interrupted stitches (see Fig. 2.40) in between the mattress appropriately</li> </ul>	<ul style="list-style-type: none"> <li>To achieve a good cosmetic effect</li> <li>To arrest bleeding and achieve hemostasis</li> <li>To avoid urethral injury or accidental trauma to the glans and reduce wound gaping to enhance healing by primary intention</li> </ul>

Steps	Rationale
  <p>Figure 2.38 Horizontal Mattress</p> <p>Figure 2.39 Vertical Mattress</p> <ul style="list-style-type: none"> <li>• Irrigate the incision site with normal saline</li> <li>• Apply dressing sequentially</li> <li>• Clean the client's soiled parts with a sterile towel</li> <li>• Assist the client to get out of the operating table</li> <li>• Assist the client to dress up and put on a well-fitting pant</li> </ul>	  <p>Figure 2.40 Simple Interrupted Stitches</p> <ul style="list-style-type: none"> <li>• To achieve hydration of the incision site and to assist with visual examination</li> <li>• To render the incision site free of micro-organisms and enhance healing</li> <li>• For infection prevention and control</li> <li>• To help avoid injury</li> <li>• To prevent penile contact with the clothing causing discomfort and pain</li> </ul>

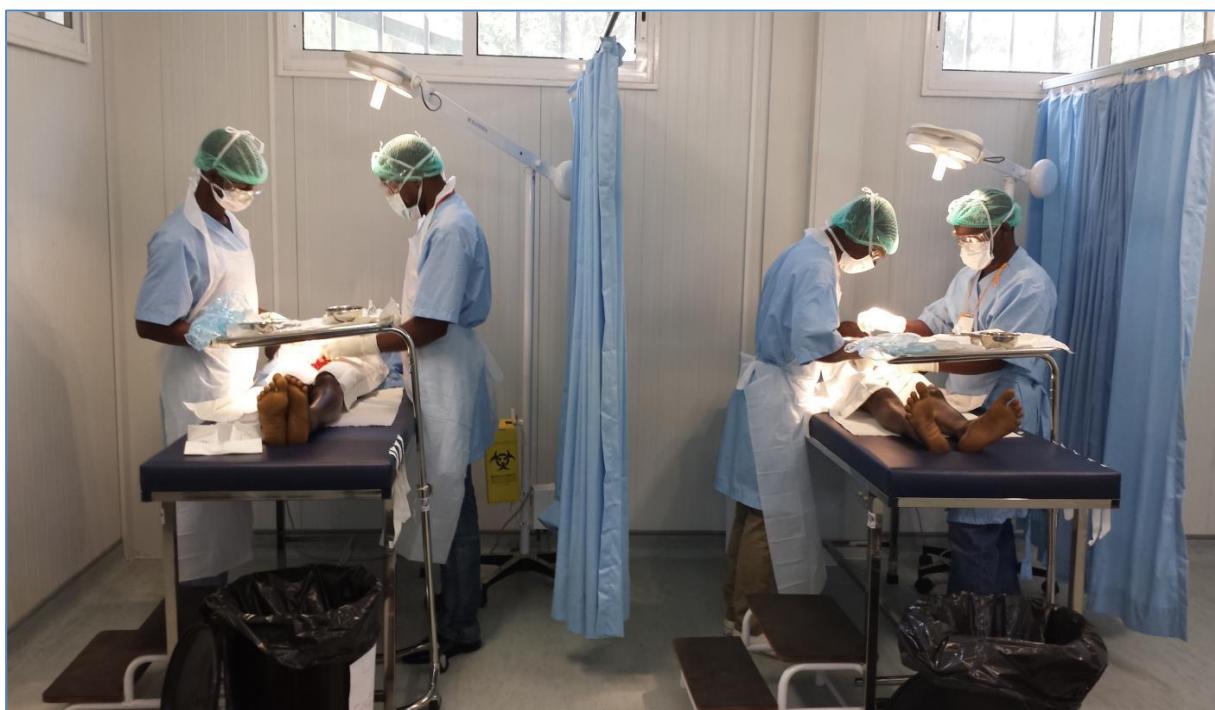


Figure 2.41 Voluntary Medical Male Circumcision in Progress - Photo (Adapted from VMMC Adverse Event Action Guide by PSI 2016)

Steps	Rationale
<b>Post-Operative Care</b>	
1. Check for any adverse reactions after the procedure	1. To inform on appropriate interventions
2. Take the client's vital signs (Blood Pressure, Pulse Rate, Temperature and Respiratory Rate) 30min post-surgery	2. For comparison with baseline data to plan for appropriate interventions
3. Assess the dressing applied at the incision site	3. For swelling or bleeding and to take necessary intervention (Refer to adverse event action guide)
4. Carry out pain assessment (see Fig. 1.4)	4. To determine the level of pain and take appropriate action
5. Discuss with the client on post-operative wound care and targeted health information on post male circumcision	5. To ensure that the wound healing process is in course with primary intention
6. Review the client's level of comfort, and give necessary medicines and instructions	6. Determines the need for additional analgesics and ensure the client understands basic instructions

## D. Evaluation

Evaluate	Rationale
1. Appropriate removal of the foreskin	1. Determine male circumcision Dorsal slit technique is performed as per the national guidelines
2. Any excessive blood loss	2. Determine if the dressing on the incision site is soaked by blood and take appropriate intervention
3. Infection prevention control	3. To ensure Infection prevention and control measures are practiced
4. Extent of pain experienced by the client	4. Determines effectiveness of local anesthesia and the patient's preparation

## E. Documentation

### Using the client's folder and Minor Theatre Register

#### Record:

- Date and time of start and completion of the surgery
- The client's condition pre and post-Surgery i.e. vital signs findings
- Name of circumciser and Assistant
- The client's response to the interventions
- Follow up date

■ ■ ■

## References

Aaron, A. R., Tobian, M. D., Serwadda, D., Quinn, T. C., Kigozi, G., Gravitt, P. E., et al. (2009). Male Circumcision for the Prevention of HSV-2 and HPV Infections and Syphilis. *The New England Journal of Medicine*, 360, 1298-1309

Amanda, J. (2014, August 23) colostomy care-colostomy indications-types of colostomy-procedure retrieved from <http://www.nsgmed.com/nursing-procedure/colostomy-care-colostomy-indication-types-of-colostomy-procedure/>

Altman, G. (2004). Delmar's Fundamental and Advanced Nursing Skills Handbook. (p. 660). Thomson/Delmar Learning.

Auvert, B., Taljaard, D., Lagarde, E., Sobngwi-Tambekou, J., Sitta, R., & Pure, A. (2005). Randomized, controlled intervention trial of male circumcision for reduction of HIV infection risk: the ANRS 1265 Trial. *PLoS Med*, 2, e298

Avert HIV AIDS 2015

Bailey, R., Moses, S., Parker, C., Agot, K., Maclean, I., Krieger, J., et al. (2007). Male circumcision for HIV prevention in young men in Kisumu, Kenya: a randomised controlled trial. *Lancet*, 369, 643 - 656.

Caroline Bunker Rosdahl, Mary T. Kowalski (2012). Textbook of Basic Nursing. Lippincott Williams and Wilkins Philadelphia

Centers for Disease Control and Prevention (CDC).. MMWR Morb Mortal Wkly Rep. 2013 Nov 29; 62(47):953-7.

Doyle G. R. and McCutcheon, J. A. (2012) clinical procedure for safer patient care. Retrieved from <https://opentextbc.ca/clinicalsSkills/chapter/introduction/>

Government of Kenya, Ministry of Health, NASCOP. National VMMC Strategy, 2014/2015-2018/2019 Nairobi, Kenya

Gray, R. H., Kigozi, G., Serwadda, D., Makumbi, F., Watya, S., Nalugoda, F., et al. (2007). Male circumcision for HIV prevention in men in Rakai, Uganda: a randomized trial. *Lancet*, 369(9562), 657-666

Hoofs M, Lueck s and Phillips MM. *The Wall Street Journal*, 5 July 2005

McCoombe and Short, *AIDS* 2006, 20: 1491–1495.

Ministry of Health. *Health Sector Quality Improvement & Strategic Plan 2010/11–2014/15*; 2011

Ministry of Public Health and Sanitation and Ministry of Medical Services, Republic of Kenya. *National Infection Prevention and Control Guidelines for Health Care Services in Kenya*. Nairobi, Kenya: Government of Kenya, December 2010.

National AIDS and STI Control Programme, Ministry of Health, Kenya.

Guidelines for HIV Testing Services in Kenya. Nairobi: NASCOP; 2015

National VMMC Strategy, Second Edition: 2014/15–2018/19.

*New Engl J Med* 2002; 346: 1105–1112

Lippincott Manual of Nursing Practice, 9th Edition 2010

Pamela Lynn 2nd Edition 2015. *Taylor's Handbook of Clinical Nursing Skills*. Wolters Kluwer. Philadelphia

Patricia Gonce Morton, Dorrie K. Fonatine (2013). *Essentials of Critical Care Nursing: A holistic approach*. Lippincott Williams and Wilkins Philadelphia

Resuscitation Council of United Kingdom (2016). *European paediatric Advanced Life support (4th edition)*, London: Resuscitation Council of UK

Reynolds SJ1, Shepherd ME, Risbud AR, Gangakhedkar RR, Brookmeyer RS, Divekar AD, Mehendale SM, Bollinger RC (2004). Male circumcision and risk of HIV-1 and other sexually transmitted infections in India. *Lancet*, 2004 Mar 27;363(9414):1039-40

Sharon Jensen (2011). *Pocket guide for nursing assessment: A best practice Approach*. Lippincott Williams and Wilkins Philadelphia

Suzanne C. Smelter, Brenda G. Bare, Janice L. Hinkle, Kerry H. Cheever. *Brunner and Suddarth's . Textbook of Medical Surgical Nursing* 12th Edition 2014, Lippincott Williams and Wilkins Philadelphia

## Chapter 2: Evaluation Checklist

Please fill this evaluation checklist to help the Nursing Council of Kenya improve the quality of subsequent procedure manuals.

MEDICAL – SURGICAL NURSING	YES	NO	COMMENTS
1. Critical procedures in Medical-Surgical Nursing are included in the chapter			
2. Procedures are placed under their relevant functional patterns/systems			
3. Procedures are arranged from simple to complex within the respective functional patterns/systems			
4. Procedures are correctly defined			
5. Purpose of the procedures is stipulated clearly			
6. Indications for the procedures are correct			
7. Steps in the procedures are accurate			
8. Nursing process is correctly applied:			
➤ Assessment			
➤ Planning			
➤ Implementation			
➤ Evaluation			
➤ Documentation			
9. Scientific rationales are given in assessment, implementation and evaluation			
10. Approach of the nursing process is useful in these procedures			
11. Diagrams are:			
➤ Relevant			
➤ Appropriate			
➤ Arrangement			
12. How would you rate this chapter on a scale of 1 to 10 (where 1 is the lowest & 10 is the highest score)?			
13. Overall comments for this chapter			

## CHAPTER 3

# Midwifery and Obstetric Nursing

## Chapter Outline

### 3.1: Antenatal Care

- 3.1-1:** History Taking from Antenatal Client
- 3.1-2:** Physical Examination of an Antenatal Client
- 3.1-3:** Breast Examination
- 3.1-4:** Abdominal Examination
- 3.1-5:** Pelvic Examination
- 3.1-6:** Performing an Antenatal Profile Test

### 3.2: Intrapartum Care

- 3.2-1:** Admission of a Client in Labour
- 3.2-2:** Vaginal Examination
- 3.2-3:** Monitoring Labour using a Partograph
- 3.2-4:** Care of a Client/Patient with Antepartum Haemorrhage
- 3.2-5:** Care during Second Stage of Labour
- 3.2-6:** Management of Third Stage of Labour
- 3.2-7:** Manual Removal of the Placenta
- 3.2-8:** Examination of the Placenta
- 3.2-9:** Epidural Care of a Client following Epidural Anaesthesia during Labour
- 3.2-10:** Vacuum Extraction (Ventouse)
- 3.2-11:** Episiotomy Repair
- 3.2-12:** Breech Delivery
- 3.2-13:** Care of a Client with Shoulder Dystocia
- 3.2-14:** Care of a Client with Postpartum Haemorrhage (PPH)
- 3.2-15:** Manual Vacuum Aspiration

### 3.3: Postnatal Procedures

- 3.3-1:** Expressing Breast Milk
- 3.3-2:** Postpartum Examination
- 3.3-3:** Perineal Care

## 3.4: Newborn Care Procedures

- 3.4-1:** Assessing the Apgar score of a Newborn
- 3.4-2:** Resuscitation of a Newborn
- 3.4-3:** First Examination of a New Born
- 3.4-4:** Daily Examination of a Newborn
- 3.4-5:** Admission of a Newborn into the Newborn Unit
- 3.4-6:** Thermoregulation and Thermocare of a Newborn
- 3.4-7:** Care of a Newborn on Exchange Transfusion

## 3.1: Antenatal Care

### 3.1-1: History Taking from Antenatal Client

**Definition:**

The systematic procedure of gathering information about the client's general health and her pregnancy status.

**Purpose:**

To determine and identify the health and socio-economic conditions likely to influence the outcome either negatively or positively and to direct care during pregnancy and childbirth.

**Indications:**

- On first contact with an antenatal client seeking antenatal services
- Any pregnant client seeking antenatal services

## A. Assessment

Assess	Rationale
1. Environment	1. For warmth, safety ,privacy and comfort
2. The client and companion's readiness for the procedure	2. To allay anxiety and promote cooperation
3. Availability of required supplies and equipment	3. For ease of access and efficiency

## B. Planning



**Self**

- Appropriate grooming
- Examine own ability to communicate effectively.
- Review history taking procedure
- Examine own cultural influences
- Wash and dry hands



**Client**

- Explain the procedure to the client and companion



**Environment**

- Safe, clean spacious and dry room with visual and auditory privacy
- Adequate seats or benches and a table

- Clean, dry and comfortable examination couch
  - Linen (a pair of bed sheets)
  - Bedside stepping stool
  - Arrange seats to make provision for same height, a square setting of 90° angles, full view of the client and companion with no barrier between the client, companion and the midwife.
  - Adequate space with adequate light
  - Sink with running water, liquid soap
  - disposable hand towel
  - Coded colour bins
- ■ ■

### Requirements

Assemble and arrange the following items on a trolley or table:

- Pens of different colours
- Plain papers
- Antenatal record book
- Antenatal cards
- Vital signs observation equipment
- Antenatal Registers
- Calendar and the gestation calendar wheel

## C. Implementation

Steps	Rationale
<b>Introductory phase</b>	
1. Greet and welcome the client and her companion and offer them a place to sit	1. To establish rapport
2. Address the client by name	2. For the patients' respect and dignity
3. Assume a relaxed sitting position that demonstrates availability of time	3. To enhance comfort, relaxation and promote cooperation
4. Inquire the language the client is comfortable with	4. Makes the client and companion feel accepted, relaxed and promotes disclosure
5. Explain to the client the approximate time history taking is likely to take and what is required of her	5. To ensure efficiency in communication prevents anxiety
6. Inquire from the companion(s) the relationship with the client	6. For privacy and confidentiality
7. Discuss general topics for about one minute	7. Allows for relaxation and promotes disclosure
<b>Working phase</b>	
1. Take vital signs	1. For baseline data
2. Observe principles of interviewing techniques	2. Determines validity and accuracy of information
3. Observe the client for non-verbal communication and validate them	3. Reveals some information the client may not express verbally

Steps	Rationale
<p>4. Ask open ended questions and use simple language</p> <p>5. Obtain, interpret and record complete information of the following;</p> <p>a. <b>Personal data:</b></p> <ul style="list-style-type: none"> <li>• Name</li> <li>• Age</li> <li>• Address and telephone number</li> <li>• Level of education</li> <li>• Occupation of the client</li> <li>• Religion</li> <li>• Name and contact of next of kin</li> <li>• Alcohol use and Smoking and any other substance addiction</li> </ul>	<p>4. Encourages self-expression</p> <p>5. Identifies clients and aids in tracing the patient in the event of follow up</p>
<p>b. <b>Medical and surgical history (Specific diseases and conditions):</b></p> <ul style="list-style-type: none"> <li>• TB, Heart Disease, Chronic Renal Disease, Epilepsy, Diabetic Melitus, hypertension, psychiatric, thyroid conditions, hepatic diseases</li> <li>• History of surgery and Anaesthetic complications</li> <li>• Sexually Transmitted Infections</li> <li>• Reproductive tract conditions or diseases.</li> <li>• HIV Status if known</li> <li>• Other conditions depending on Prevalence in that region (e.g. Malaria, Sickle Cell Trait)</li> <li>• Operations other than Caesarean Section</li> <li>• Blood Transfusions</li> <li>• Current use of Medication – specify</li> <li>• History of drug and food allergies</li> </ul>	<ul style="list-style-type: none"> <li>• Identify women with special health conditions and /or those at risk for developing complications and refer for higher level of care for necessary interventions</li> </ul>
<p>c. <b>Menstrual/Gynecological history:</b></p> <ul style="list-style-type: none"> <li>• Menarche</li> <li>• First day of Last menstrual period</li> <li>• Menstrual cycle</li> <li>• Menstrual problems e.g <ul style="list-style-type: none"> <li>□ Dysmenorrhoea</li> <li>□ Menorrhagia</li> <li>□ Metrorragia</li> <li>□ Polymenorrhagia</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• To determine the exact gestation by dates and aid in calculation of the expected date of delivery</li> <li>• To aid in management of labor and any abnormality like severe after pains and heavy bleeding after delivery</li> </ul>
<p>d. <b>Obstetric history:</b></p> <ul style="list-style-type: none"> <li>• Number of previous pregnancies</li> <li>• Duration of labour</li> <li>• Mode of delivery</li> </ul>	<ul style="list-style-type: none"> <li>• To identify any risk factor and prepare to act accordingly</li> </ul>

Steps	Rationale
<ul style="list-style-type: none"> <li>• Date and outcome of each event (live birth, preterm, stillborn)</li> <li>• Birth weight</li> <li>• Sex of the newborn and current status</li> <li>• Maternal complications and events in previous pregnancies, specify which pregnancy, validate by records (if possible):</li> <li>• Gynaecological operations</li> <li>• Perinatal complications and events in previous pregnancies</li> </ul>	
e. <b>FP history:</b> <ul style="list-style-type: none"> <li>• Use of FP method</li> <li>• Type of FP method</li> <li>• Duration of use</li> <li>• Any complications resulting from FP use</li> <li>• When and reasons for stopping or non-use</li> </ul>	<ul style="list-style-type: none"> <li>• To plan for family planning postnatally or after puerperium</li> </ul>
<b>Termination phase</b>	
1. Explain to the client that the information required has been obtained. However, if more is required then it will be taken during the next visit	1. Encourages the client/companion to clarify their issues of concern. Ensure continuity of the care
2. Ask the client and companion(s) if they have questions to ask	2. Ensures that the clients' issues have been clarified
3. Thank the client and companion(s) and prepare for physical examination and ante natal profile	3. Demonstrates appreciation and promotes cooperation
4. Document the findings accurately	4. For record and subsequent references
5. Wash and dry hands	5. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Comprehensiveness of history obtained	1. To determine if further history is required
2. Adequacy of history in planning interventions	2. Adequate history is required to help plan interventions

## E. Documentation

### Record:

- Full history obtained
  - Specific issues of concern to the client and companion
  - Any anxiety observed from the client or companion
  - Areas of history that require further clarification
  - Relationship between the companion and the client during interaction
- ■ ■

## 3.1-2: Physical Examination of an Antenatal Client

### **Definition:**

Systematic review of the health status of a pregnant client.

### **Purpose:**

- To confirm pregnancy, gestational age and evaluate the general health status of the client and the foetus
- Identify any abnormalities and plan for appropriate interventions

### **Indications:**

- All pregnant clients presenting to antenatal clinic

## A. Assessment

Assess	Rationale
1. If the client understands physical examination procedure	1. To determine teaching needs of the client and gain co-operation
2. Required equipment	2. To determine availability and efficiency
3. Condition of the environment	3. To determine if it is conducive, provides for privacy and safety
4. Ability of the client to comply with position changes required during the examination	4. To determine assistance and more equipment needed

## B. Planning



### **Self**

- Appropriate grooming
- Review physical examination procedure
- Wash and dry hands



### **Client**

- Greet the client, welcome her and introduce self
- Address the client by name
- Explain the procedure to the client and obtain an informed consent
- Ask the client to empty bladder before the procedure
- Assist the client to the examination room
- Assist the client onto the examination couch / bed
- Advise the client about potential discomfort or sensations prior to procedures



## Environment

A quiet private room with the following:

- Auditory privacy
- Adequate working space
- Adequate light
- A sink with running water, liquid soap and disposable hand towel
- A clean, dry, well made and comfortable examination couch/bed with clean gown on the stool beside it
- A label at the door indicating “procedure in progress”



## Requirements

- Weight and height scale
- A trolley containing:

### Top shelf;

- A tray containing physical examination equipment
  - Foetal scope/foetal Doppler
  - Bp machine, stethoscope/digital monitor, and thermometer
  - A pair of clean gloves
  - Centimeter tape measure
  - Watch with a second hand
  - Dry cotton swabs
  - A packet of sanitary towels

### Bottom shelf;

- Receivers for used items
- Antiseptic solution
- Obstetric cream

### Accessories;

- Resuscitation equipment's
- Sterile delivery pack

## C. Implementation

Steps	Rationale
1. Ask the client to void prior to the examination	1. For the client's comfort and to facilitate uterine and adnexal evaluation
2. Collect urine specimen	2. To obtain specimen for laboratory testing
3. Instruct the client to sit on the examination couch	3. Provides easy accessibility to body parts being examined
4. Wash and dry hands	4. For infection prevention and control

Steps	Rationale
<p>5. Record the client's:</p> <ul style="list-style-type: none"> <li>• Height</li> <li>• Weight</li> <li>• Temperature</li> <li>• Pulse</li> <li>• Respirations</li> <li>• Blood pressure</li> </ul>	<p>5. To obtain baseline data and identify deviations from normal and take necessary action. Contracted pelvis is more common in women with height of &lt;150cm</p>
<p>6. Perform general survey</p>	<p>6. Provides preliminary information on the state of health and guides priority sharing of health messages</p>
<p>7. Note the general stature and gait when the client is walking to the couch</p> <ul style="list-style-type: none"> <li>• Structural and physical abnormalities</li> <li>• With the client in sitting up/fowlers position Assess for mood e.g. calm, anxious, depressed, hydrated</li> <li>• Inspection of the head to neck for: general cleanliness, infections e.g. fungal infections, discharge from the nose, ears and eyes for pallor, jaundice etc. Mouth for bleeding gums, cavities etc.</li> <li>• Neck for cleanliness and palpate the thyroid gland for enlargement</li> </ul>	<p>7. To rule out other medical conditions</p>
<p>8. Instruct the client to lie on the couch on supine position with one pillow under the head</p>	<p>8. To expose anterior aspects of the client for effective examination</p>
<p>9. Cover the client and expose only the part being examined</p>	<p>9. To maintain privacy, comfort and warmth</p>
<p>10. Examine breasts (<b>Refer to procedure 3.1-3, Breast Examination</b>) and perform abdominal examination (<b>Refer to procedure 3.1-4, Abdominal Examination</b>)</p> <p><b>RE:</b></p> <ul style="list-style-type: none"> <li>• Do not check breast activeness</li> <li>• Perform vaginal examination only if there is an indication</li> </ul>	<p>10. Rule out any abnormalities and to prevent premature labour induction</p>
<p>11. Lower extremities</p> <ul style="list-style-type: none"> <li>• Expose both legs up to mid-thigh and examine for size shape and equality.</li> <li>• Inspect for color, fungal infection in between the toes, capillary refill, oedema, ulcerations and varicose veins</li> <li>• Palpate for temperature, oedema and texture</li> </ul>	<p>11. To identify anatomical deviations and rule out varicosity</p>

Steps	Rationale
<ul style="list-style-type: none"> <li>• Palpate the popliteal, dorsalis pedis and posterior tibial pulses</li> <li>• Inspect muscle size and palpate muscle tone of the legs and feet</li> <li>• Assess range of motion and strength of the hips, Knees, ankles and feet</li> <li>• Assess for clonus</li> </ul>	
12. Inguinal area <ul style="list-style-type: none"> <li>• Inspect and palpate the inguinal lymph nodes</li> <li>• Inspect for inguinal hernias</li> <li>• Palpate the femoral pulses</li> <li>• Auscultate the femoral pulses for bruits (<b>Refer to procedure 3.1.6, Performing Antenatal Profile Tests</b>)</li> </ul>	12. To rule out lymph node enlargement and presence of the pulses
13. Genitalia: <ul style="list-style-type: none"> <li>• Inspect pubic area for: hair distribution, presence of parasites, skin color and condition</li> <li>• Inspect mons pubis, vulva, clitoris, urethral meatus, vaginal introitus, sacrococcygeal area, perineum, and anal orifice</li> <li>• Palpate the labia, urethral meatus, skene's glands, vaginal introitus, and perineum</li> </ul>	13. To rule out any deformities and female genital mutilation that may likely cause obstructed/ prolonged labour and perineal tears
14. Give feedback to the client and request her to dress up	14. Encourages the client/companion to clarify their issues of concern. Ensure continuity of the care
15. Remove the gloves, wash & dry hands then remove the receptacle for dirty swabs and dispose according to waste disposal procedures	15. Prevents spread of infection and promotes safety for staff, midwife and clients
16. Clear appropriately	16. Prepare for subsequent use
17. Document the findings on the appropriate records	17. For record keeping and reference during follow up

## D. Evaluation

Evaluate	Rationale
1. That the general health and pregnancy status of the client has been ascertained	1. To aid in giving comprehensive feedback and health education
2. Whether history is consistent with findings of physical examination	2. Gives an indication for more investigations
3. If the client requires further interventions	3. For effective management

## E. Documentation

### Record:

- Assessment findings in the appropriate records
- Schedule for the next visit
- The health education provided

■ ■ ■

### 3.1-3: Breast Examination

**Definition:**

A process in which the breasts and their accessory structures are observed and palpated in assessing the presence of changes or abnormalities.

**Purpose:**

- To detect any abnormalities and take appropriate action
- Prepare for breastfeeding
- Teach the client self-breast examination (SBE)

**Indications:**

- All clients of reproductive age
- Any man with an indication
- Before starting a family planning method
- On client's request

## A. Assessment

Assess	Rationale
1. The client's readiness for the procedure	1. To alleviate anxiety and promote participation
2. Required equipment and supplies	2. For ease of access and efficiency
3. The working environment	3. For warmth, safety, privacy and comfort

## B. Planning



**Self**

- Appropriate grooming
- Review the procedure on breast examination
- Wash and dry hands



**Client**

- Explain the procedure to the client
- Provide privacy
- Plan for partner's role
- Provide an examination gown where appropriate



**Environment**

- Prepare a safe and clean working area and ensure privacy
- Ensure adequate lighting



### Requirements

- Clean and dry examination couch
- Soft pillow
- Client's record card
- Dry Cotton swabs in a gallipot
- Antiseptic solution
- Colour Coded bin

## C. Implementation

Steps	Rationale
1. Explain the procedure to the client	1. To allay anxiety and promote participation
2. Instruct the client to sit at the edge of the bed/couch	2. For ease of access
3. Close nearby window	3. To promote privacy
4. Ensure good lighting	4. For better visibility
5. Wash hands and dry	5. For infection prevention and control
6. Expose both breasts and inspect for size, shape, scars, symmetry	6. To detect any abnormalities from normal
7. Observe any obvious masses or swellings, perform breast movement by asking the client to put her hands on her sides and then hold her hips. Ask client to raise her hands over her head and drop them again as the two of you observe them	7. Rule out inflammations and early signs of breast cancer
8. Check for: discolouration, puckering dimpling/inverted/retracted nipple and nipple discharge	8. To rule out masses and adhesions or cancer
<b>Breast Palpation</b>	
9. Ask client to lie in supine	9. To allow breast to lie flat on the rib cage
10. Client to raise her hand and place it behind the neck (start from the furthest breast to the nearest)	10. Promotes effectiveness and ensures no part is left out
11. Expose the breast of the raised hand	11. To elevate tissues for easy palpation
12. Use the pads of the three middle fingers to palpate	12. To prevent accidentally missing lumps
13. Support the breast with the other hand (if necessary)	13. To immobilize and support during palpation
14. Using light, medium and firm pressure, examine breast in four segments <ul style="list-style-type: none"> <li>• From the under arm down one side of the breast to the lower bra line</li> <li>• Across the breast, to the breast bone</li> <li>• Up the other side of the breast to the collar bone</li> </ul>	14. To rule out any breast masses

Steps	Rationale
<ul style="list-style-type: none"> <li>Back across the upper half of the breast to the axilla</li> </ul>	
<p>15. Feel for any masses or lumps, or changes in breast tissue. Palpate the nipple and areola then follow the tail of the breast to the axilla and palpate for axillary nodes</p> <p><b>NB:</b> Do not squeeze the nipple of a pregnant client</p>	<p>15. To detect for any abnormalities that would warrant addition examinations and intervention</p>
<p>16. Palpate the supraclavicular and infraclavicular lymph nodes</p>	<p>16. To ensure examination of the whole breast and accessory organ</p>
<p>17. Cover the breast</p>	<p>17. To avoid over exposure, chilling and maintain the client's dignity</p>
<p>18. Repeat the procedure on the other breast while demonstrating to the client</p>	<p>18. To allow the client to do return demonstration. To facilitate involvement in decision making and intervention</p>
<p>19. Cover the breast and allow her to dress up</p>	<p>19. To avoid unnecessary exposure</p>
<p>20. Give client feedback of the examination and findings</p>	<p>20. Promote cooperation and continuity of care</p>
<p>21. Clear the equipment appropriately</p>	<p>21. To leave the environment clean and safe</p>
<p>22. Appreciate the client and share appropriate health messages</p>	<p>22-23. For accountability, record keeping, continuity of care and avoid duplication.</p>
<p>23. Document findings</p>	

## D. Evaluation

Evaluate	Rationale
<p>1. The breast condition</p>	<p>1. To plan for appropriate interventions</p>
<p>2. The client's readiness for breastfeeding</p>	<p>2. Allows preparation for breastfeeding</p>
<p>3. The client's knowledge and skills on self-breast examination</p>	<p>3. For planning appropriate interventions</p>
<p>4. Self-breast examination</p>	<p>4. To determine if further education is required</p>
<p>5. Appropriateness of the intervention</p>	<p>5. To ensure the right intervention is instituted promptly</p>

## E. Documentation

### Record:

- All data obtained
- The patient's response to the procedure
- Name and signature of the examining nurse

■ ■ ■

### 3.1-4: Abdominal Examination

**Definition:**

A process of gathering information on the status of the client's pregnancy.

**Purpose:**

- To ascertain pregnancy, foetal gestation, presentation, presenting part, lie, attitude and descent, assess foetal size, determine single versus multiple gestation and locate foetal heart tones.

**Indications:**

- All pregnant clients

## A. Assessment

Assess	Rationale
1. The client's readiness for the examination	1. To alleviate anxiety and promote cooperation
2. Required equipment and supplies	2. To determine the need and confirm availability
3. Appropriateness of the examination environment	3. To facilitate privacy and comfort

## B. Planning



**Self**

- Appropriate grooming
- Review procedure for abdominal examination
- Wash and dry hands



**Client**

- Explain the procedure to the client and the companion
- Obtain an informed consent
- Ask the client to empty the bladder



**Environment**

- Ensure privacy
- Adequate lighting and ventilation
- Adequate working space



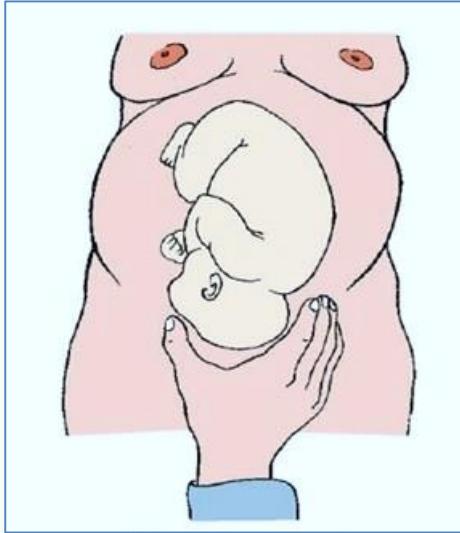
## Requirements

- Clean and dry the examination couch
- The client's record card
- Pinard foetal scope and Doppler machine
- Aqueous gel
- Non stretching tape measure
- Pillow as required
- Linen

## C. Implementation

Steps	Rationale
1. Instruct the client to assume a supine position on the examination bed/couch with her knees slightly bent	1. Relaxes the abdominal muscles, facilitating palpation of the foetal parts
2. Provide a pillow under the client's head	2. For comfort
3. Maintain privacy throughout the examination	3. Promotes comfort and dignity
<b>Inspections</b>	
1. Inspect contour, symmetry, pigmentation and color, umbilicus, scars, striae prominent linea nigra foetal movements	1. To detect deviation from normal and plan appropriate action
2. Inspect for size and shape	2. Curves and dips in the uterus may indicate foetal position
3. Auscultate bowel sounds, Bruits, venous and friction hum	3. To detect deviations from normal
<b>Palpation</b>	
1. With warm hands, palpate the abdomen using the physical landmarks of the xiphisternum, the Umbilicus and the symphysis pubis to estimate the Fundal height); Utilize the tape measure to determine fundal height	1. Warm hands help prevent tightening of the abdominal muscles and promote the client's comfort
	
<p>Figure 3.1 Assessing Fundal Height (Using A Tape Measure Photo Adapted from MCHIP Honors Word AIDS Day (2012)</p>	

Steps	Rationale
<p>2. Use Leopold's maneuver to complete abdominal examination</p> <p>a. <b>First maneuver (Fundal Palpation/grip):</b> Palpate the uterine fundus with both hands while facing the head of the client (Fig 3.2a)</p> 	<p>2.</p> <p>a. To determine the presentation. (A hard, smooth, ballotable mass at the fundus means the foetus is in breech presentation.)</p>
<p>b. <b>Second maneuver (Lateral Palpation/umbilical grip):</b> move hands to sides of the abdomen to locate the foetal back while still facing the clients head. (Fig 3.2b)</p> <p>With one hand in place to steady the uterus, use the other hand to palpate the opposite side of the uterus with firm, circular motions. Repeat the maneuver, but palpate the opposite side of the uterus to confirm findings</p>	<p>b. For ease of access of foetal heart and the lie and foetal parts</p> 
<p>c. <b>Third maneuver (Pawlak's Grip):</b> Still facing the client's head, with the thumb and fingers of one hand, gently grasp the lower portion of the abdomen just above the symphysis pubis to hold the presenting part (The part nearest the cervix). Attempt to move presenting part side to side between thumb and fingers to</p>	<p>c. To determine the degree of engagement and mobility of presenting part</p>

Steps	Rationale
<p>determine whether the part is the head (hard and smooth) or the breech (soft and irregular) and whether it is floating above the pelvis, dipping into the pelvis, or engaged (immobile) in the pelvis (Fig 3.2c)</p>	 <p>Figure 3.2c 3<sup>rd</sup> Leopold Maneuver (Adapted from Merano, n.d)</p>
<p>d. <b>Fourth maneuver (Pelvic Palpation/grip):</b> The midwife faces towards the client's feet. Place palmar surface of hands on each side of abdomen. Move hands on both sides of the uterus above the inguinal ligaments toward the symphysis pubis, palpating with fingertips for resistance on either side, to locate the cephalic prominence and degree of flexion of the foetal head. (Fig 3.2d)</p>  <p>Figure 3.2d 4<sup>th</sup> Leopold Maneuver (Adapted from Merano, n.d)</p>	<p>d. To determine the foetal attitude and descend</p> <p>The maneuver is easier to perform if you are facing the client's feet; It provides information about foetal attitude (flexion versus extension of the head) and engagement (descent of the head into the pelvis and pose of the foetus in the pelvis)</p>

Steps	Rationale
e. Palpate the liver and spleen  <b>NB:</b> Throughout the examination, ask yourself; <ul style="list-style-type: none"> <li>• What part am I feeling?</li> <li>• What is the presentation of the foetus?</li> <li>• What is the size of the foetus?</li> <li>• Is there more than one foetus?</li> </ul>	e. To determine any deviation from normal
<b>Percussion</b>	
1. Percuss the liver if applicable	1. To detect any abnormality
<b>Auscultation</b>	
1. Locate the foetal heart by placing the foetoscope or Doppler on the foetal back	1. To determine heart tones
2. Auscultate the foetal heart rate for one minute while comparing it with the maternal pulse	2. To confirm that the abdominally detected rate is that of the foetus, not the client
3. Note any deviation from normal and take appropriate action	3. Facilitates clinical judgments and appropriate interventions

## D. Evaluation

Evaluate	Rationale
1. The status of the pregnancy	1. To ensure wellbeing of the client and foetus
2. Whether history is consistent with findings of physical examination and antenatal profile	2. To validate if diagnosis is consistent with findings

## E. Documentation

### Record:

- All data obtained
- The patient's response to the procedure
- Name and signature of the examining nurse



## 3.1-5: Pelvic Examination

### Definition:

The process of examining the pelvic cavity and its organs.

### Purpose:

- To detect abnormalities of the pelvic organs
- To determine the parameters of the pelvic organs
- To collect specimens for analysis
- To treat pelvic conditions where necessary

### Indications:

- Any female client with an indication

## A. Assessment

Assess	Rationale
1. The client's readiness for the examination	1. To alleviate anxiety and gain co-operation
2. Required equipment and supplies	2. To determine availability and access
3. Condition of the examination environment	3. To determine if it is conducive, provides for privacy and safety or if preparation is required

## B. Planning



### Self

- Appropriate grooming
- Review the procedure for pelvic assessment
- Wash and dry hands



### Client

- Identify the client by name
- Explain the procedure to the client and seek consent
- Instruct her to empty her bladder



### Environment

A quiet clean and dry private room with the following;

- Auditory privacy
- Adequate working space
- Adequate light
- A sink with running water, liquid soap and disposable hand towel



### Requirements

- Sterile gloves
- Vaginal speculum
- Water-soluble lubricant
- Materials for pap smear and cultures
- Clean bed sheet
- Clean and dry Examination couch with stirrups
- Laboratory request forms
- Colour coded disposal bins

## C. Implementation

Steps	Rationale
1. Instruct the client to empty the bladder and to undress from the waist down/change into an examination gown	1. To promote comfort and ease access
2. Give the client a clean bed sheet to cover herself	2. To provide privacy and warmth
3. Explain the procedure to the client	3. To alleviate anxiety and promote cooperation
4. Instruct the client to assume lithotomy position	4. For ease of access
5. Encourage the client to remain calm and take slow deep breaths during the procedure	5. To minimize discomfort and promote relaxation
6. Ensure that the client is dry and comfortable after the procedure	6. For the patient's comfort and dignity
7. Before handling specimens, wash hands and put on gloves. Prepare specimens for transfer to the laboratory	7. To promote infection prevention
8. Instruct the client to a sitting position ensuring that she remains covered with the drape then provide privacy to dress up	8. For privacy and termination of the procedure
9. Ask the client whether she has questions before she leaves	9. To determine understanding of the procedure and interventions

## D. Evaluation

Evaluate	Rationale
1. The findings	1. To validate diagnosis for appropriate intervention
2. Appropriateness of specimen collection	2. For accurate diagnosis
3. Planned intervention	3. For appropriate and timely intervention

## E. Documentation

### Record:

- Examination findings
- Planned interventions
- Health education provided
- Areas of follow up care

■ ■ ■

## 3.1-6: Performing Antenatal Profile Tests

### Definition:

The systematic procedure of preparing the client for blood and urine tests specific to the antenatal client to gather objective data.

### Purpose:

- To assess the health status, ascertain baseline laboratory/data, identify risk factors and plan for appropriate interventions.

### Indications:

- On first contact with a prenatal client
- Any other antenatal client with specific indications

## A. Assessment

Assess	Rationale
1. The client's understanding of specimen collection procedure	1. To determine teaching needs of the client
2. Required supplies and equipment	2. To determine availability and efficiency
3. Availability of requisite facilities	3. For privacy and efficiency

## B. Planning



### Self

- Appropriate grooming
- Avail the request forms
- Review test procedures



### Client

- Explain to the client what the investigation involves and her role in accomplishing it
- Carry out appropriate pre-test counselling
- Inform the client to bring the lab results to the clinic in specified time



### Environment

A quiet private room with the following:

- Auditory privacy
- Adequate working space
- Adequate light
- Clean and dry toilet



## Requirements

- Laboratory request forms
- A sink with running water
- Liquid soap
- Hand towels
- Clean gloves
- Urine dip sticks
- Specimen bottles
- Toniquette
- Syringes and needles
- Cotton wool swabs
- Safety boxes
- Receiver for reusable items
- Bucket with disinfectant
- Laboratory test kits

## C. Implementation

Steps	Rationale
1. Complete the laboratory request forms: • <b>Urine:</b> for urine analysis • <b>Blood:</b> syphilis test, HIV, Grouping and rhesus factor, Malaria parasite, haemoglobin	1. For accuracy and follow-up of results
2. Direct the client to the right test areas	2. To ease location of facilities
3. Perform the relevant tests	3. Promotes identification of infection and facilitates planning for appropriate interventions
4. Receive and review results	4. Provides an opportunity for intervention
5. Perform appropriate post-test counseling	5. To prepare the client for the results and interventions
6. Give feedback and intervene appropriately	6. To facilitate decision making on interventions
7. Appreciate the client	7. To demonstrate appreciation and ensure the client receives required management
8. Wash and dry hands	8. For infection prevention and control
9. Document in appropriate records	9. For record keeping

## D. Evaluation

Evaluate	Rationale
1. Values of results obtained	1. To form a basis for management and health messages sharing
2. Consistency of history, physical examination and antenatal profile	2. To aid in making the correct diagnosis hence management

## E. Documentation

**Record:**

- Document all the laboratory findings on the appropriate records
- Specific concerns of the client and companion
- Areas of intervention and follow-up care
- Specific concerns of the client and companion
- Areas of intervention and follow-up care

■ ■ ■

## 3.2: Intrapartum Care

### 3.2-1: Admission of a Client in Labour

**Definition:**

A process of confining a pregnant client who is in labour in a maternity unit.

**Purpose:**

To ensure the safety of the client and foetus, plan accurately for the course of labour and birth, and promote a rewarding experience for the client and the family.

**Indications:**

- A client in labour

## A. Assessment

Assess	Rationale
1. Physiological and emotional state of client	1. To determine level of comfort to gain cooperation
2. Equipment	2. For ease of access and readiness
3. Environment	3. For privacy, comfort and safety

## B. Planning



**Self**

- Appropriate grooming
- Review procedure for admitting a client in labour
- Wash and dry hands



**Client**

- Welcome the client and her companion(s)
- Greet the client and introduce self
- Direct the client to a comfortable place to sit or lie depending on her choice
- Inquire the language the client is comfortable with
- Explain the admission procedure
- Explain your expectations
- Orientation of the client to the ward and routines
- Ask client to empty her bladder



## Environment

- Provision for privacy
- Adequate working space
- Adequate working light
- Table with seats
- Clean and dry Admission bed
- Heater
- Sink with running water, liquid soap and disposable hand towels



## Requirements

A clean trolley containing:

### Top shelf;

- Sterile vaginal examinations pack containing:
  - Cotton swabs
  - kidney dish
  - Bowl
  - Gallipot
  - Pads
  - Two (2) draping towels
  - Two (2) hand towels

### Bottom shelf;

Clean tray with:

- Antiseptic lotion in a container of warm water
- Obstetric cream or water based lubricant
- 2 pairs of sterile surgical gloves
- Sanitary pads
- Extra linen
- Three coded bin
- An observation tray containing
  - Dry cotton wool Swabs
  - A spirit container
  - Prepared vital signs tray
  - Foetal scope
  - Clean gloves
  - Urine jug for urine specimen
  - Urine dipsticks
  - File containing:
    - Admission papers,
    - Cardex,
    - Partograph
    - Baby notes

## C. Implementation

Steps	Rationale
1. Ask the client the following: <ul style="list-style-type: none"> <li>• Reasons for coming to hospital</li> <li>• When her labour pains began and how often they come</li> <li>• Whether membranes have ruptured</li> </ul>	1. For baseline data and guide further intervention
2. Explain to the client all procedures	2. To allay anxiety, and gain confidence and cooperation
3. Give an orientation to the unit	3. To create awareness of the surrounding
4. Ask the client to change into hospital gown	4. To be in appropriate clothing for ease of examination and infection prevention and control
5. Ask the client to empty the bladder	5. To ensure comfort during abdominal examination
6. Assist the client to lie onto the couch/bed on the lateral position	6. For comfort and effective perfusion
7. Take vital signs and do a quick abdominal examination	
8. Obtain history by: <ul style="list-style-type: none"> <li>• Reviewing antenatal card carefully noting all risk factors</li> <li>• Clients who did not attend antenatal clinic should be interviewed as if they were attending antenatal clinic for the first time</li> </ul> <p><b>NB:</b> If the client is in active labour, obtain the most important information and postpone the other history</p>	
9. Obtain information about labour <ul style="list-style-type: none"> <li>• Note nature of labour pains</li> <li>• Vaginal bleeding</li> <li>• Foetal movements</li> <li>• Drainage of liquor</li> <li>• Any other relevant symptoms</li> </ul>	7 - 12. For baseline data and to guide subsequent intervention
10. Perform physical examination: <i>(See procedure on Physical Examination 1.1-3)</i>	
11. Perform abdominal examination <i>(See procedure on Abdominal Examination 3.1-5)</i>	
12. Perform vaginal examination <i>(See procedure for Vaginal Examination 3.2-2)</i>	

Steps	Rationale
13. Explain findings to the client and companion and leave her comfortable in bed	13. To allay anxiety, promote involvement in care
14. Decontaminate the soiled linen and equipment	14 - 16. For infection prevention and control
15. Clean the trolley with soap and water	
16. Wash and dry hands	

## D. Evaluation

Evaluate	Rationale
1. The findings	1. To determine intervention to be planned, for accountability, record keeping, continuity of care and avoid duplication
2. Expectations during labour	2. To promote cooperation and confidence

## E. Documentation

### Record:

- Maternal and foetal findings
- Partograph if indicated

■ ■ ■

## 3.2-2: Vaginal Examination

### Definition:

A procedure performed through the vagina to assess progress of labour.

### Purpose:

- To determine the progress of labour through determination of cervical position, consistency, effacement, and dilation, foetal presentation, position, station, status of membranes and pelvic adequacy

### Indications:

- All clients in labour

### Contraindications:

- Antepartum haemorrhage
- Preterm labour with premature rapture of membranes
- Extensive vaginal warts
- Active herpes simplex

## A. Assessment

Assess	Rationale
1. Availability of required equipment	1. To ensure ease of access
2. General condition of the client	2. For baseline data
3. Genitalia for discomfort	3. Plan for measures to alleviate discomfort
4. Environment	4. For safety, appropriateness and privacy

## B. Planning



### Self

- Appropriate grooming
- Review procedure of performing a vaginal examination
- Wash and dry hands



### Client

- Greet client and introduce self
- Explain the nature and steps of the procedure
- Ask the client to empty her bladder



## Environment

- Adequate light
- Adequate working space
- Provision for privacy
- Clean, dry, and comfortable well prepared room



## Requirements

A clean trolley with;

### Top shelf;

- Sterile vaginal examinations pack containing;
  - A bowl
  - A gallipot
  - Cotton wool swabs
  - Sterile pads
  - Four draping towels

### Bottom shelf;

- Two Pairs of sterile gloves
- Lubricant -Obstetric cream
- Container with disinfectant for used equipment
- Extra sterile cotton swab
- Antiseptic lotion dipped in a bucket of warm water.
- Receiver for used swabs

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. For infection prevention and control
2. Place the sterile vaginal pack on the top shelf and Complete setting the trolley with the equipment stated above	2. In readiness for the procedure
3. Wheel the trolley next to the couch	3. For ease of access
4. Screen the bed/couch	4. To promote privacy
5. Inform the client on every step being done and describe the sensations to expect	5. To reduce anxiety and facilitate cooperation
6. Perform abdominal palpation	6. For comparison of the findings with those of vaginal examination
7. Position the client in lithotomy and drape her appropriately	7. Enhance comfort, privacy and access
8. Instruct your assistant to open the top flap of sterile pack taking care not to contaminate it	8. For infection prevention and control

Steps	Rationale
9. Instruct the assistant to pour the lotion and lubricant respectively in the bowl and gallipot taking care not to contaminate sterile field	9. To determine the appropriate intervention
10. Inspect the vulva for any discharge, scars, lesions, inflammation and smell	
11. Wet the cotton swabs in the antiseptic solution, squeeze excess solution, place them on the dominant hand	
12. Drop the first four swabs, one swab at a time into the non-dominant hand	10 - 13. For infection prevention and control
13. Using the non-dominant hand, swab the following four areas with a single downward stroke using each swab in this order: furthest labia majora, nearest labia majora, furthest labia minora, nearest labia minora	
14. With the last swab in the dominant hand, retract the labia using your index and thumb of your non-dominant hand and swab the vestibule with the dominant hand	14 - 16. To reduce discomfort and easy access to the cervix
15. Lubricate the index and middle finger of the dominant hand	
16. Instruct the client to relax and to begin slow, rhythmic breathing	
17. Again retract the labia using your index and thumb of your non-dominant hand and then gently insert the index and middle finger into the vagina while examining from the vaginal walls to the cervix, presenting part and pelvic adequacy. Ensure your thumb is kept away from the clitoris.	
<p><b>NB:</b> Do not remove fingers until you have completed the examination to reduce infections and discomfort</p>	17 - 18. To obtain baseline data to guide intervention Prevents transfer of microorganisms to the client
18. Assess the following parameters: <ul style="list-style-type: none"> <li>• Cervical position</li> <li>• Cervical consistency</li> <li>• Cervical effacement</li> <li>• Cervical dilatation</li> <li>• Presenting part</li> <li>• Foetal position as determined by the foetal suture lines and position of the fontanelle (in cephalic presentations) in relation to the maternal pelvis</li> </ul>	

Steps	Rationale
<ul style="list-style-type: none"> <li>• Foetal station as determined by the presenting part in relation to the ischial spines of the pelvis</li> <li>• Status of membranes</li> <li>• Pelvic adequacy</li> </ul>	
19. Determine dilatation as follows: <ul style="list-style-type: none"> <li>• Insert fingers into the cervix; determine the internal os, of the cervix by curling tip of index finger over upper edge of cervix.</li> <li>• Without stretching estimate the cervical dilation</li> </ul>	
20. Determine the position of the foetal head: <ul style="list-style-type: none"> <li>• Locate the posterior fontanelle by gently palpating the foetal head. Distinguish the posterior fontanelle which is triangle shaped, from the anterior fontanelle which is diamond shaped</li> <li>• Determine the relationship of the posterior fontanelle to the maternal pubic bone. If posterior fontanelle is located just under the maternal pubic bone, the foetal position is anterior. If the posterior fontanelle is located toward the back of the maternal pelvis, the foetal position is posterior</li> </ul>	19 - 20. To obtain baseline data to guide intervention Prevents transfer of microorganisms to the client
21. <b>Pelvic adequacy:</b> Where necessary perform assessment of pelvic adequacy in the following order: <ul style="list-style-type: none"> <li>• Try to tip the sacropromontory</li> <li>• Feel the curve of the sacrum</li> <li>• Feel the mobility of the coccyx</li> <li>• Your fingers to the sides and feel the ischial spines</li> <li>• Turn the upwards towards the subpubic angle and estimate the angle</li> <li>• After removing your fingers from the vagina, fold your examining hand and estimate the intertuberous diameter using your four knuckles</li> </ul>	21. To determine pelvic diameters and rule out deviation from normal
22. Remove the fingers from the vagina and inspect them for discharge colour, amount and smell	22. To rule out infections
23. Remove the draping towels, place a clean pad and help the client to a suitable position and dry her	23. To terminate the procedure and restore comfort and dignity
24. Explain the examination findings to the client and her companion	24. To promote decision making and involvement in intervention

<b>Steps</b>	<b>Rationale</b>
25. Remove the gloves and wash your hands	25. For infection prevention and control
26. Clear the equipment clean and store the trolley	26. For preparation for the next procedure
27. Record the findings	27. For subsequent references and action

## D. Evaluation

<b>Evaluate</b>	<b>Rationale</b>
1. Labour progress 2. If findings were within the expected range	1 – 2. To plan for intervention

## E. Documentation

### Record:

- Findings as follows:
  - Vaginal examination
  - Abdominal examination
  - Foetal status
  - Maternal status
- Record labour progress as indicated in the partograph



## 3.2-3: Monitoring Labour using a Partograph

### **Definition:**

A process of assessing the progress of labour using a graphic record containing relevant details of the client and the foetus.

### **Purpose:**

- To monitor progress of labour for appropriate intervention

### **Indications:**

- All clients in active labour

## A. Assessment

Assess	Rationale
1. Onset of active labour	1. To determine if the client meets the criteria for commencement of partograph and mode of care
2. The client's understanding of frequent monitoring	2. Allays anxiety and facilitates cooperation
3. Availability of the partograph	3. To monitor labor progress

## B. Planning



### **Self**

- Appropriate grooming
- Review guidelines on use of partograph
- Wash and dry hands
- Assemble and arrange the requirements



### **Client**

- Explain to the client and companion importance of frequent monitoring, recording and what is expected of them



### **Environment**

- Adequate lighting
- Adequate working space



## Requirements

- Kenyan Modified Partograph (*See Annex 1*)
- Pens of different colours
- Second hand watch

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. For infection prevention and control
2. Record the client's information on the partograph: <ul style="list-style-type: none"> <li>• Full name</li> <li>• Registration/file number</li> <li>• Age</li> <li>• Gravidity</li> <li>• Parity</li> <li>• Date and time of admission</li> </ul>	2. For positive identification of the client and baseline data
3. Time elapsed since rupture of membranes	3. To institute appropriate intervention
4. Take and record foetal heart rate every half hour (plotted as a dot) in line with the cervical dilatation, always join the dots with a straight line	4. To monitor the status of the foetus and help in instituting appropriate interventions
5. At each vaginal examination ( <i>Refer to procedure 3.2-2, Vaginal Examination</i> ) describe and record the state of membranes and or liquor as follows: <ul style="list-style-type: none"> <li>• <b>I</b> – Intact membranes</li> <li>• <b>R</b> – Membranes ruptured</li> <li>• <b>C</b> – Membranes rupture, clear fluid</li> <li>• <b>M</b> – Meconium stained fluid</li> <li>• <b>B</b> – Blood stained fluid</li> <li>• <b>ARM</b> – Artificial rupture of membranes</li> </ul>	5. For baseline data to institute intervention and to identify signs of foetal distress for prompt intervention
6. Record the degree of moulding as follows: <ul style="list-style-type: none"> <li>• <b>'0'</b> – if the bones are separated, sutures felt easily</li> <li>• <b>+</b> Sutures apposed</li> <li>• <b>++</b> Sutures overlapped but reducible</li> <li>• <b>+++</b> Sutures overlapped and not reducible</li> </ul>	6. To determine the adequacy of the pelvis and institute corrective interventions
7. <b>Cervical dilatation</b> <ul style="list-style-type: none"> <li>• Assessed at every vaginal examination and marked with a cross "X"</li> </ul>	7. To monitor labor progress and effacement

Steps	Rationale
<ul style="list-style-type: none"> <li>Begin plotting on the partograph at 4 cm dilatation and above with regular painful contractions</li> <li>Chart the dilatation on the alert line; write the time directly under the X in the space for time</li> </ul>	
8. <b>Descent:</b> Assessed by abdominal palpation Plotted as "O" and measured in fifths: <ul style="list-style-type: none"> <li>5/5 head completely above the pelvic brim</li> <li>4/5 sinciput high, occiput easily felt</li> <li>3/5 sinciput easily felt, occiput felt.</li> <li>2/5 sinciput felt, occiput just felt</li> <li>1/5 sinciput felt, occiput not felt</li> <li>0/5 no palpable foetal head</li> </ul>	8. To ascertain the descent of the presenting part into the pelvic brim
9. <b>Hours:</b> Record the time that has elapsed since the onset of active phase of labour	9. To monitor labor progress and need for additional interventions from the nurse
10. <b>Time:</b> Record time of admission as zero time. The actual hour of the day is recorded below the hour time	10. To calculate average duration of labor
11. <b>Contractions:</b> Record the frequency and duration of contractions every half hourly (frequency of contractions is the number of contractions felt over a ten-minute period and duration is the time a contraction lasts and is measured in seconds). <p>Chart contractions as follows:</p> <ul style="list-style-type: none"> <li>Less than 20 seconds </li> <li>Between 20-40 </li> <li>More than 40 Seconds </li> </ul>	11. To determine the efficacy of the contraction in relation to the expulsion of the foetus
12. <b>Oxytocin:</b> Record the amount per volume of I.V fluids (e.g. 2.5 I.U per 500mls saline or use of pumps) Record the rate in drops per minute every 30 minutes	12. To augment labor, monitor effectiveness and adverse reactions
13. Record any additional drugs and I.V fluids given in the space provided as appropriate	13. To prevent medication errors and overdose
14. Vital signs <ul style="list-style-type: none"> <li>Take and record the maternal pulse every 30 minutes and mark with a dot (•)</li> </ul>	14. To monitor maternal progress and coping, and to guide intervention

Steps	Rationale
<ul style="list-style-type: none"> <li>• Take and record the maternal blood pressure every four hours and indicate with arrows↑↓</li> <li>• Take and record the actual maternal temperature every four hours</li> </ul>	
<p>15. Encourage the client to pass urine every two hours and test for protein and acetone, note the volume and record the findings</p> <p><b>NB:</b> Whenever you chart the partograph, review the whole partograph, take note of all the parameters, analyze, interpret and take the appropriate action</p>	<p>15. To enhance descent, comfort, prevent bladder injury and aid intervention</p>
<p>16. At the end of the fourth stage of labour, record the summary of labour on the partograph. Remember to write your name in the space provided</p>	<p>16. For record keeping, continuity of care and accountability by midwife</p>

## D. Evaluation

Evaluate	Rationale
1. The Findings 2. The accuracy of plotting on the partograph	1 - 2. To validate diagnosis and aid in planning intervention
3. Interventions	3. To ascertain the effectiveness of intervention

## E. Documentation

### Record:

- Findings
- Interventions

■ ■ ■

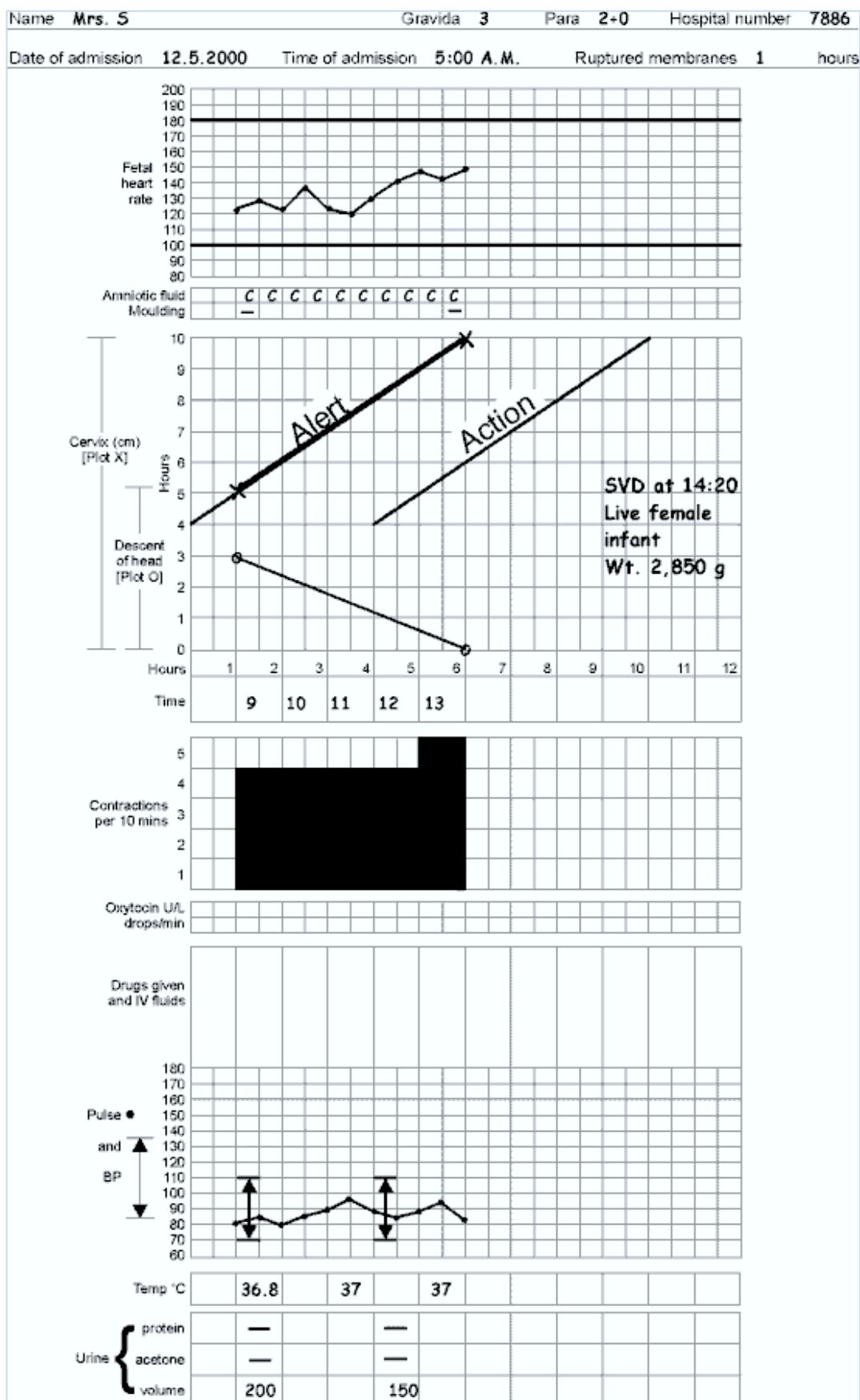


Figure 3.3 Partograph

## 3.2-4: Care of a Client/ Patient with Antepartum Haemorrhage

### **Definition:**

It is vaginal bleeding occurring after twenty weeks gestation and before the delivery of the newborn.

### **Purpose:**

- To prevent bleeding
- To prolong pregnancy until term
- Prevent further complication to the client and newborn/foetus

**Refer to the current national guidelines on management of antepartum haemorrhage**



## 3.2-5: Care during Second Stage of Labour

### Definition:

This is the care given from the time the cervix is fully dilated until the baby is born.

### Purpose:

- To assist and support the birth process and ensure optimal outcomes of newborn and the client which promotes positive experience

### Indications:

- All pregnant client at full dilatation of the cervix

## A. Assessment

Assess	Rationale
1. The signs of second stage	1. To aid in institution of appropriate intervention
2. Availability of the required equipment and if assistance is needed	2. Ensure appropriateness and efficiency during the procedure
3. Safety, warmth and privacy of the environment	3. To ensure a conducive and safe birth environment for the client, companion and newborn
4. The condition of the foetus	4. Identifies immediate measures to be taken during the delivery process
5. The client's confidence	5. Facilitates maximum cooperation during birth

## B. Planning



### Self

- Appropriate grooming
- Empty bladder
- Review guidelines on care during second stage of labour
- Wash and dry hands
- Ensure availability of an assistant
- Wear protective gear
- Open the delivery pack and arrange the equipment appropriately for ease of accessibility and use during the procedure



## Client

- Explain to the client what is expected of her during second stage and rehearse pushing techniques with her
- Support the chosen birth companion



## Environment

- Adequate working space
- Adequate lighting
- Clean and warm room
- Clean, dry and make the delivery couch comfortable



## Requirements

A delivery trolley with;

### Top shelf;

- Sterile delivery pack with
  - 1 gown
  - 2 hand towels
  - 1 gallipot
  - 6 draping towels
  - 1 pair of episiotomy scissors
  - 2 pairs of scissors one for cutting the cord during delivery and one for shortening the newborn's cord
  - 2 artery forceps
  - 2 perineal pads – 1 for supporting the perineum for the client
  - 2 cord ligatures or cord clamps
  - 2 kidney dishes – 1 for equipment 1 for receiving the placenta
  - 1 medium bowl for lotion
  - Cotton wool swabs (at least 10)
  - Gauze swabs (at least 10)
  - Placenta basin

### Bottom shelf;

- Tray with:
  - Syringes of different sizes
  - Needles
  - Cotton swabs
  - Sutures
  - Perineal prep set
  - Spirit in a container
  - Foetoscope and doppler
  - Lignocaine hydrochloride 0.5%, 1%
  - Sterile gloves
  - Antiseptic solution
  - Obstetric cream
  - Oxytocin in a fridge easily accessible
  - Infant identification band

**Accessories;**

- Suction machine and bulb sucker
- Oxygen
- Vacuum extractor
- Radiant heated infant warmer
- Resuscitation tray for the client and the newborn
- Postpartum haemorrhage Kit
- Extra linen
- Additional light source if needed for good visibility
- Decontaminant
- Colour coded bins
- Glasses or goggles
- Plastic apron
- Weighing scale
- Gumboots
- Cap
- Mask

**C. Implementation**

<b>Steps</b>	<b>Rationale</b>
1. Confirm 2nd stage of labour (full dilatation of the cervix)	1. To prepare for the delivery of the baby
2. Recognize the presumptive signs of second stage: <ul style="list-style-type: none"> <li>• Steady descent of foetus through birth canal</li> <li>• Onset of expulsive (pushing) phase</li> <li>• Contractions increase in frequency and duration</li> <li>• Client may vomit</li> <li>• The perineum bulges and the skin becomes tense and glistening</li> <li>• The anus may gape</li> </ul>	2. To ascertain onset of second stage of labor
3. Inform the client that she is ready to deliver and remind her of her role and that of the companion during and after a contraction	3. To allay anxiety and assist the mother to cooperate and participate in the process of delivery
4. Allow the client to assume a position of her choice during the procedure	4. For cooperation and comfort
5. Wash hands and wear protective gear	5. For infection prevention and control
6. Encourage the client to push with every contraction without holding the breath continuously and rest in between contractions	6. To aid descent, reduce exhaustion and improve perfusion
7. Encourage the client to sip drink(s) of her choice in between contractions	7. To prevent dehydration and enhanced energy
8. Instruct the assistant to: <ul style="list-style-type: none"> <li>• Check foetal heart rate after every contraction,</li> </ul>	8. Ascertain foetal and maternal wellbeing, institute appropriate interventions and enhance comfort

Steps	Rationale
<ul style="list-style-type: none"> <li>• Check maternal pulse every 10 minutes,</li> <li>• Wipe sweat from the client's face (If birth companion is present she/he can assist in wiping sweat.)</li> </ul>	
9. Once the client is in the expulsive phase of the second stage, encourage the client to assume the position she prefers and bear down	9. To enhance comfort and descend
10. Wet the cotton swabs in the antiseptic solution, squeeze excess solution, and place them on the dominant hand	10. To prepare for cleaning of the mother
11. Drop the first four swabs, one swab at a time into the non-dominant hand	11. Infection prevention and control
12. Using the non-dominant hand, swab the following four areas with a single downward stroke using each swab in this order: furthest labia majora, nearest labia majora, furthest labia minora, nearest labia minora	12. Prevents cross infection; for hygienic purposes
13. With the last swab in the dominant hand, retract the labia using your index and thumb of your non-dominant hand and swab the vestibule with the dominant hand	13. For infection prevention and control
14. Drape the client starting with the nearest thigh, abdomen, furthest thigh and the bottoms incase the client is in a supine position	14. For privacy and dignity
15. Encourage the client to bear down with every contraction without holding the breath continuously until the newborn's head delivers	15. To aid in descend, prevent exhaustion and enhance perfusion
16. When the head is crowning (when the head is not receding in between contractions) and the vaginal outlet is stretched, instruct the client to stop pushing and commence the required breathing technique (shallow pants or blows)	16. To maintain flexion and to prevent forceful expulsion and injury
17. Place palm of the non-dominant hand on the foetal head to keep it flexed (bent) and prevent expulsion.  <b>NB:</b> It is important that the foetal head is only controlled and not held back	17. To prevent injury from accidental falls
18. Keep observing the perineum to detect early signs of an impending tear and consider an episiotomy	

Steps	Rationale
19. If an episiotomy is required, infiltrate with local anesthesia, wait until the perineum is thinned out then perform the episiotomy	18 - 20. To eliminate pain and widen the passage and prevent unnecessary perineum tissue damage
20. Continue to gently support the perineum as the newborn's head is delivered	
21. Once the newborn's head is delivered, ask the client to relax and stop pushing	21. To allow for restitution of the head and rotation of the shoulder
22. Using dry and sterile gauze, wipe the mouth then the nose of the newborn. In case of suspected meconium aspiration, suction the mouth then the nose using the necessary equipment	22. To clear the airway
23. Check for cord around the neck and determine its tightness. If the cord is round the neck and loose, slip it over the head. If extremely tight, clamp it using two artery forceps and cut in between before unwinding it from around the neck ( <b>caution: CUTTING SHOULD ONLY BE THE LAST RESORT</b> )	23. To prevent compression of the cord blood vessels or strangulation of the baby
24. Wait for restitution of the head then support the head at the parietal bones using the palms of your hands	24. To aid in delivery of the shoulders
25. Deliver the anterior shoulder by applying a slight downwards traction, then the posterior shoulder by an upward traction, then support the rest of the body with one hand as it slides out	25. To facilitate the delivery of the baby and prevent injury
26. Note and shout time of birth	26. To determine the time of birth
27. Place the newborn on a towel on the client's abdomen. Dry the newborn appropriately, wipe the eyes and assess the newborn's airway while conducting APGAR score	27. To maintain warmth and promote bonding
28. Palpate the abdomen and confirm absence of the second twin	28. To rule out the presence of a second twin
29. Inform your assistant to administer 10 iu of oxytocin Intramuscularly within one minute of birth of the baby	29. To aid in the contraction of the uterus
30. Change the wet towels and place the newborn on skin to skin contact and cover with a clean warm towel while assessing the APGAR score	30. To prevent hypothermia, encourage bonding and institute appropriate interventions

Steps	Rationale
<p><b>NB:</b></p> <ul style="list-style-type: none"> <li>a. Most babies begin crying or breathing spontaneously within 30 seconds of birth;</li> <li>b. If the newborn is crying or breathing i.e. chest rising at least 30 times per minute, leave the newborn with the client</li> <li>c. If the newborn does not start breathing within 30 seconds, <b>call for help</b> and take steps to resuscitate the newborn. (<i>See procedure on Resuscitation of a Newborn 3.4-2</i>)</li> </ul>	
<p>31. Clamp and cut the cord at 3 and 5 cm from the umbilicus</p> <p><b>NB:</b> The companion can be allowed to cut the cord once clamped. In this case, hold the cord and show the companion where to cut</p>	<p>31. To separate the baby from the placenta leaving appropriate length to aid in clamping</p>
<p>32. Show the client and her companion their newborn and let them identify the sex and congratulate the client</p>	<p>32. To correctly identify the sex of the baby, allay anxiety, and commend her efforts</p>
<p>33. Instruct your assistant to ensure the newborn is kept warm, maintain skin-to-skin contact on the client's chest and initiate breastfeeding depending on the client's choice.</p> <p><b>NB:</b> the assistant should assess APGAR score at 5 and 10 minutes; observe the newborn for signs of readiness to breastfeed and ensure initiation of breastfeeding immediately and not beyond the first 30 minutes of birth; and ensure that the newborn remains with the client for the first hour of birth. Examination of the newborn (including weighing) should be done after the first hour of birth</p>	<p>33. To maintain warmth, promote bonding, and nourish the baby</p>
<p>34. Proceed with the other steps of active management of the third stage of labour which includes:</p> <ul style="list-style-type: none"> <li>a. Controlled cord traction</li> <li>b. Uterine massage</li> </ul> <p>(<i>See procedure on Management of Third Stage of Labour 3.2-6</i>)</p>	<p>34. To ensure safety of both the baby and the mother</p>

## D. Evaluation

Evaluate	Rationale
1. Outcome of labour	
2. Maternal and foetal condition	
3. Partograph	1 - 3. To determine the need for intervention. For accountability, record keeping, continuity of care and avoid duplication

## E. Documentation

**Record:**

- Duration of second and third stage
- Any drugs administered
- State of the perineum
- Estimated blood loss
- Progress during 2nd stage of labour
- Mode of delivery
- Condition of the newborn and the client
- Initiation of breastfeeding



## 3.2-6: Management of Third Stage of Labour

### **Definition:**

A combination of interventions that facilitate delivery of the placenta and subsequent contraction of the uterus after birth of the newborn.

### **Purpose:**

- To deliver the placenta and membranes and prevent postpartum hemorrhage

### **Indications:**

- All clients in third stage of labour

## A. Assessment

Assess	Rationale
1. Whether 10 iu of oxytocin has been administered	1. To aid in uterine contraction
2. Availability of required equipment	2. For ease of access
3. The client's understanding of the procedure	3. To gain cooperation
4. Comfort of the client and the newborn during the procedure	4. To gauge the success of the process
5. Environment	5. To determine safety, appropriateness and privacy

## B. Planning



### **Self**

- Appropriate grooming
- Review the procedure on active management of third stage of labour
- Wash and dry hands and put on sterile gloves
- Assemble and arrange the required equipment



### **Client**

- Explain the procedure to the client



### **Environment**

- Adequate working space
- Adequate light
- Provision for privacy

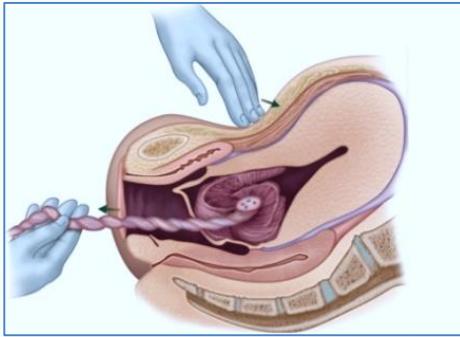
- Close nearby windows

■ ■ ■

### Requirements

- Sterile pack used during 2nd stage of labour (**Refer to procedure 3.2-5, Care during the 2<sup>nd</sup> Stage of Labour**)
- A calibrated jug
- Sterile gloves

## C. Implementation

Steps	Rationale
1. Wash and dry hands and put on two pairs of sterile gloves	1. For infection prevention and control
2. Clamp the cord close to the perineum using sponge forceps	2. To secure the cord and prevent bleeding.
3. Palpate the abdomen to confirm contraction of the uterus	3. To prevent inversion of the uterus during delivery of the placenta
4. Place the other hand just above the client's pubic	4. To stabilize the uterus by applying counter traction during controlled cord traction
5. Keep slight tension on the cord and await for a strong uterine contraction (two to three minutes after administration of oxytocin)	5. To safely deliver the placenta
6. Using controlled cord traction, apply persistent downward cord traction using the dominant hand while applying counter traction on the uterus using the non-dominant hand and observe descent of the placenta. Traction should be done only during a contraction. (See Fig 3.4)	6. To prevent uterine inversion and ensure delivery of a complete placenta
	
<p>Figure 3.4 Delivery of the Placenta; Controlled Cord Traction (Adapted from Posner, G.D., et al, 2013)</p>	
7. If the placenta is not delivered with the first contraction, gently hold the cord and wait for the next uterine	7 - 9. Helps prevent tearing off the thin membranes

Steps	Rationale
contraction and repeat controlled cord traction	
8. Using the sponge forceps, keep clamping the cord closer to the perineum as it lengthens 9. Hold the placenta with two hands as the placenta is delivered and turn the placenta anticlockwise motion to twist the membranes as you pull slowly until they are completely delivered	
10. Immediately massage the uterus above the client's abdomen in a cycle culminating in a 'cupping hold' of the uterus into the pelvis and repeat for at least three times until the uterus is well contracted and clots are expelled	10. To aid in uterine contraction
11. Perform a quick examination of the placenta and membranes (for at most 30 seconds) for completeness and set it aside for a later detailed examination (see procedure of examination of the placenta)  <b>NB:</b> In case uterine inversion occurs, reposition the uterus using the guidelines	11. To ascertain the completeness of the placenta, cord and membranes
12. Change gloves and swab the perineum in reverse technique i.e Clean the vulva systematically starting with the vestibule, the labia minora and then the labia majora	12. For infection prevention and control
13. a. Roll a gauze round the first two fingers of the dominant hand while the first two fingers of the opposite hand support the upper vaginal wall. b. Gently insert the fingers of the dominant hand into the vagina and inspect the birth canal.	13. a. To minimize trauma  b. To determine the presence of trauma to the birth canal.
14. If tears, laceration or episiotomy are present pack as you prepare to stitch	14. To compress blood vessels to prevent bleeding
15. Put a sterile pad and clean the thighs	15. For comfort, infection prevention and control
16. Assist and teach the client and birth companion to massage the uterus every 15 minutes for the first two hours and Ensure that the uterus does not	16. To maintain a contracted uterus to reduce bleeding

Steps	Rationale
become relaxed (soft) after you stop uterine massage	
17. Instruct your assistant to take vital signs of the client, observe excessive bleeding and report  <b>NB:</b> Understand the cultural beliefs and practices for disposal of the placenta	17. To monitor the mother post delivery
<b>Examination of the Placenta</b>	
1. Spread the placenta on a flat surface	1. Facilitates examination of the placenta
2. Examine the blood vessels, length of the cord, type of cord insertion, distribution of blood vessels, state of the chorion and amnion, the state of the cotyledons	2. Determines completeness and condition of the placenta and rules out any abnormalities of the placenta
3. Weigh the placenta	3. Determine whether its weight is 1/6 of newborn's weight
4. Estimate blood loss correctly  <b>NB:</b> Consider blood on the linen, floor and collected then correlate with the client's vital signs	4. To institute the appropriate intervention
5. Decontaminate used equipment and soiled linen	5 - 7. For infection prevention and control
6. Clean the trolley with soap and water and disinfect	
7. Oversee the clearing of the coded bin  <b>NB:</b> Continue with management of 4 <sup>th</sup> stage of labour	

## D. Evaluation

Evaluate	Rationale
1. Blood loss	1. To institute appropriate intervention
2. State of placenta/membranes	2. To detect deviation from normal and completeness
3. Asepsis observed throughout the delivery process	3. For infection prevention and control
4. The state of the uterus	4 - 5. To determine the contraction of the uterus
5. Haemostasis is achieved	

## E. Documentation

### Record:

- Document delivery of the placenta in the delivery notes, complete the partograph
- Complete the newborn notes and fill the notification form
- Report any abnormalities

■ ■ ■

## 3.2-7: Manual Removal of Placenta

### Definition:

Manual placenta removal is the evacuation of the placenta from the uterus by hand under anaesthesia or rarely, under sedation and analgesia.

### Purpose:

- To evacuate the uterus to prevent postpartum hemorrhage

### Indications:

- Retained placenta

## A. Assessment

Assess	Rationale
1. The client's status and readiness for the procedure	1. To gain co-operation
2. Required equipment and medication	2. For ease of access and efficiency
3. Condition of the environment	3. For privacy and safety

## B. Planning



### Self

- Appropriate grooming
- Review the procedure on manual removal of placenta
- Inform theatre to be prepared in case of failure
- Be ready to abandon procedure in case of failure
- Wash and dry hands
- Wear protective gear



### Client

- Address the client by name
- Introduce self
- Explain the procedure to the client and get verbal consent
- Ask the client to empty the bladder before the procedure or catheterize if necessary
- Assist the client onto the examination couch /bed
- Advise the client about potential discomfort or sensations prior to procedures
- Administer analgesia



## Environment

- A quiet private room with the following:
  - Auditory privacy
  - Adequate working space
  - Adequate light
  - A sink with running water, liquid soap and disposable hand towel
  - A well-made and comfortable examination couch/bed with clean gown on the stool beside it
- A label at the door indicating procedure in progress



## Requirements

### Top shelf;

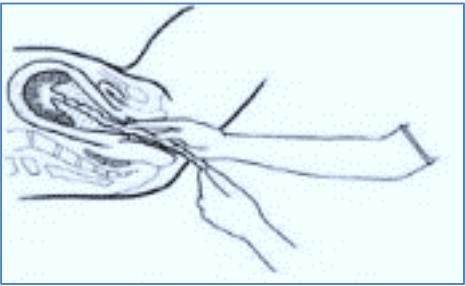
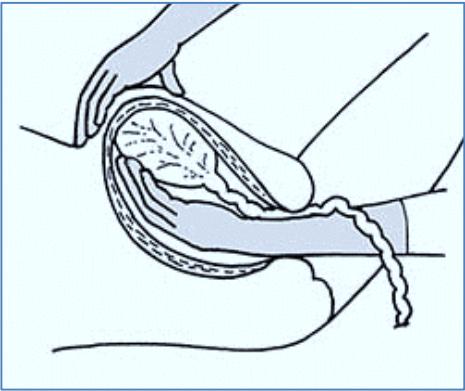
- A tray containing
  - Sterile gynecological gloves
  - Sterile dry swabs in a gallipot
  - Sterile gauze
  - A pack of sterile sanitary towels

### Bottom shelf;

- Receivers for used items
- Antiseptic solution and obstetric cream
- Foley's catheter
- Postpartum

## C. Implementation

Steps	Rationale
1. Ask the client to void or catheterize if necessary	1. To aid contraction of uterus
2. Commence Normal saline IV fluids using a wide bore cannula	2. To secure access for institution of appropriate intervention
3. Administer appropriate analgesia	3. To control pain
4. Give prophylactic antibiotics	4. To prevent sepsis
5. Place a gloved hand into the uterus, with the other hand externally placed on the fundus of the uterus to support the fundus	5. To stabilize the uterus
6. Follow the umbilical cord to find the edge of placenta. (Fig 3.5)	6. To guide in locating the attachment area
7. Slide the hand and identify the cleavage between the placenta and the uterine wall and ease the placenta away with a gentle peeling action using the edge of the hand (If the placenta does not detach easily, suspect placenta accreta. The use of	7. To ease the detachment and aid in complete evacuation of the placenta

Steps	Rationale
<p>excess force in such a case can result in life-threatening hemorrhage or uterine trauma – hysterectomy is often required) (Fig 3.6)</p> 	
<p>Figure 3.5 Manual Removal of Placenta (Adapted from WHO, 2003)</p>	<p>Figure 3.6 Manual Detachment of Placenta (Adapted from WHO, 2003)</p>
<p>8. When the placenta is fully detached, control the fundus with one hand while cupping and extracting the placenta and membrane with the other hand, which will still be in the uterine cavity</p>	<p>8. To prevent uterine inversion</p>
<p>9. Explore the uterine cavity</p>	<p>9. To ascertain complete evacuation</p>
<p>10. Examine the placenta (<b>Refer to procedure 3.2-8, Examination of Placenta</b>)</p>	<p>10. To determine deviation from normal</p>
<p>11. Give parenteral oxytocics where necessary</p>	<p>11. To aid in contraction of the uterus</p>
<p>12. Ask an assistant to massage the fundus of the uterus</p>	<p>12. To stimulate the contractions and prevent bleeding</p>

## D. Evaluation

Evaluate	Rationale
<p>1. If the placenta has been completely removed</p>	<p>1. To prevent postpartum hemorrhage</p>
<p>2. If the placenta is complete</p>	<p>2. To be sure no lobes or membranes were retained</p>
<p>3. If the client is bleeding</p>	<p>3. To institute necessary intervention</p>

## E. Documentation

### Record:

- Document the procedure on the patient's file
  - Document the medication used
  - Vital observations
  - State of the placenta and estimated blood loss
- ■ ■

## 3.2-8: Examination of Placenta

### Definition:

Examination of the placenta is the process of inspecting the state of the placenta and the membranes.

### Purpose:

- To determine completeness of the placenta
- To detect any abnormalities

### Indications:

- All placentas immediately after birth

## A. Assessment

Assess	Rationale
1. The client's understanding of the procedure and her willingness to observe it	1. To gain co-operation
2. Required equipment	2. For ease of access
3. Condition of the environment	3. For privacy, safety and comfort

## B. Planning



### Self

- Appropriate grooming
- Review the procedure on examination of the placenta
- Wear protective gear



### Client

- Explain the procedure to the client and ask if she wants to observe it



### Environment

- A quiet private room with the following;
  - Adequate working space
  - Adequate light
  - A sink with running water, liquid soap and disposable hand towel



## Requirements

### Top shelf;

- A tray containing the placenta

### Bottom shelf;

- Receivers for used items
- Gauze
- Gloves

## C. Implementation

Steps	Rationale
1. Place the placenta with the foetal surface uppermost noting shape, size, colour and smell	1. For easy visualization
2. Examine the cord noting the length insertion point and presence of true knots or false knots	2. To determine deviation from normal
3. Inspect the umbilical cord vessels at the cut end and count them	3. To determine completion, detect abnormalities
4. Observe the foetal side for irregularities such as succenturiate lobes, missing cotyledons, fatty deposits or infarction	4. To ascertain need for interventions
5. By lifting the cord and holding the placenta up, you can then observe the membranes and inspect for completeness. <ul style="list-style-type: none"> <li>• There should be a single hole present where the newborn has passed through the membranes</li> <li>• Return the placenta to the surface and spread the membranes out in order to look for extra vessels, lobes, or holes in the surface</li> </ul>	5. To ensure no parts were left in the uterus
6. Separate the amnion from the chorion by pulling the amnion back over the base of the umbilical cord to ensure both are present	6. To verify their continuity and completion
7. Turn the placenta over to inspect the maternal side	7. For calcification and other indicators of reduced perfusion in utero
8. Examine the cotyledons, note presence of infarcts, blood clots or calcification	8. For completeness
9. Take cord blood samples if required	9. For laboratory evaluation and testing
10. Weigh the placenta swab or take samples if indicated	10. To determine maternal nutrition during pregnancy

Steps	Rationale
11. Clean away the equipment and dispose the placenta appropriately	
12. Wash hands	11 - 13. For infection prevention and control
13. Explain the findings to the client	

## D. Evaluation

Evaluate	Rationale
1. The placenta, cord and membranes	1. To determine deviations from normal
2. Interventions implemented	2. To ascertain the effectiveness of planned actions

## E. Documentation

### Record:

- Document findings on the cord, membranes and the placenta
- Interventions planned

■ ■ ■

## 3.2-9: Epidural Care of the Client following Epidural Anaesthesia during Labour

### **Definition:**

Care of the client who has undergone administration of opioids and/or local anaesthetics into the epidural space during labour.

### **Purpose:**

- To maintain analgesia during labour
- To prevent complications

### **Indications:**

- All clients who have undergone epidural anaesthesia during labour

## A. Assessment

Assess	Rationale
1. The client's status and readiness for the procedure	1. To gain co-operation of the client
2. Required equipment and medication	2. For ease of access
3. Condition of the environment	3. For privacy, safety and comfort

## B. Planning



### **Self**

- Appropriate grooming
- Review guidelines for epidural care
- Review the anaesthetic and obstetric prescriptions
- Wash and dry hands



### **Client**

- Seek consent from the client
- Update the client and her companion on the progress of labour
- Explain the non-pharmacological and pharmacological pain relief options available for the client and her companion and allow her to make an informed decision
- Explain the procedure to the client and companion
- Explain the positioning for epidural access
- Explain the roles of multidisciplinary collaborative team
- Explain potential risks of the procedure
- Explain the potential side effects of the procedure
- Discuss risk and potential benefit
- Explain on potential late complications occurring after discharge
- Assist the anesthetist or obstetrician in planning and performing the procedure



## Environment

- Provision for privacy
- Adequate working space
- Adequate working light
- Clean and dry bed
- clean and quiet
- Sink with running water, liquid soap and disposable hand towels



## Requirements

- Epidural trolley containing
  - Cotton swabs
  - Kidney dish
  - Bowl
  - Gallipot
  - Draping towels
  - Hand towels
  - Urinary catheter
  - Anaesthetic catheters
  - Infusion pumps
  - Epidural drugs
- A Clean tray with:
  - Antiseptic lotion in a container of warm water
  - Obstetric cream
  - Sterile surgical gloves
  - Sanitary pads
  - Extra linen
  - Colour-coded bins
  - An observation tray
  - Foetalscope/Doppler/monitor
  - Clean gloves
  - Specimen bottles
  - Urine dipsticks
  - Epidural charts
  - Cardex
  - Partograph
- Resuscitation equipment

## C. Implementation

Steps	Rationale
1. Start and maintain IV infusion as prescribed	1. To maintain hydration
2. Continue labour and foetal monitoring as required	2. For baseline data and intervention
3. Position the client in a lateral or semi-recumbent position after the initial placement of the epidural catheter,	3. Prevent orthostatic hypotension due to compression of the inferior venacava

Steps	Rationale
and explore ambulation if the condition allows	
4. Change the client's position every hour if she is not ambulating	4. Ensure comfort and facilitate labour progress
5. The patient should ambulate in Labour and Delivery unit only	5. For vigilance
6. Encourage the patient to void every 2 hours	6. To facilitate descend and prevent bladder injury
7. Upon confirmation of full cervical dilation, unless the client has an urge to push or the foetal head is visible at the perineum, pushing should be delayed for an hour or longer after which active pushing with contraction is encouraged	7. Ensure progress and prevent complications
8. Monitor the client for: <ul style="list-style-type: none"> <li>• Effectiveness of the drug</li> <li>• Sedation level</li> <li>• Respiratory distress</li> <li>• Nausea and vomiting</li> <li>• Itching of the body</li> <li>• Pressure on the lower back</li> <li>• Urinary retention</li> <li>• Level of sensory block</li> <li>• Level of motor nerve block</li> <li>• Epidural site care</li> </ul>	8 - 9. To prevent complications and institute appropriate interventions
9. After delivery, continue monitoring the above until anesthesia completely wears off	

## D. Evaluation

Evaluate	Rationale
1. Effectiveness of epidural	1 - 2. Promote comfort
2. Outcomes of labour	
3. Complications	1. Institute prompt interventions
4. Interventions	2. To ascertain the effectiveness of the planned actions

## E. Documentation

### Record:

- Placement time
- Members of the multidisciplinary team
- Care given
- Maternal/foetal responses to interventions
- Complications
- Emergency measures
- Resolution/continuation of effect of anesthesia and complications
- The client's education

■ ■ ■

## 3.2-10: Vacuum Extraction (Ventouse)

### Definition:

Vacuum Extraction is a method used to assist delivery of the head using a vacuum device.

### Purpose:

- To expedite second stage of labour when the head is presenting and the cervix is fully dilated

### Indications:

- Prolonged second stage
- Maternal illnesses: Cardiac disease, respiratory (severe asthma), intracranial hemorrhage, severe preeclampsia and eclampsia)
- Foetal compromise in second stage

### Contraindications:

- Malpresentation (breech, face, brow, shoulder)
- Prematurity
- Active vulval viral disease (active herpes simplex)

## A. Assessment

Assess	Rationale
1. The client's understanding of the procedure and her willingness to cooperate	1. To gain co-operation of the client
2. Availability and functionality of required equipment	2. For ease of access
3. Condition of the environment	3. For privacy, safety and comfort

## B. Planning



### Self

- Appropriate grooming
- Review the procedure on vacuum extraction
- Inform theatre to be prepared in case of failure
- Be willing to stop the procedure in case of failure
- Wash and dry hands
- Wear protective gear
- **Be familiar with the following prerequisites for performing a manual vacuum extraction:**
  - **A-**
    - Ask for help, to assist in the procedure
    - Address the client
    - Anaesthesia adequate?
  - **B-** Bladder empty
  - **C-** Cervix fully dilated

- **D-**
  - Decent 1/5 and below
  - Determine position of the head
- **E-** Equipment familiarity and in working condition
- **F-** Flexion point- 2-3cm in front of the posterior Fontanelle
- **G-** Gentle traction with contraction
- **H-**
  - Halt when cup slips off twice and in 20 minutes if the head is not about to be delivered
  - Halt traction after contraction
- **I-** Incision- evaluate need for an episiotomy
- **J-**
  - Jaw visible- remove the cup
  - Jump to caesarean section if **H** occurs

## Client

- Identify the client by name
- Introduce self
- Explain the procedure to the client and get verbal consent and cooperation
- Confirm the indications
- Ask the client to empty bladder before the procedure or catheterize if necessary
- Educate the client and companion about potential complications of the procedure

## Environment

- A quiet private room with the following:
  - Auditory privacy
  - Adequate working space
  - Adequate light
  - A sink with running water, liquid, soap and disposable hand towel
  - A well-made and comfortable examination couch/bed with clean gown on the stool beside it
  - A label at the door indicating procedure in progress

## Requirements

A clean trolley containing;

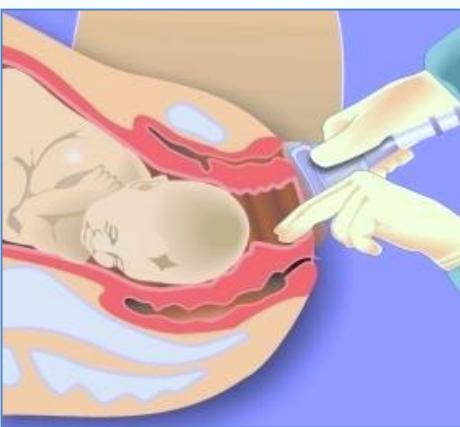
### Top shelf;

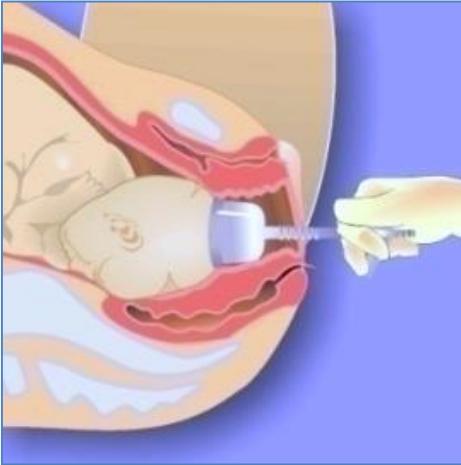
- Vacuum extractor
- A tray containing delivery set
  - Sterile dry swabs in a gallipot
  - Sterile gauze
  - A pack of sterile sanitary towels

### Bottom shelf;

- Receivers for used items
- Antiseptic solution and obstetric cream
- Foley's catheter
- Sterile gloves

## C. Implementation

Steps	Rationale
1. Examine the client abdominally and vaginally	1. To confirm indications and prerequisites
2. Explain the procedure	2. To gain consent and cooperation
3. Prepare equipment. In addition to routine delivery supplies add vacuum extractor	3. For ease of access
4. Test the vacuum extractor on the palm of your hand by squeezing the pump handle to start the vacuum. Hold the cup on your hand. You will feel the suction on your hand then release the pressure	4. To determine functionality
5. Ask the client to void or catheterize her if necessary	5. To prevent bladder injury and descend
6. Instruct the client to assume the lithotomy with the head supported	6. To allow full accessibility of the perineum
7. Perform a vaginal examination to determine the position of the foetal skull and locate the posterior fontanelle and place the cup 2-3cm in front of the posterior fontanelle (flexion point)	7. To ascertain correct placement and aid flexion
8. Insert the index and middle finger into the vagina and press downwards on the posterior vaginal wall (Fig 3.7)	8. For ease of access to the foetal head
	<p>Figure 3.7 Insertion of Fingers into Vagina to Access the Appropriate Position to Fix the Cup (Adapted from Damos JR, Bassett R., (2003))</p>
9. Insert the extractor cup gently in to the vagina, hold the cup with your fingers then pass a finger gently around the edge of the cup	9. To be sure no maternal tissue has been caught under the cup
10. Create a vacuum of 0.2kg/cm <sup>2</sup> (at the yellow level)	10. To create adequate suction

Steps	Rationale
11. Confirm that there is no maternal tissue trapped between the cup and foetal head	11. To prevent injury
12. Increase vacuum up to a maximum of 0.8kg/cm <sup>2</sup> (at the green level)	12. To create adequate suction for traction
13. Instruct the client to communicate the start and the end of a contraction	13. To allow synchrony between traction and expulsive forces
14. Place the index finger on the scalp and the thumb on the cup	14. To feel for the earliest signs of cap slippage
15. If perineal resistance is encountered perform an episiotomy after perineal infiltration with local anaesthetic	15. To aid in the delivery of the head and prevent injury
16. Pull (apply traction) perpendicular to the cup only when there is a contraction	
	16 - 18. To prevent slippage and maintain flexion of the foetal head
17. Encourage the client to push long and steady. At the same time, the midwife will pull on the handle firmly and straight. Do not twist and turn the cup or the handle for this will cause the cup to pop off	
18. Continue pulls for a maximum of three contractions which should be sufficient	
19. Once the jaw of the newborn is visible, release pressure, remove cup and proceed with the delivery of the newborn	19. To signify the end of the vacuum delivery

Steps	Rationale
 <p>Figure 3.9 Removing the Cup when the Foetal Jaw is Reachable (Adapted from Damos JR, Bassett R., (2003))</p> <p><b>NB:</b></p> <ul style="list-style-type: none"> <li>• Abandon the procedure if the cup slips twice and if in 20 minutes of traction, the head is not about to be delivered.</li> <li>• Refer to the manufacturer's instructions for different types of equipment.</li> </ul>	
20. Perform active management of third stage of labour	21. To deliver the placenta
21. Repair any perineal tear or episiotomy	22. To prevent postpartum hemorrhages
22. Clean the equipment in preparation for next use	23. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The outcome of the second stage	1. To intervene appropriately
2. Interventions	2. To ascertain the effectiveness of actions taken
3. The client and newborn	3. To determine deviation from normal

## E. Documentation

### Record:

- Document the outcome of the delivery
- Interventions planned



## 3.2-11: Episiotomy Repair

### Definition:

The process of restoring separated edges of the perineal incision.

### Purpose:

- Attain good approximation of the incision
- To achieve hemostasis

### Indications:

- All women with episiotomies
- Episiotomy should be considered only in the case of:
  - Complicated vaginal delivery that is breech, shoulder dystocia
  - Scarring from female genital cutting or poorly healed third or fourth degree tears
  - Foetal distress

## A. Assessment

Assess	Rationale
1. Availability of the equipment	1. For ease of access
2. Extent of the episiotomy	2. For appropriate intervention
3. Client's understanding of the procedure	3. To gain cooperation and gain anxiety

## B. Planning



### Self

- Appropriate grooming
- Review guidelines on repair of an episiotomy
- Wash and dry hands
- Assemble and arrange required instruments



### Client

- Explain the procedure of repair of an episiotomy and obtain consent
- Explain to the client her role during repair of episiotomy



### Environment

- Adequate working space
- Adequate light, warm
- Provide privacy
- Clean and dry comfortable bed/couch



## Requirements

A trolley containing:

### Top shelf;

- Sterile suture pack containing
- 2 draping towels
- A needle holder
- Dissecting forceps
- A pair scissors
- Gauze swabs
- Sanitary pads

### Bottom shelf;

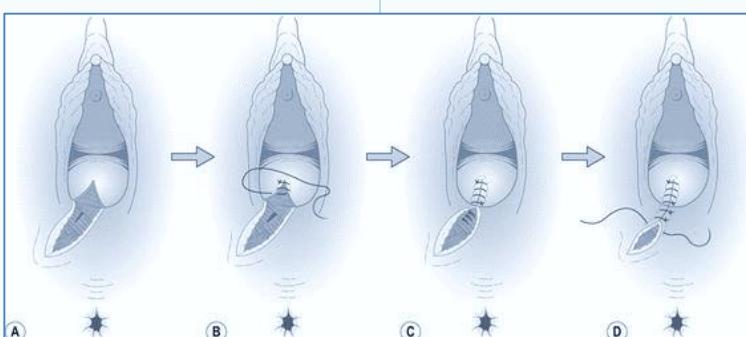
- Lignocaine hydrochloride 0.5% or 1%
- 10ml syringe
- 2 needles gauge 21
- Suture material Polyglycolic sutures preferred over chromic catgut
- Sterile gloves
- Antiseptic solution

### Accessories;

- Portable lamp/light
- Coded bins

## C. Implementation

Steps	Rationale
1. Move trolley next to the couch	1. For convenience and efficiency
2. Place the coded bin near the couch	2. For proper waste disposal
3. Assist the client to a lithotomy position	3. For ease of access
4. Wash and dry hands and put on sterile gloves	4. For infection prevention and control
5. Ask the assistant to open the pack	5. To prevent contamination
6. Perform vulval cleansing (do incision site last)	6. For infection prevention and control
7. Place a sterile towel under the perineum	7. To prevent soiling of the environment
8. With help from the assistant, withdraw 20ml 1% lignocaine hydrochloride carefully without contamination of hands and prepare the suture material. Administer using the correct infiltration technique	8. To eliminate pain
9. Inspect the vulva	9. To ensure there are no other perineal tears and ascertain the diameters of the episiotomy

Steps	Rationale
<p>10. Identify the apex of the incision and infiltrate the episiotomy with lignocaine hydrochloride in a 'fan-shape' technique</p> <p><b>NB:</b> If the episiotomy is extended through the anal sphincter or rectal mucosa, manage as third or fourth degree tears, respectively; remember to massage the uterus every five minutes) ligate any actively bleeding vessels</p>	<p>10. For appropriate alignment and prevent complications</p>
<p>11. Repair the vaginal wall using a continuous 2-0 suture (Fig 3.10B)</p>	<p>11. A continuous stitch achieves better homeostasis</p>
	
<p><b>Figure 3.10 Episiotomy Repair</b> Adapted from Robson &amp; Higgs (2011)</p>	
<p>12. Open the incision with two fingers of the non-dominant hand</p>	<p>12. For infection prevention</p>
<p>13. Start the repair about 1 cm above the apex (top) of the episiotomy. Continue the suture to the level of the vaginal opening</p>	<p>13. For better alignment of severed tissues</p>
<p>14. At the opening of the vagina, bring together the cut edges of the vaginal opening</p>	<p>14. To restore anatomical alignment</p>
<p>15. Bring the needle under the vaginal opening and out through the incision and tie. Repair fascia and muscle of the perineum with continuous stitch with Vicryl 2.0-40 mm needle as shown in Fig 3.10D</p>	<p>15. To minimize chances of dehiscence</p>
<p>16. Repair the skin starting at the fourchette downwards using continuous stitches or subcuticular stitches</p>	<p>16. To ensure aesthetic and anatomical restorations</p>
<p>17. Clean the area and place a sterile sanitary pad</p>	<p>17. For infection prevention and control</p>

Steps	Rationale
18. Perform a digital rectal examination   Figure 3.11 Digital Rectal Examination	18. To ascertain the patency of the rectum
19. Explain to the client the extent of tissue injury and repair	19 - 20. To promote involvement in self-care
20. Conduct health education on care of episiotomy	
21. Clear linen, instruments, equipment and waste in accordance with waste disposal procedures. Ensure emptying of the coded bin	21. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Alignment of the tissues	1. To promote healing
2. Level of haemostasis	2. To institute appropriate intervention

## E. Documentation

### Record:

- Performance of the procedure
- Removal of the vaginal pack
- Status of the uterus
- Health education provided
- Planned interventions

■ ■ ■

## 3.2-12: Breech Delivery

### Definition:

The care of a client in labour with a breech presentation.

### Purpose:

- To deliver a normal healthy newborn in breech presentation with minimal trauma
- To deliver a newborn safely in breech presentation

### Indications:

- Clients coming in second stage with breech presentation
- Delivery of an after coming foetus in breech presentation
- A client that understands and accepts vaginal delivery
- Experienced operator and confident with vaginal breech delivery
- Complete or frank breech
- Adequate clinical pelvimetry
- Small foetus < 3kg
- No previous caesarean section for cephalopelvic disproportion
- Presenting part at or below the level of ischial spines
- Labour progress more than or equal to 1cm per hour

### Contraindications:

- Gestation below 34 weeks (Extreme prematurity)
- Uterine anomalies
- Estimated weight of below 1500grams
- Cord prolapse
- Non reassuring foetal status

## A. Assessment

Assess	Rationale
1. The general condition of the client	1. Allay anxiety and gain the client's cooperation
2. The level of understanding of the type of delivery	2. Determine need for additional information
3. Availability of the required equipment and if assistance is needed	3. Ease of access and efficiency
4. Environment	4. For safety, privacy and comfort
5. The stage of labour	5. To institute appropriate intervention

## B. Planning

### Self

- Appropriate grooming
- Review the procedure for breech delivery
- Collect and assemble required equipment
- Ensure extra help i.e. pediatrician and obstetrician
- Alert theatre for readiness

### Client

- Explain the procedure to the client and the companion
- Obtain consent

### Environment

- Adequate working space
- Adequate light
- Provision for privacy
- Room temperature maintained at 21°C – 23°C
- A prepared clean and dry delivery bed/couch

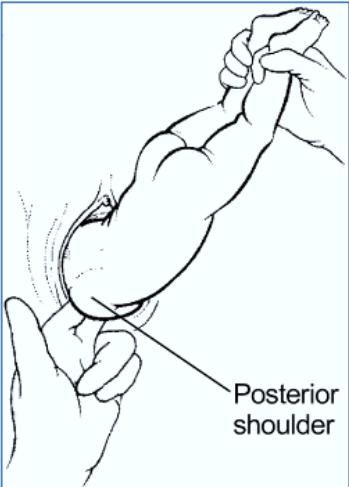
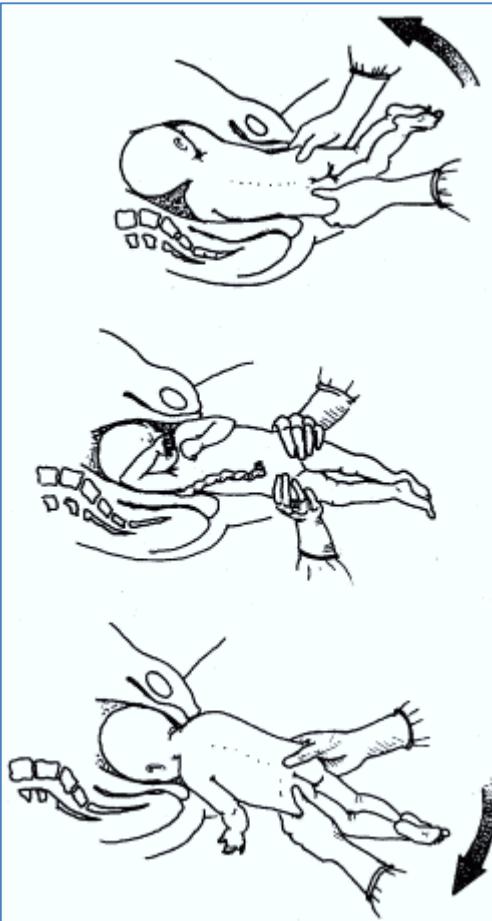
### Requirements

- Neonatal resuscitation equipment
- Catheterization tray
- Foetoscope and doppler
- A delivery tray/trolley

## C. Implementation

Steps	Rationale
1. Review for indications	1. To establish relevance of the interventions
2. Start an IV access	2. For fluid and medication administration
3. Provide emotional support and encouragement	3. Allays anxiety and encourages cooperation from the client
4. Inform the obstetrician and pediatrician	4. For specialized intervention when need arises
5. Assist the client into lithotomy position with her buttocks at the edge of the delivery couch	5. Readiness for delivery and ease of access for maneuvers
6. Ask the assistant to open the delivery pack on top of the trolley	6. To prevent contamination and cross infections

Steps	Rationale
7. Wash and dry hands and put on gloves	7. For infection prevention
8. Drape the client ( <b>Follow steps as stipulated in Management of 2<sup>nd</sup> stage of Labour Procedure 3.2-6</b> )	8. To prevent unnecessary exposure, dignity
9. Perform a vaginal examination	9. Confirm full dilatation of the cervix and engagement of the breech
10. Catheterize the client	10. To ensure empty bladder and aid descend
11. Once the buttocks have entered the vagina and the cervix is fully dilated, tell the client to bear down with the contractions	11. For progressive descent of the foetus
12. As perineum distends decide the need for episiotomy	12. To allow enough room for the foetus to pass
13. Adhere to the principle of “hands off the breech” as the newborn progressively descents	
14. Let the buttocks deliver until the lower back and the shoulder blades are seen  <b>NB:</b> in a complete breech the legs and the hands deliver spontaneously without assistance	13 - 14. To allow gravitational descent of the newborn
15. Gently loosen the loop of the cord	15. To prevent traction and compression of blood vessel
16. Gently hold the buttocks in one hand, but do not pull	16. To support them and prevent accidental fall
17. If the legs do not deliver spontaneously, deliver one leg at a time: a. Push behind the knee (popliteal fosa) to bend the leg b. Grasp the ankle and deliver the foot and leg c. Repeat for the other leg	17. To prevent injury and facilitate the delivery of the leg
18. Hold the foetus on the bonny pelvis (by the hips) using a towel	18. To facilitate delivery, prevent hypothermia and prevent slippage
19. After delivery of the trunk, allow the breech to hang, then gently pull the loop of the cord	19. To prevent traction and compression of cord blood vessels
20. Feel for the pulsation on the cord	20. To ascertain foetal wellbeing

Steps	Rationale
<p>21. Allow the arms to disengage spontaneously one by one. Only assist if necessary (Fig. 3.12)</p> 	<p>21 - 23. To facilitate the delivery of the arms</p>
<p>22. After spontaneous delivery of the first arm, lift the buttocks towards the client's abdomen to enable the second arm to deliver spontaneously (Fig 3.13) if the arms are stretched above the head or folded around the neck, use the Lovset's maneuver (Refer to current practices using EmONC)</p>	
<p>23. Grasp the iliac crests with the fore fingers and the sacrum with the thumbs and apply a downward traction while the client is asked to push</p>	
<p>24. Allow newborn to hang by its own weight (hands off breech principle)</p>	<p>24. To allow the head to engage into the pelvic floor</p>
<p>25. The occiput rotates <math>\frac{1}{8}</math> of a circle forwards until the airline is visible</p>	
<p>26. Hold foetal body over your hand and arm</p>	
<p>27. Place first and third fingers on the newborn's cheek bones</p>	
<p>28. Use the other hand to grasp the newborn's shoulders</p>	<p>25 - 29. To facilitate the delivery of the head</p>
<p>29. With two fingers of this hand flex the foetal head towards its chest. (See Fig 3.14. Mauriceau-Smellie-Veit manoeuvre)</p>	

Steps	Rationale
 <p>Figure 3.14 Mauriceau-Smellie-Voit Manoeuvre Adapted from EmONC (2013)</p>	
30. Remove secretions from the newborn's face with gauze sponges and suction the mouth and nose, if necessary	30. To clear the airway
31. Record the time of delivery	31. To determine the time of birth
32. Place the newborn on the client's abdomen and quickly stimulate and dry the newborn with a sterile dry pre warmed towel	32. To stimulate breathing, bonding and maintain warmth
33. Give an Apgar Score of the newborn at 1 minute	33. To ascertain foetal wellbeing and institute appropriate intervention
34. Clamp and cut the cord when the birth of the newborn is complete. (NB: The birth partner if available can be given an opportunity to cut the cord)	34. Separates the newborn and the placenta
35. If the newborn is stable, instruct the assistant to put the newborn on the breast if not contraindicated	35. For bonding and nourishment and continuity of care
36. Administer oxytocin injection to the client. Proceed with active management of third stage of labour <b>(Refer to procedure 3.2-6, Management of 3<sup>rd</sup> Stage of Labour)</b>	36. To prevent postpartum haemorrhage and facilitate delivery of the placenta
<b>NB:</b> Repair episiotomy ( <b>Refer to procedure 3.2-11, Episiotomy Repair</b> ). The rest of the steps in this procedure are similar to the process of management of second stage of normal labour	
37. Clean the client's perineum with antiseptic lotion and place a clean pad	37. To prevent post-partum sepsis
38. Examine the placenta, the cord and membranes	38. Detects any deviation from normal

Steps	Rationale
39. Estimate the blood loss	39. To institute appropriate interventions
40. Remove the gown and gloves and wash hands	40. For infection prevention and control
41. Take the client's vital signs	41. For baseline data and institute appropriate interventions
42. Transfer the client and the newborn to the postnatal ward	42. For continuity of care
43. Decontaminate linen and instruments, wash the trolley with soap and water, then wash hands with soap and water and dry them	43. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Outcome of the delivery	1. To institute appropriate intervention

## E. Documentation

### Record:

- Record on the performance of the delivery
- Complete the partograph summary
- Document the condition of the client and the newborn
- Record the amount of blood loss
- Health education
- Record the condition of the placenta

■ ■ ■

## 3.2-13: Care of a Client with Shoulder Dystocia

### **Definition:**

This is care given to a client with impaction of the anterior shoulder against the symphysis pubis after delivery of the foetal head.

### **Purpose:**

- To disengage the entrapped shoulder

### **Indications:**

- Impacted foetal shoulder

**Refer to the current national guidelines on management of shoulder dystocia**

■ ■ ■

## 3.2-14: Care of a Client with Postpartum Haemorrhage

### **Definition:**

It is per vagina bleeding in excess of 500ml after vaginal birth or 1000ML after caesarean section or any blood loss that has the potential to cause haemodynamic instability.

### **Purpose:**

- Prevent excessive bleeding
- Prevent complications related to excessive bleeding

### **Indications:**

- All postpartum clients who are bleeding per vagina

**Refer to the current national guidelines for management of postpartum haemorrhage**



## 3.2-15: Manual Vacuum Aspiration

### Definition:

Manual vacuum aspiration (MVA) is a simple, cost-effective procedure involving the use of suction or vacuum to remove uterine tissue and blood through the cervix using hand held vacuum syringe and flexible plastic cannulas.

The procedure is highly effective in removing retained products of conception from the uterus and is associated with low complication rate.

### Purpose:

- Evacuation of retained products of conception from the uterus

### Indications:

- To obtain sample for endometrial biopsy
- Treatment of incomplete early pregnancy loss

### Contraindications:

- MVA is not indicated in molar pregnancy due to the copious products

## A. Assessment

Assess	Rationale
1. Readiness for procedure	1. To gain cooperation
2. Required equipment	2. For easy access and efficiency
3. Condition of the environment	3. Privacy and safety

## B. Planning



### Self

- Appropriate grooming
- Review the procedure on manual vacuum aspiration and ensure that the instruments are working
- Inform theatre to be prepared in case of failure
- Wash and dry hands, wear protective gears



### Client

- Address the client by name
- Introduce self
- Explain the procedure to the client and the companion and get informed consent
- Ask the client to empty the bladder before the procedure or catheterize if necessary

- Assist the client on to examination couch or bed. Advice the client about potential discomfort or sensations prior to the procedure and exclude any allergies
- Administer analgesia



## Environment

- Ensure privacy
- Clean and adequate working space
- Adequate lighting



## Requirements

- MVA aspirator Silicone lubrication
- Cannulae (4-12 mm)
- Adaptor for cannulae
- Sterile speculum
- Tenaculum-1
- Ring forceps/vulsellum
- Prewarmed antiseptic solution, sterile pieces of gauze, small bowl or kidney dish
- Different sizes of syringes and needles
- Anesthetic agent for cervical block
- Source of adequate light

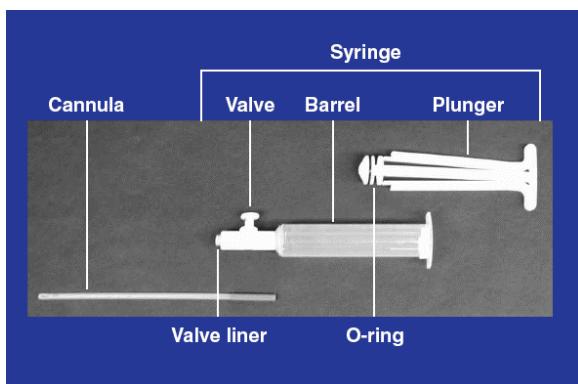


Figure 3.15 Basic Components of an MVA Kit



Figure 3.16 Basic Components of an MVA Kit

Source: [http://www.postabortioncare.org/sites/pac/files/mva\\_instruments\\_guide\\_0.pdf](http://www.postabortioncare.org/sites/pac/files/mva_instruments_guide_0.pdf)

## C. Implementation

Steps	Rationale
1. Explain the procedure to the patient and provide privacy	1. To gain informed consent and cooperation
2. Provide emotional/verbal support and encouragement throughout the procedure	2. To allay anxiety, for cooperation
3. Administer Pethidine 50mg IM 30 minutes before the procedure at the hospital level or Diclofenac or Ibuprofen at health centre level	3. To manage pain and reduce anxiety
4. Maintain aseptic technique	4. To prevent and control infection
5. Assemble the equipment	5. For easier accessibility
6. Administer oxytocin 10 IU in incomplete abortion(mostly administered post procedure)	6. To make the myometrium firm and reduce the risk for perforation
7. Place the client in lithotomy	7. To provide comfort and easier access
8. Perform 6 swab technique to clean the vulva and vagina with chlorhexidine	8. To prevent and control infection
9. Drape the vulva	9. For privacy and promotion of the patient's dignity
10. Perform bimanual pelvic examination	10. To check on the size and position of the uterus and degree of cervical dilatation
11. Insert the speculum gently and remove the visible products of conception	11. To complete the process of abortion and minimize risk of haemorrhage
12. Clean the cervix	12. To prevent risk for ascending infections
13. Examine the cervix for tears, lacerations, etc	13. To rule out trauma, and prompt intervention
14. Administer a paracervical block  <b>NB:</b> Avoid giving it at 12, 6, 9 and 3 o'clock because these areas are highly vascular and the risk of bleeding is high	14. To control and manage pain
15. Put single tooth tenaculum or vulsellum forceps on anterior lip of the cervix	15. For ease of visibility
16. Gently apply traction on the cervix and insert the cannula slowly into the uterine cavity until it touches the fundus (not more than 10cm). If need be perform mechanical cervical dilatation	16. To easily reach the fundus for complete evacuation

Steps	Rationale
17. Withdraw the cannula 1cm away from the fundus	17. To ensure free movement of the cannula during evacuation
18. Attach the prepared syringe with vacuum to the cannula	18. For maximum function of the syringe
19. Release the pinch valve on the syringe	19. To create negative pressure effective to start the evacuation
20. Evacuate any contents of the uterine cavity by gently rotating the cannula and syringe	20. To ensure the uterus is empty and restore normal uterine tone
21. Check for red or pink foam, no more tissue in the cannula or 'gritty' sensation	21. This is a sign of completed evacuation
22. Gently withdraw the cannula and detach it from the syringe	22. For completion of the procedure
23. Quickly inspect the products of conception	23. For consistency, and signs of total evacuation
24. Administer Oxytocin 10 IU IM	24. For uterine contraction and minimization of bleeding
25. Process the MVA equipment according to standards	25. To prepare for the next use
26. Observe the client/patient for 30 minutes	26. To ensure the client is in stable general condition
27. Complete counseling process including Family Planning and provision of the chosen method	27. To enhance the patient's comfort and ensure the patient makes an informed choice of family planning method

## D. Evaluation

Evaluate	Rationale
1. If the uterine content has been completely evacuated	1. To determine need to repeat the procedure
2. If the client is bleeding per vagina	2. To plan for appropriate interventions

## E. Documentation

### Record:

- Document the procedure on the patient file
- Document medication use and family planning method
- Vital observation
- The state of the products of conception

■ ■ ■

## 3.3: Postnatal Care Procedures

### 3.3-1: Expressing Breast Milk

**Definition:**

Systematic removal of breast milk manually.

**Purpose:**

- To obtain breast milk
- To relieve breast engorgement

**Indications:**

- Babies with specific anomalies e.g. cleft palate
- Clients with excess milk
- Clients with engorged breasts
- Clients with premature infants
- Clients with inverted nipples

## A. Assessment

Assess	Rationale
1. Availability of required equipment	1. For ease of access and efficiency
2. Environment	2. For safety, privacy and comfort
3. General condition of the client	3. To ascertain wellbeing
4. Condition of the breast	4. To determine deviation from normal

## B. Planning



**Self**

- Appropriate grooming
- Review the procedure of expressing breast milk
- Wash and dry hands
- Clean and assemble equipment



**Client**

- Greet the client and introduce self
- Explain the procedure
- Instruct to wash hands
- Instruct the client to take a bath twice a day to maintain hygiene of the breast



## Environment

- Adequate working space
- Adequate light
- Warmth and privacy
- A chair or a stool



## Requirements

A clean trolley containing:

### Top shelf;

- 2 sterile cups
- A bowl containing sterile gauze swabs
- A breast pump in a receiver if required
- Sterile graduated jug

### Bottom shelf;

- A clean gown for the client
- A jar of hot water
- A receiver for dirty swabs

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1- 2. For infection prevention and control and ease of access to breasts
2. Ask the client to wash her hands with soap and water and change into a clean gown with the open side in front	
3. Wheel the trolley next to the client	3. For efficiency and access of equipment
4. Ensure the client is seated on a chair a or stool	4. To promote comfort and cooperation
5. Instruct the client to hold the cup below the left breast with left hand or vice versa	5. To ensure that the expressed milk flows in to the cup
6. Instruct the client to hold the areola between thumb and first two fingers to support the breast from below while the other hand supports the cup	6. To ease performance of the procedure
7. Direct the nipple in to the cup and instruct the client to press gently and firmly from the edge of areola towards the nipple using the thumb and first two fingers	7. To avoid spillage and promote milk flow
8. Ask the client to continue expressing milk for 5 – 7 minutes with 3 or 4 rests in between	8. For maximum breast stimulation and complete emptying of the breast

Steps	Rationale
9. When the client has completed expressing, wipe, dry and cover the breast	9. To maintain hygiene, prevent infection and promote privacy
10. Expose the other breast repeat the process, but change the hands as appropriate	10. For continuity and completion of the procedure
11. After the completion of the procedure, ask the client to remove the gown, wash and dry her hands	11. For infection prevention and control
<b>Expressing Breast Milk using the Breast Pump</b>	
1. Repeat steps 1-5 above	1. For ease of access, infection prevention and control
2. Instruct the client to hold the breast pump with the dominant hand and fit it onto the breast	2. To create suction in the pump
3. Assist the client to fit the funnel snugly round the breast with the nipple in the center of the funnel and the edge of the funnel on the edge of the areola	3. To create a balanced suction on the breast
4. Instruct the client to release the upper part of the funnel slightly and at the same time press the bulb to expel air, then with the bulb still pressed hold the funnel firmly	4. To create appropriate suction
5. Instruct client to support the breast with one hand firmly	5. To maintain suction and prevent spillage
6. Instruct the client to release the bulb gently and observe for flow of milk into the milk chamber	6. For complete emptying of the breast
7. Instruct client to repeat pressing and releasing the bulb for about 5-7 minutes or until there is no more flow of milk	7 - 8. For complete emptying and facilitation of milk refill
8. Repeat the process on the other breast and empty the milk into the cup as it fills the chamber during the process	
9. Wipe the breasts with wet gauze instruct the client to remove the gown and change into her dress	9. For comfort, privacy, infection prevention and control
10. Store the milk appropriately	10. To insure safety, potency and availability of the milk when needed

## D. Evaluation

Evaluate	Rationale
1. Colour, consistency and amount of milk expressed	1. To ascertain amount and quality for appropriate intervention
2. Discomfort	2. To determine appropriate intervention

## E. Documentation

**Record:**

- Amount, color and consistency of milk expressed
- The client's reaction to the procedure
- If there is need to express milk subsequently
- General condition of the breast
- Health education

■ ■ ■

### 3.3-2: Postnatal Examination

**Definition:**

Examination carried out on a client based on targeted post-natal schedule

**Purpose:**

- To assess the general physical and emotional health of the client
- Assess whether the reproductive organs have gone back to their pre-gravid state
- To detect any arising complications
- Evaluate family planning needs
- To detect any arising complications

**Indications:**

- All clients under the targeted post-natal care (Ref. National Guidelines)
- Within 48 hours of birth
- 1 to 2 weeks
- 4 to 6 weeks
- 4 to 6 months

## A. Assessment

Assess	Rationale
1. The required equipment	1. Ease of access
2. Readiness of the client for the procedure	2. For cooperation
3. Need for incorporating other family members in the client's care	3. For involvement and continuity of care

## B. Planning



**Self**

- Appropriate grooming
- Review the procedure on postnatal examination
- Wash and dry hands
- Prepare the required equipment



**Client**

- Address the client by name and introduce self
- Explain procedure
- Ask the client to empty the bladder and change the soiled pad



## Environment

A quiet private room with the following:

- Auditory privacy
- Adequate working space
- Adequate light
- Clean and dry toilet



## Requirements

A clean trolley containing:

### Top shelf;

- The client's hospital record
- A tray containing:
  - Tape measure/ruler
  - Cotton wool swabs in a bowl
  - A pair of gloves
  - Sanitary pads
- Observation tray with vital signs equipment

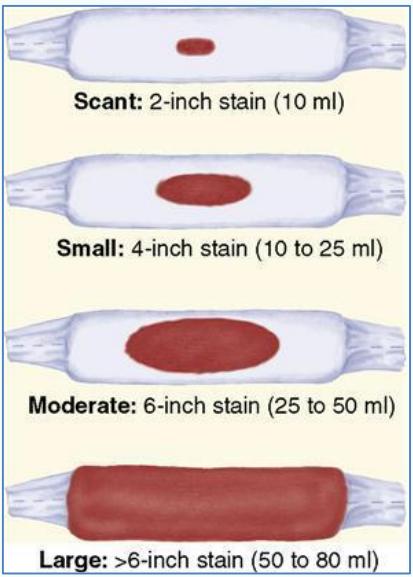
### Bottom shelf;

- Extra linen
- Receiver
- Antiseptic solution
- Obstetric cream
- Colour coded bins

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. For infection prevention and control
2. Move the trolley next to the bed	2. For ease of access
3. Avail coded bins	3. For appropriate waste segregation and disposal
4. Assist the client to lie on the bed in dorsal position	4. For comfort and ease of access
5. Remove bed covers leaving only the top sheet for covering the client	5. Provides privacy, promote comfort and warmth; and easy access
6. Wash hands, dry and put on gloves	6. For infection prevention and control
7. Assess general status of the client (include focused history taking)	
8. Perform a systematic head to toe examination with special emphasis on the breasts, abdomen, perineum, lochia loss, and the extremities	7 - 8. To obtain information for baseline data, noting abnormalities that would require immediate interventions

Steps	Rationale
<b>Breasts</b>	
9. <ul style="list-style-type: none"> <li>a. Assess the fit and support provided by the client's bra</li> <li>b. Size and shape of the breasts</li> <li>c. Any abnormalities, reddened areas, engorgement</li> <li>d. Lightly palpate for softness, slight firmness associated with filling, firmness associated with engorgement, warmth or tenderness</li> <li>e. Assess nipples for fissures, cracks, soreness, inversion</li> <li>f. Teach the client on recognizing problems associated with the breast</li> </ul>	i. To promote successful lactation, and identify need to for appropriate interventions
10. Non breast feeding client assessed for evidence of discomfort and relief measures taken when necessary	j. To guide on suppression of milk and prevent breast complications
<b>Palpation of the Abdomen</b>	
11. <ul style="list-style-type: none"> <li>a. Position the client flat on the bed with head comfortable on a pillow</li> <li>b. If the client is uncomfortable, may flex knees</li> </ul>	a - b. For comfort and cooperation
c. Gently place one hand on the upper uterine segment and progressively move it downwards until the fundal height is felt. Determine whether the fundus is firm, if not, massage gently until it is firm	c - d. To determine the level of involution of uterus, and identify risk factors for puerperal infections to aid in planning appropriate interventions
d. Measure the height of the fundus in relation to the umbilicus	e. To evaluate the healing process
e. Examine caesarean section site if applicable	f. To prevent discomfort and to promote uterine involution
f. Evaluate the bladder for distention	
12. <b>Perineum</b> Put on a pair of gloves and assess the lochia for amount, presence of clots, color and odor (See Fig 3.17)	12. To determine the progress of involution and deviation from normal

Steps	Rationale
 <p><b>Scant:</b> 2-inch stain (10 ml)</p> <p><b>Small:</b> 4-inch stain (10 to 25 ml)</p> <p><b>Moderate:</b> 6-inch stain (25 to 50 ml)</p> <p><b>Large:</b> &gt;6-inch stain (50 to 80 ml)</p>	
<p>Figure 3.17 Lochia Loss</p>	
<p>Source: <a href="http://www.nursekey.com">www.nursekey.com</a></p>	
<p>13. Assess the episiotomy or perineal laceration</p>	<p>13. To assess the healing process</p>
<p>14. Assess the extremities for varicosities, DVT, oedema</p>	<p>14. To detect deviation from normal</p>
<p>15. Carry out health education to include contraception</p>	<p>15. To promote informed decision making</p>
<p>16. Clear the trolley, remove gloves and wash hands</p> <p><b>NB:</b></p> <ul style="list-style-type: none"> <li>• Within 48 hours, assess for uterine contractions</li> <li>• After 48 hours, assess for uterine involution</li> <li>• Always perform head to toe examination to rule out other complications outside reproductive system</li> </ul>	<p>16. For infection prevention and control</p>

## D. Evaluation

Evaluate	Rationale
<p>1. Health status</p>	<p>1. Determine post-delivery progress</p>
<p>2. Interventions planned</p>	<p>2. To evaluate effectiveness of actions instituted</p>

## E. Documentation

### Record:

- Examination findings
  - Health education given
  - Interventions planned
- ■ ■

### 3.3-3: Perineal Care

**Definition:**

It is the examination and cleaning of the genitals and anal area after delivery.

**Purpose:**

- To prevent infection
- To prevent offensive odor
- To prevent skin breakdown

**Indications:**

- Following caesarean section (C/S)
- Postnatal clients with conditions preventing them to perform own perineal care hygiene
- Clients with incontinence
- Clients with obstetric fistula

## A. Assessment

Assess	Rationale
1. The required equipment	1. For ease of access and efficiency
2. Environment	2. For safety, comfort and privacy
3. The health status of the client	3. To determine deviation from normal
4. Know the client's knowledge on the procedure	4. For cooperation and involvement

## B. Planning



**Self**

- Appropriate grooming
- Review the procedure of perineal care
- Wash and dry hands
- Prepare the required equipment



**Client**

- Address and greet the client by name
- Introduce self
- Explain the procedure
- Ensure the bladder is empty



## Environment

- Ensure clean, warm and well lit working space
- Provide for auditory and physical privacy
- Clean dry and comfortable couch/bed
- Sink with running water, liquid soap and disposable hand towels



## Requirements

A clean trolley with:

### Top shelf;

- A sterile perineal pack containing:
  - A jug
  - A bowl
  - Cotton wool swabs
  - Sterile gauze swabs
  - Sterile sanitary pad

### Bottom shelf;

- Warm antiseptic lotion in a bottle
- Warm bedpan with the cover
- Extra linen
- Sterile gloves
- Mackintosh/water proof pads
- Coded disposal bins

## C. Implementation

Steps	Rationale
1. Explain the procedure to the client	1. To attain the client's cooperation and involvement
2. Ask the client to empty the bladder/ensure the bladder is empty	2. To promote comfort and cooperation
3. Assist the client in dorsal position	3. To promote access and efficiency
4. Wash and dry hands	4. For infection prevention and control
5. Arrange the trolley and wheel to the bedside	5. For efficiency and ease of access
6. Wear sterile gloves	6. For infection prevention and control
7. Ask the assistant to pour warm lotion into the jug and into the bowl	7. In preparation for disinfecting of the perineum
8. Pick one swab at a time with the dominant hand dip in the lotion. Squeeze the excess lotion and carefully drop the swab into the other hand	8. For hygiene and infection prevention

Steps	Rationale
<ul style="list-style-type: none"> <li>Clean the labia majora using a downward stroke starting with the furthest then the near majora</li> <li>Clean the labia minora using the same technique</li> <li>Clean the vestibule with the dominant hand using downward movement</li> <li>Pat dry the perineal area</li> </ul>	<ul style="list-style-type: none"> <li>Prevent microbial seeding of the vagina</li> <li>Prevent cross infection</li> <li>Prevent transfer of microbes to the vestibule</li> <li>For comfort and convenience during the procedure</li> </ul>
9. Turn the client laterally and clean the buttocks	9. To promote comfort and ease of access
10. Apply the pad and change the beddings	10. For comfort
11. Conduct health education	11. To impart and update knowledge
12. Clear the trolley, remove gloves and wash hands	12. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
<ol style="list-style-type: none"> <li>The perineal area</li> <li>Characteristic of the odor</li> <li>Skin integrity</li> </ol>	To institute appropriate intervention

## E. Documentation

### Record:

- State of the perineal area
- Characteristic of lochia
- Health education provided
- Planned interventions



## 3.4: Newborn Care Procedures

### 3.4-1: Assessing Agpar Score of a Newborn

**Definition:**

A systematic method of collecting data on a newborn's conditions after delivery at 1 minute, 5 minutes and at 10 ten minutes of birth based on five parameters: Heart rate; Respiratory effort; Muscle tone; Response to stimulation and Presence or absence of central and peripheral cyanosis

**Purpose:**

- To determine the immediate wellbeing of the neonate
- To provide the baseline for neonatal subsequent evaluation
- To guide in appropriate interventions to be instituted

**Indications:**

- All newborn babies

## A. Assessment

Assess	Rationale
1. Determine availability of required equipment	1. To facilitate efficiency and ease of access
2. General condition of the newborn	2. To ascertain the wellbeing of the newborn
3. Environment	3. For warmth, safety and comfort
4. Working surface	4. For efficiency and appropriateness

## B. Planning



**Self**

- Appropriate grooming
- Review knowledge on APGAR scoring
- Review guidelines on standard precautions
- Ensure availability of an assistant



**Client**

- Explain the procedure and its purpose to the client



## Environment

- Ensure environment is at least 25°C, ventilated, and well lit
- Adequate working space



## Requirements

A tray containing:

- Stethoscope
- The client's chart
- The newborn's charts
- Thermometer
- Extra newborn warm wrappers
- Warm water in a bowl
- Gloves
- Resuscitation equipment
- Suction machine
- Bulb sucker
- Clock
- Working Heater

## C. Implementation

Steps	Rationale
1. Place the newborn in a warm comfortable flat area for assessment	1. To facilitate easy examination of the newborn while preventing hypothermia
2. Wash and dry hands and put on gloves	2. For infection prevention and control
3. Note general condition of the newborn	3. To determine status and wellbeing of the newborn
4. Note the following five parameters: <ol style="list-style-type: none"> <li><b>Color (Appearance - A):</b> Note the color of the skin</li> <li><b>Heart Rate (P):</b> A stethoscope is used to listen to the apical pulse</li> <li><b>Response to stimulation (Grimace-G):</b> Gently rub onto the sole of the foot and note the grimace</li> <li><b>Activity of Muscle (A)</b> <ul style="list-style-type: none"> <li>• Note activity and muscle tone of the newborn</li> <li>• Stimulate arms and legs by pulling onto them</li> </ul> </li> <li><b>Respirations Efforts (R):</b> Note respirations by looking at the abdomen and chest</li> </ol>	4. For baseline data to institute appropriate interventions
5. Wrap up the newborn warmly and place on the client's chest or place in a cot/incubator	5. To maintain warmth

Parameter	Score2	Score1	Score0
Appearance	Pink whole body	Pink body and blue extremities	Completely blue
Pulse	100 and above	Below 100	No pulse
Grimace	Strong ability to	weak	no
Activity	Strong muscle tone	Weak muscle tone	floppy
Respiratory effort	strong cry	Weak cry	No respiration

Figure 3.18 AGPAR Scoring Guide

Steps	Rationale
6. Update the client on the condition of the newborn	6. To allays anxiety and gains client's cooperation
7. Clean the used surface, remove gloves and wash hands	7. To prevent and control infection
8. Remove the tray and store in right place	8. To clear the working space and allow proper equipment maintenance

## D. Evaluation

Evaluate	Rationale
1. The APGAR Score	1. To determine the state of the child and appropriate intervention
2. Effectiveness of intervention	2. To ascertain the need for re planning and interventions

## E. Documentation

### Record:

- Serial APGAR scores at 1, 5 and 10 minutes
- Status of the newborn
- Any interventions
- Plan for subsequent care

■ ■ ■

## 3.4-2: Resuscitation of a Newborn

### Definition:

Resuscitation is a series of actions taken to establish normal breathing, heart rate, color, tone and activity in an infant who has not established breathing or crying or those suffering from birth asphyxia.

### Purpose:

- To restore lung and heart functions through establishing and maintaining a clear airway, ensuring effective circulation, correcting acidosis and preventing hypothermia, hypoglycemia

### Indications:

- All newborns who do not establish adequate respirations after delivery (i.e. newborns with neonatal birth asphyxia)
- Newborns who have an Apgar score of below 7 at birth
- Any newborn who stops breathing or has vital signs below the normal parameters

## A. Assessment

Assess	Rationale
1. Condition of the new born	1. Determines appropriate intervention
2. The required equipment	2. To confirm availability
3. Environment	3. For warmth, safety, and comfort

## B. Planning



### Self

- Appropriate grooming
- Review the new born resuscitation
- Review institution's policy on resuscitation
- Wash and dry hands
- Prepare to resuscitate



### Client

- Inform the client the condition of the newborn and reassure her (if her condition allows)



### Newborn

- Maintain warmth
- Proper positioning



## Environment

- Adequate light
- A warm well ventilated room with temperature of at least 25°C degrees centigrade
- Resuscitaire with working overhead radiant heater and light
- Oxygen and oxygen apparatus
- Bulb/penguin sucker/ Working suction machine
- Mucus extractor
- Wall clock
- Incubator
- Newborn cot



## Requirements

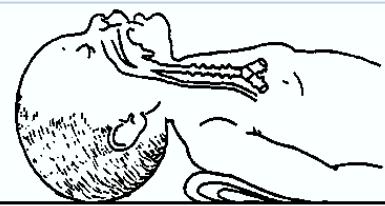
- Clean, warm towels and a blanket for thermal protection
- A tray with the following:
  - Self-inflating bag (newborn size) with round face masks size 0
  - Laryngoscope – newborn size blades size 01 (straight black)
  - Airway – size 0, 00, and 000
  - Bulb/Penguin sucker/Suction catheters size 6, 8, and 10
  - Oxygen, flow meter and tubing
  - Warm saline in bowl
  - Syringes – 2cc, 5cc, 10cc, 20cc
  - Needles – size 23, 25
  - Scalp vein needles – gauge 23
  - Endo-tracheal tube – size 2.5mm, 3 and 3.5mm and connectors
  - Sterile surgical blades
  - Extra batteries and bulbs
  - Newborn stethoscope
  - Cord clamps, specimen bottles/laboratory request forms
  - Sterile dressing pack
  - Soluset, drip stand, treatment sheet
  - Newborn notes, nursing notes
  - Umbilical tapes
  - Strapping
  - Neonatal brannula appropriate size
  - Delivery kit for cord care
  - Pairs of gloves,
  - Stethoscope
  - Extra newborn towels

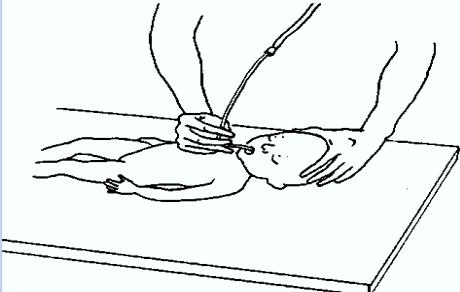
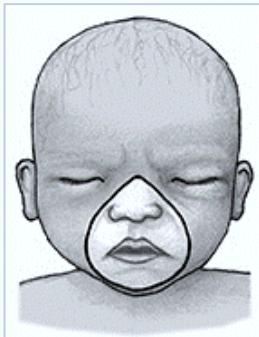
**NB:**

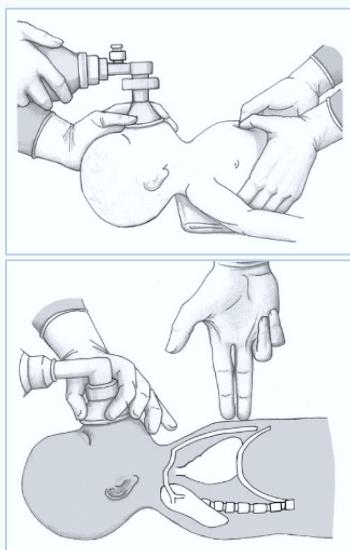
Always have an additional set of equipment in reserve for multiple births or in case of failure of the first set.

## C. Implementation

Steps	Rationale
1. Alert the resuscitation team members	1. To assemble an effective team of experts essential for resuscitation

Steps	Rationale
2. Wash hands with water, liquid soap, dry and put on gloves	2. For infection prevention and control
3. Immediately after birth all newborns must be quickly dried in a warm towel and then placed in a second warm, dry towel before they are clinically assessed	3. Aids in effective thermoregulation, prevents heat loss through evaporation
4. Wipe the newborn's mouth with a clean towel if there are excessive secretions	4. To clear and maintain patent airway
5. If newborn becomes active, pink and breathes well, let the infant stay with the client. It is best to place the healthy newborns in the kangaroo client care position and allow them to breastfeed	5. For warmth, nourishment, and bonding
<p><b>NB:</b> If the newborn fails to respond to drying and stimulation, then the infant must be immediately actively resuscitated.</p>	
6. Place in a warm firm surface under a radiant heat warmer	6. For ease of access, provision of warmth
<p><b>NB:</b> There are 4 main steps in the basic resuscitation of a newborn infant. They can be easily remembered by thinking of the first 5 letters of the alphabet, i.e. <b>"TACBD"</b></p> <ul style="list-style-type: none"> <li>- TEMPERATURE</li> <li>- AIRWAY</li> <li>- BREATHING</li> <li>- CIRCULATION</li> <li>- DRUGS</li> </ul> <p>According to AHA/AAP</p>	
<b>Step 1</b>	
<p><b>1. OPEN AND CLEAR THE AIRWAY.</b> Place the newborn head in the neutral position with the neck slightly extended.  Do not flex or over extend the neck. It is best to place the infant on a firm surface, facing face up(Fig.3.19a)</p>	<p>1. To clear and maintain patent airway</p> <div style="border: 1px solid black; padding: 10px; text-align: center;">  </div> <p>Figure 3.19a Correct Position of the Head for Ventilation (Adapted from WHO - OMS, 1997)</p>

Steps	Rationale
<p>2. <b>GENTLY CLEAR THE THROAT.</b> The infant may be unable to breathe because the airway is blocked by mucus or blood. Suction the back of the mouth and throat with preferably penguin/bulb sucker or a soft F 10 catheter (Fig 3.19b, c).</p> <p><b>NB:</b></p> <ul style="list-style-type: none"> <li>Excessive suctioning, especially if too deep in the region of the vocal cords, may result in apnoea and bradycardia by stimulating the vagal nerve. This can be prevented by holding the catheter 5 cm from the tip. When suctioning the newborn's throat, only suction what can be visualized.</li> <li><b>Never</b> hold an infant upside down to clear secretions</li> <li>Do not waste time by giving oxygen, without also applying mask ventilation, if the infant does not breathe. Any infant who is not breathing or breathing poorly, gasping, or has a heart rate below 100 breaths per minute needs ventilation</li> </ul>	 <p>Figure 3.19b Suctioning the Mouth and Nose using Mucus Extractor Adapted from (WHO - OMS, 1997)</p>  <p>Figure 3.19c Suctioning the mouth and the Nose Source (Leardal Global Health, 2017)</p>
<b>Step 2</b>	
<p>1. If a newborn doesn't breath after drying and stimulation start the infant breathing by providing adequate ventilation</p> <p>2. <b>MASK VENTILATION:</b></p> <ol style="list-style-type: none"> <li>Hold mask tightly over the newborn nose and mouth. Make sure the head is in the correct position and the airway is clear (Fig 3.19d, e)</li> </ol>	<p>a. To ensure maximum chest expansion</p>
 <p>Figure 3.19d Correct Placement of the Mask Source: (Tjukurpa, M. K., 2015)</p>	 <p>Figure 3.19e Holding Mask Tightly Over the Newborn Nose and Mouth Source: (Tjukurpa, 2015)</p>

Steps	Rationale
b. Give 5 inflation deep breath if newborn not breathing at birth, each lasting 2-3 seconds. Making sure the chest rises	b. To initiate spontaneous respiratory activity
c. The newborn breathing, color and heart rate must be reassessed	c. To determine level of oxygenation
d. Reassess by listening to neonatal heart rate and breathing using the stethoscope	d. To assess resumption of cardiac activity
e. If the newborn has established spontaneous breathing rate of >30 breaths per minute and heart rate >100 beats per minute stop ventilation and support with oxygen as per need	e. To determine the success of the therapy and termination of the process
f. In cases where the newborn has a heart rate of more than 60 beats per minute but with a respiratory less than 30 breaths per minute, continue with ventilation at a rate of 30-40 breaths per minute until the newborn establishes spontaneous breathing	f. To ensure adequate oxygenation
<b>Step 3</b>	
1. In cases where the heart rate of the newborn drops to less than 60 beats per minute initiate cardiopulmonary resuscitation. Obtain a good circulation with chest compressions.	
<p>a. Apply chest compressions (external cardiac massage) at a rate of about 100 beats a minute. Place the hands one finger breadth below the nipple line and compress at a depth of a third of the antero-posterior diameter of the chest cavity.</p> <p>Three chest compressions should be followed by one breath. Preferably both hands can be used to give chest compressions although two fingers of one hand can be used in scenarios where a midwife is alone. (Fig 3.19f)</p>	<p>a. To stimulate the heart and maintain brain tissue perfusion</p>  <p>Figure 3.19f Two Methods of Chest Compression Source: (Tjukurpa, 2015)</p>

Steps	Rationale
b. Once both effective ventilation and chest compressions have been achieved for 2 minutes, reassess the newborn breathing, color and heart rate	b. To determine the next course of action
c. If the heart rate is below 60 beats per minute, continue with chest compressions until 60 beats per minute are achieved	c. To stimulate the heart and maintain tissue perfusion
d. If the heart rate is 60 beats and above, continue ventilating at the rate of 30-40 breaths per minute	d. For effective ventilation
e. Continue ventilating until a heart rate of above 100 beats per minute is achieved, respirations are between 30-40 breaths per minute.	e. For effective tissue perfusion
<b>NB:</b> <ul style="list-style-type: none"> <li>• Use of drugs may be instituted if the basic resuscitation fails and investigations have been done</li> <li>• Stop resuscitation after 20 minutes if the newborn is not breathing, gasping, or after 30 minutes of resuscitation and spontaneous breathing has been achieved</li> <li>• Stopping resuscitation is guided by the available national guidelines</li> </ul>	
f. If the newborn's condition improves put in an incubator, connect oxygen using a facemask at 2L/minute and continue observing	f. For close monitoring and continuity of care
g. Reassure the client and inform her of the infants condition	g. To allay anxiety and involvement of care
h. Discard disposable equipment into the coded bins, decontaminate equipment appropriately then remove gloves and wash hands	h. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The newborn's condition	1. To institute appropriate intervention

## E. Documentation

### Record:

- Serial APGAR scores at 1, 5 and 10 minutes
- Resuscitation process
- Drugs used
- Condition of the newborn

**NB: (Refer to the current national guidelines on neonatal resuscitation)**

■ ■ ■

### 3.4-3: First Examination of a Newborn

#### **Definition:**

The systematic review of the newborn's health status within the first 24 hours of birth.

#### **Purpose:**

- To detect early, and correct any deviations from normal
- To establish neonatal maturity
- To exclude birth injuries
- Evaluate the adaptations to extra uterine life

#### **Indications:**

- All newborn babies

## A. Assessment

Assess	Rationale
1. Availability of required equipment	1. To ensure availability of required equipment and to save time
2. The health status of the newborn	2. To ascertain wellbeing of the newborn
3. The client's readiness to observe the procedure	3. For cooperation and to determine health education needs
4. Environment	4. To determine safety, appropriateness and privacy

## B. Planning



#### **Self**

- Appropriate grooming
- Review the procedure for first examination of a newborn
- Wash and dry hands



#### **Client and companion**

- Greet the newborn, the client and the companion and introduce self
- Explain procedure to the client and companion
- Ensure privacy



## Newborn

- Ensure privacy
- Remove clothing and cover newborn with a warm drape
- Ensure that the newborn has fed



## Environment

- Warm, well lit, and drought free room with adequate working space
- Clean newborn cot/examination couch



## Requirements

A clean trolley with:

### Top shelf;

- A tray with:
  - A gallipot
  - Dry cotton wool swabs
  - Clinical thermometer
  - Lubricant
  - Stethoscope
  - Tape measure
  - Cord clump
  - Glucometer

### Bottom shelf;

- Newborn's chart
- Extra linen
- A jar of warm water
- A bowl
- Sterile transport media for specimen collection
- Specimen containers

### A trolley with;

- Weighing scale
- Coded bins
- Length measuring scale

## C. Implementation

Steps	Rationale
1. Explain procedure to the client and companion	1. To alleviate anxiety and gain cooperation
2. Move the trolley next to the examination area	2. For ease of access and efficiency
3. Wash and dry hands and put on gloves	3. For infection prevention and control
4. Inspect the appearance, breathing pattern and activity	4. To determine current status and detect any deviation from normal

Steps	Rationale
5. Expose only the area under examination	5. To prevent hypothermia
<b>Head</b>	
<b>Inspect:</b>	
6. Caput succedaneum, cephalheamatoma or moulding	6 - 9. To determine features of birth and intracranial injuries and malformations
7. Size	
8. Palpate the fontanelles and sutures	
9. Measure the head circumference	
<b>Eyes</b>	
10. Inspect colour, discharge, symmetry, distance between the eyes (should be approx. 3cms)	10. To determine features of birth and intracranial injuries and malformations
11. Reflexes (blinking, red reflex,) pupils' reaction to light	11. To determine birth defects and any other deviation from normal
<b>Nose</b>	
12. Inspect the nose for (discharge, continuity flaring, deviated nasal septum, blockage)	12. To evaluate the presence of potential respiratory distress and other abnormalities
<b>Mouth</b>	
13. Inspect the lips, gums, palate, tongue, frenulum or false teeth	13. To evaluate the presence birth defects and presence of abnormalities
14. Elicit reflexes (rooting, sucking,) Place your finger at the corner of the newborn's mouth and observe the newborn's behavior. Newborn turns toward the side of the stimuli as a normal rooting reflex	14. To determine normal neurological function
<b>Ears</b>	
15. Inspect the position of the pinna in relation to the canthus of the eyes. The upper notch of the pinna should be level with the canthus of the eyes	15. To determine the maturity of the newborn
16. <ul style="list-style-type: none"> <li>• Palpate the cartilage of the ears</li> <li>• Visualize into the ears</li> </ul> <b>NB:</b> Leakage of cerebral spinal fluid is a sign of intracranial injury, discharge is a sign of infection	16. To evaluate the patency of external auditory meatus
17. Inspect for webbing at the back of the neck , excess skin, and mobility	17. To determine any birth defects
18. Flex and rotate the head	18. To determine any birth injuries
<b>Upper Limbs and Shoulders</b>	
19. Palpate clavicles for continuity and rotate the shoulders for dislocation	19. To determine any birth injuries

Steps	Rationale
20. Examine the arms for equality and free movements 21. Examine each hand at a time. And assess for grasping 22. Flex and rotate the wrist joint	20 - 22. To detect any deviation from normal
<b>Chest</b>	
23. Inspect the chest for respiratory pattern, symmetry, retraction, nipple placement, nipple discharge 24. Measure chest circumference 25. Auscultate heart sounds and apical pulse, and the respiration rate	23. To detect any deviation from normal 24. To rule out hydrocephalus 25. To determine the rate, identify congenital heart defects
<b>Abdomen</b>	
26. Inspect for shape, colour and size 27. Auscultate for bowel sounds 28. Palpate gently 29. Examine the umbilical cord for blood vessels, hernia, colour, stump if secure	26. To detect birth GIT defects 27. For rate and rhythm of peristaltic movements 28. To prevent reflux and reflex peristalsis 29. To rule out abnormalities
<b>Lower Limbs</b>	
30. Inspect the limbs for, symmetry, tone, full range of motion in all joints, crasp reflex, leg appear bowed and sole crease present 31. Examine each leg independently 32. Flex and rotate the ankle joint 33. Palpate the groins for swelling	30. To determine musculoskeletal defects 31. For comparison purposes 32. To determine birth trauma of the hip <ul style="list-style-type: none"> <li>• To exclude presence of birth and congenital injuries</li> <li>• To determine the presence of normal reflexes and function</li> </ul> 33. To detect any abdominal masses
<b>Hips</b>	
34. Perform Ortolani's Test or Barlow's Test on the hips of the newborn.	34. To exclude bleeding, birth injuries and congenital abnormalities
<b>Genitalia</b>	
35. Examine the genitalia <ul style="list-style-type: none"> <li>• <b>Male:</b> inspect shape, size, position of penis and urethra, fore skin for retraction, bruising, swelling or haematomas.</li> <li>• <b>Female:</b> part labia to visualize the opening, detect masses, swellings, discharge, abnormal anatomy</li> </ul>	35. To determine congenital abnormalities and birth injuries

Steps	Rationale
<b>NB:</b> elicit information on whether the newborn has voided and passed meconium	
<b>Anus</b>	
36. Observe the position	
37. Gently touch the anus to elicit contraction and retraction of the anal muscle (normal reflex)	36 - 38. To determine the patency of the anus, to exclude abnormalities
38. Insert a lubricated rubber catheter into the anus if newborn has not passed meconium	
<b>Spine</b>	
39. Position in prone, inspect and palpate the back and along the spine for clefts, dimples, sinuses, hairy patches	39. To exclude vertebral malformation and injuries
40. Check for other neonatal reflexes	40. To determine neurological function
<b>Measurements</b>	
41. Take weight and length of the newborn	41. To confirm maturity of the newborn
42. Dress up the newborn, hand over to the client	42. To promote warmth and safety
43. Take random blood sugar	43. The measurements provide parameters against which future growth and development can be monitored
44. Take the newborn's temperature  <b>NB:</b> <ul style="list-style-type: none"><li>• Review prenatal and labour records for the client</li><li>• Observe breastfeeding (position, attachment)</li></ul>	44. To determine any deviation from normal

## D. Evaluation

Evaluate	Rationale
1. Abnormalities detected	1 - 3. Provides information about the general condition of the newborn
2. Maturity level	
3. Presence of birth injuries	
4. Adaptations to extra uterine life	4. Identify implementation gaps for subsequent planning

## E. Documentation

### Record:

- The examination
- Health education
- Planned interventions

■ ■ ■

## 3.4-4: Daily Examination of a Newborn

### Definition:

This is an examination done daily on all the newborns by the midwife.

### Purpose:

- To detect any complications that the newborn might have developed and take appropriate action
- To detect and rule out any internal congenital abnormality
- To assess growth and development of the newborn
- To monitor progress of the newborn

### Indications:

- All newborn babies

## A. Assessment

Assess	Rationale
1. The availability of equipment	1. For ease of access and efficiency
2. Environment	2. For warmth, privacy and safety
3. The client's readiness for the procedure	3. For cooperation and involvement of care

## B. Planning



### Self

- Appropriate grooming
- Review the procedure on daily examination of a newborn
- Wash and dry hands and put on a pair of gloves



### Client

- Explain the procedure to the mother and obtain informed consent



### Newborn

- Remove clothing and cover the newborn with a warm drape



## Environment

- Ensure adequate working areas
- Adequate light
- Newborn cot
- Ensure privacy
- Close nearby windows



## Requirements

A clean trolley with:

### Top shelf;

- Gallipot with cotton wool swabs
- A clinical thermometer
- Lubricant
- Stethoscope
- Tape measure
- Cord clamp
- Glucometer

### Bottom shelf;

- Newborn's chart
- Extra linen
- A jar of hot water
- A bowl
- Specimen transport media

### Accessories;

- Weighting scale
- Coded bins

## C. Implementation

Steps	Rationale
1. Explain the procedure to the client	1. To allay anxiety and gain cooperation
2. Wash and dry hands	2. Infection prevention and control
3. Clean the trolley and set equipment stated above	3 - 4. For ease of access and efficiency
4. Wheel the trolley next to the bed	
5. Close nearby windows	5. Promote warmth
6. Screen the bed	6. Promote privacy
7. Ensure coded bins are in place	7. For waste segregation and disposal
8. Wash dry hands and put on gloves	8. Infection prevention and control
9. Undress the newborn but do not over expose him/her	9. Ease of access and warmth

Steps	Rationale
10. Talk to the client and the newborn	10. To alleviate anxiety and enhance sensory stimulation
11. Place the newborn in supine position and make a physical observation of the newborn	11. For ease and convenience during assessment
12. Perform physical examination of the newborn beginning from head to toe	12. For systematic evaluation and approach
13. Gently palpate the anterior and posterior fontanelles	13. For presence, pulsations and to rule out features of increased intracranial pressures
14. Identify any new swelling e.g. cephalohaematoma and caput succedaneum and determine if moulding is subsiding	14. To determine overlooked findings during the initial assessment
15. Examine the eyes for discharge or stickiness and yellow coloration of the sclera	15. To rule out eye infections, and instill appropriate interventions for neonatal eye care
16. Examine the nose	16. For congenital defects, patency of the nares
17. Examine the mouth	17. For birth defects and other abnormalities
18. Examine the ears	18. For symmetry and discharges
19. Examine the neck	19. For motion, rigidity and swellings
20. Examine the chest	20. To detect abnormalities and defects, signs of respiratory and cardiac symptoms requiring urgent attention
21. Examine both extremities	21. For defects, abnormalities
22. Examine the abdomen	22. For deviations from normal
23. Examine the cord stump.	23. For signs of healing or infection
24. Examine the groin	24. For growths, swellings and herniations
25. Examine the genitalia	25. For birth defects and abnormalities
26. Examine the buttocks	26. For abnormalities
27. Weigh and dress the newborn	27. To determine current weight deviations, and for warmth
28. Enquire from the client whether newborn is feeding, sleeping, crying and voiding well	28. To determine general wellbeing of the newborn
29. Observe the client breastfeeding to ensure appropriate position and attachment	29. To establish attachment and need for additional and appropriate intervention
30. Give feedback to the client	30. To alleviate anxiety and promote involvement

## D. Evaluation

Evaluate	Rationale
1. The newborn's condition	1. For appropriate intervention

## E. Documentation

### Record:

- Record findings in the newborn's notes and the client's cardex
- Record the temperature pulse and respiration on the chart
- Complete the feed chart
- Give verbal report concerning the client

■ ■ ■

## 3.4-5: Admission of a Newborn into the Newborn Unit

### Definition:

Process of receiving and allowing a newborn to stay in the new born unit.

### Purpose:

- To provide care and prevent development of complications
- For investigations, diagnosis and therapeutic interventions
- To relieve the family from the demands made by the newborn until they are ready to cope

### Indications:

- Newborn born before arrival to hospital
- Babies at risk who need close observation
- Premature babies

## A. Assessment

Assess	Rationale
1. The required equipment	1. For ease of access
2. Environment	2. For warmth, safety, and comfort
3. The general condition of the newborn	3. To determine wellbeing and institute appropriate interventions

## B. Planning



### Self

- Appropriate grooming
- Review the procedure of admitting a newborn in the newborn unit
- Wash and dry hands



### Client

- Explain the procedure to the mother and obtain informed consent



### Newborn

- Ensure availability of an incubator and a newborn cot



### Environment

- Ensure clean and adequate working space/light
- Warm environment



## Requirements

A clean trolley with:

### Top shelf;

- A bowl with warm water
- A bowl with cotton swabs
- A sterile tray containing:
  - Sterile gallipot
  - Sterile cotton swabs
  - Sterile cord scissors

### Bottom shelf;

- A jug of warm water
- Normal saline
- A tape measure
- A stethoscope
- A thermometer
- Admission papers
- Linen
- A pair of gloves
- Cord clamp
- A container with spirit for cleaning the cord
- Glucometer

### Accessories;

- Incubator
- Coded bins
- Weighing scale
- Newborn charts/notes
- Cardex
- Identification band
- Length board

## C. Implementation

Steps	Rationale
1. Wash dry hands and put on gloves	1. Infection prevention and control
2. Unwrap the newborn and observe the general condition of the newborn	2. To determine wellbeing of the newborn and institute appropriate intervention
3. Explain to the client why the newborn must be admitted	3. To allay anxiety, and promote cooperation
4. Set the incubator temperature at 32-34° C and humidity at 60-80%	4. For thermoregulation and prevention of hypothermia
5. Place the newborn in the incubator	5. For warmth and subsequent care
6. Clean the trolley	6. Infection prevention and control
7. Set the equipment as above.	7. For ease of access and efficiency

Steps	Rationale
<b>NB:</b> Prioritize the care depending on the condition of the newborn e.g. if the cord is bleeding ligate.	
8. Obtain the history of the pregnancy, labour and delivery from the client or the person who is accompanying the newborn	8. For baseline data and institute appropriate intervention
9. Perform a head to toe physical examination	9. For baseline data, deviation from normal and to institute appropriate intervention
10. Take the vital signs i.e. <ul style="list-style-type: none"> <li>• Rectal temperature if the baby has not passed meconium</li> <li>• Apex Beat</li> <li>• Respiration</li> <li>• Observe Colour</li> <li>• Cry Activities</li> <li>• Take random blood sugar</li> </ul>	10. For baseline and determine the current status of the child upon which subsequent references shall be based upon
11. Take weight and length of the newborn	11. Determine the current weight in comparison to the birth weight
12. Clean the eyes with warm saline using sterile swabs, one eye at a time using each swab once only from inner canthus to the outside	12. To prevent cross infection
13. Perform top and tailing if general condition of the newborn allows	13. For hygienic purposes
14. Clean cord using 4% chlorhexidine	14. To disinfect and prevent microbial culturing that could result in neonatal sepsis
15. Clean the trolley, decontaminate the equipment and the linen	15. For infection prevention and control
16. Inform the pediatrician about the admission and the general condition of the newborn	16. For review and additional medical specialist care and collaborations

## D. Evaluation

Evaluate	Rationale
1. The newborn's general condition	1. To institute appropriate intervention
2. Interventions	2. To evaluate effectiveness of actions planned

## E. Documentation

### Record:

- Record in the midwife's notes and admission book
- Fill in the necessary chart
- Give verbal report to the in-charge
- Inform the pediatrician about the admission

■ ■ ■

## 3.4-6: Thermoregulation and Thermocare of a Newborn

### Definition:

Care given to a neonate in a neutral thermal environment to ensure growth and recovery.

### Purpose:

- To maintain thermoregulation of the neonate

### Indications:

- Premature babies
- Sick babies
- Small for dates

## A. Assessment

Assess	Rationale
1. General condition of the newborn	1. To determine a suitable thermoregulation intervention
2. The psychological and physical status of the client	2. To determine level of understanding of the newborn's condition and need for incubator care
3. The client's knowledge on the newborn's condition	3. To reassure the client of the expertise care in order to allay anxiety and win her confidence
4. The condition of the parent/guardian	4. To ascertain if fit for kangaroo care

## B. Planning



### Self

- Appropriate grooming
- Review guidelines on care of a neonate in a neutral thermal environment



### Client

- Explain the need for incubator care and warm environment
- Explain the alternative method of thermoregulation



### Newborn

- Ensure the incubator is working and the environment is warm enough
- Ensure the baby's condition can allow for kangaroo care



## Environment

- Should be clean, dry, warm and free from draught



## Requirements

A clean trolley with:

### Top shelf;

- A sterile tray containing:
  - A rectal thermometer
  - Lubricant for the thermometer
  - Gallipot with cotton wool swabs
  - Stethoscope
  - Chlorhexidine 4%

### Bottom shelf;

- Extra drapes and napkins
- Hand towels or paper towels

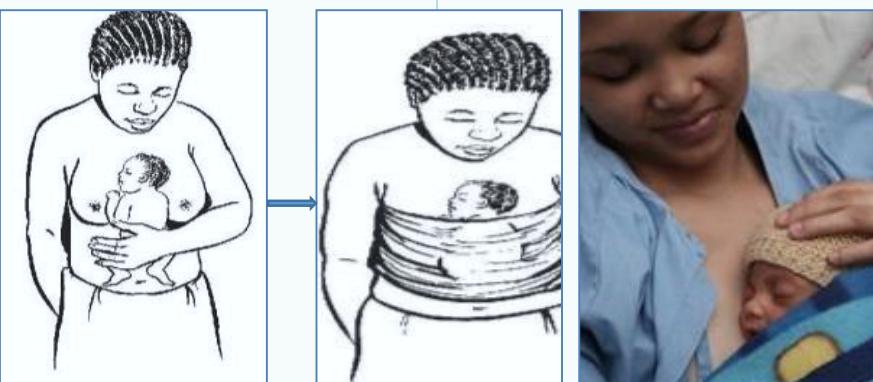
### Accessories;

- Incubator (ready for use)
- Oxygen apparatus
- Drip stand
- Intravenous fluids
- Nasogastric tubes
- Suction apparatus
- Bucket for dirty containers/swabs
- Cardex, newborn's notes, fluid charts, weight record book
- Weighing machine
- Neonatal head caps
- Diaper/nappy
- Socks
- Wrapper
- Gloves

## C. Implementation

Steps	Rationale
<b>Incubator</b>	
1. Explain the need for incubator care	1. To allay anxiety and promote cooperation
2. Set the equipment neatly in the drawers or on the bottom tray	2. For ease of access and efficiency
3. <b>Prepare incubator:</b> raise the head of the incubator up and spread a warm towel over the mattress, check the water level, switch it on for 2 hours before use, ensure adequate power supply	3. For continuous warmth

Steps	Rationale
4. Ensure good visibility of the site for the incubator	4. To easily visualize the newborn while in the incubator
5. Keep the accessories in the room/midwifery	5. Easy accessibility when required
6. Place the newborn without a wrapper in the warm incubator with a temperature between 32°C to 35°C humidity 60% to 80%	6. To prevent overheating or too cold conditions
7. Clear the airway – with mucous catheters using a suction machine	7. Maintain patency of the airway and improve tissue perfusion
8. Administer oxygen as necessary	8. To meet the body demand and improved tissue oxygenation
9. Assess and record the Rectal Temperature 4 hourly, apex beat ½ - 1 hourly depending on the newborn's condition, respiration ½ - 1 hourly depending on newborn's condition. skin color and activity and overall general condition	9. To monitor and ensure regulated temperature within normal range
10. Assess passing of urine and meconium	10. To determine elimination status of the newborn
11. Ensure the newborn gets the correct amounts of feeds either IV or via nasogastric tube as prescribed by the doctor. The mode changes to breastfeeding as the condition improves	11. To take care of nutritional aspect of the newborn
12. Clean the newborn during the critical phase	12. To maintain body hygiene
13. Clean the cord with chlorhexidine 4% daily	13. To prevent sepsis
14. Change the newborn's linen whenever they are soiled	14. To protect delicate skin from sores, rashes and for baby comfort
15. Turn the newborn's position 2 hourly	15. To prevent orthostatic pneumonitis and decubitus ulcer formation
16. Perform daily examination for head to toe	16. To identify problems, and institute interventions
17. Weigh the newborn if condition allows and record in the newborn's note	17. To monitor growth and development
18. Ensure medications are administered as prescribed and recorded in the treatment sheet	18. To prevent medications errors and resistance due to missed doses

Steps	Rationale
19. Ensure a high standard of environmental hygiene	19. To prevent nosocomial infections
20. Encourage the parents/guardian to participate in the care of the newborn	20. To reduce anxiety, promote cooperation and for continuum of care
21. Clear the trolley and decontaminate used equipment and linen	21. For infection prevention and control
<b>Kangaroo Care</b>	
1. Wash and dry hands	1. For infection prevention and control
2. Explain the procedure to the client	2. To alleviate anxiety, gain cooperation and involvement of care
3. Prepare the environment	3. To ascertain the suitability of kangaroo care
4. Assess the general condition of the baby	4. For warmth, safety, and comfort
5. Instruct the parent/guardian to wear a loose fitting, open chest outfit	5. To facilitate Kangaroo Care to the baby
6. Dress the baby in only a diaper, socks and hat	6. For ease of access and comfort
7. Encourage the parent/guardian to take a warm drink	7. To prevent extremities from extreme temperatures
8. Place the baby in a vertical frog position, skin to skin on a parent's chest	8. To maximize skin contact
9. Position the baby's head slightly extended and turned to one side	9. To maintain the patency of airway
10. Tie the wrapper over the baby's back firmly covering the ear without constricting the baby's abdomen and chest (Fig 3.21) for steps <ul style="list-style-type: none"> <li>• Maintain kangaroo care for at least 18 hours a day</li> <li>• Avoid frequent interruptions; a session should not last less than 60 minutes</li> </ul>	10. To secure, support the baby and enhance contact
	
Figure 3.21 Steps for Kangaroo Care	

## D. Evaluation

Evaluate	Rationale
1. Intervention	1. To plan for appropriate action

## E. Documentation

### Record:

- Document the condition of the newborn in the newborn's charts and file
- Document use of incubator
- The client's involvement in care of the newborn

■ ■ ■

## 3.4-7: Care of a Newborn on Exchange Transfusion

### Definition:

Care given to a newborn undergoing an invasive procedure whereby the blood containing sensitized erythrocytes is removed and replaced with blood compatible with the newborn blood group through central umbilical venous and arterial lines.

### Purpose:

- To control and maintain bilirubin levels within normal range of 200-215 $\mu\text{mol/l}$  (12-13mg/dl)
- To prevent brain damage associated with effects of bilirubin on the brain (kernicterus)
- To prevent or reverse the complications of neonatal sepsis
- Elevate low haemoglobin level

### Indications:

- Newborn babies who develop jaundice during the first 24 hours and whose bilirubin levels are as follows:
  - 255 $\mu\text{mol/l}$  (15mg/dl) for preterm of <1500gms
  - 300-400 $\mu\text{mol/l}$  (17-23 mg/dl) for sick and preterm babies >1500gms and those experiencing haemolysis
  - 400-500  $\mu\text{mol/l}$  (23-29mg/dl) for healthy term babies

## A. Assessment

Assess	Rationale
1. Availability of the required equipment	1. For ease of access and efficiency
2. General condition of the newborn	2. To ascertain wellbeing of the newborn
3. Availability of radiant warmer bed with a temperature probe	3. To maintain appropriate temperature
4. Knowledge of the client about the procedure	4. To alleviate anxiety, promote cooperation and continuity of care
5. Environment	5. For warmth, safety, and comfort

## B. Planning



### Self

- Appropriate grooming
- Review blood exchange procedure guidelines
- Reflect on own feelings and anxieties and manage them
- Wash and dry hands



## Client

- Explain the procedure to the mother and obtain informed consent



## Newborn

- Explain to the client the purpose of the procedure and her role
- Obtain a written consent from the client
- Ensure the newborn is on intravenous fluid four hours before the procedure
- Observe the newborn's vital signs



## Environment

- Privacy of the room
- Ensure warmth and cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

- Exchange transfusion tray
- Procedure chart
- Povidone iodine
- Sterile water
- 4x4 gauze and / or wipes
- Adhesive Tape
- Radiant warmer bed
- Sterile gauze
- Blood (cross matched)
- Blood warmer
- IV extension tubing with stopcock
- Cannulas
- Blood transfusion
- Drip stand
- Plastic waste bag – to use as a receptacle for discarded blood
- Extra syringes
- Sterile gowns and gloves
- Masks and caps

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. Infection prevention and control
2. Assemble and arrange equipment and supplies then take equipment and supplies to the treatment room	2. For ease of access and efficiency
3. Ensure the room is warm	3. To protect the newborn from hypothermia

Steps	Rationale
4. Place the newborn on the blood exchange surface (crucifix) and ensure there is a heater for the newborn	4. To ensure the newborn is placed in the most comfortable position while undergoing exchange transfusion
5. Assist in bandaging the newborn to a cross splint	5. To ensure the newborn is still; protects the newborn from injury that would arise from the newborn's movements
6. Strap the stethoscope to the left chest wall of the newborn	6. To allow for frequent access to the apex beat with minimal disturbance to the newborn
7. Sit beside the newborn, take and record heart rate and respirations every 10-15 minutes	7. To detect any deviations from normal and institute appropriate action
8. Take pre-exchange bilirubin and haemoglobin levels	8. For baseline data for appropriate intervention
9. Record all the blood injected in and withdrawn from the newborn	9. For accurate records to avoid circulatory overload
10. Record all the doses, time and type of drugs given	10. To ensure drugs are not given at too close intervals that may cause cumulated toxicity
11. Provide the newborn with stuffed teat soaked in dextrose to suck in case of restlessness	11. To promote source of comfort and prevents the newborn from experiencing dry lips
12. Monitor IV fluids by maintaining fluid input and output chart	12. To detect signs of fluid and electrolyte imbalance against daily output
13. Take post exchange bilirubin and haemoglobin levels	13. For evaluation and appropriate interventions
14. Continue to monitor vital signs of the newborn quarter hourly for the next six hours post exchange transfusion	14. To monitor progress and observe changes that would require urgent intervention

## D. Evaluation

Evaluate	Rationale
1. The newborn's condition	1. To institute appropriate interventions
2. Interventions	2. To determine effectiveness of the interventions

## E. Documentation

### Record:

- All vital signs observations taken during and after the procedure
  - The newborn's behavior during the procedure
  - All drugs given during the procedure
  - Amount of blood exchanged
  - Outcome of evaluation
- ■ ■

## References

American Heart Association (AHA) Guidelines for Cardiopulmonary Resuscitation (CPR) and Emergency Cardiovascular Care (ECC) of Pediatric and Neonatal Patients: (2005)

*Antenatal care.* Retrieved from <https://image.slidesharecdn.com/anccare>

Antenatal and postnatal mental health: clinical management and service guidance. Clinical guideline [CG192], (2014)

Basic Newborn Resuscitation: A Practical Guide (WHO - OMS, 1997, 54 p.)

Damos JR, Bassett R. Chapter H: assisted vaginal delivery. In: Advanced Life Support in Obstetrics (ALSO) Provider Syllabus. 4th ed. Leawood, Kan.: American Academy of Family Physicians; 2003:3–8.

*Essential Surgical Care Manual: Emergency Obstetric Care; WHO, 2003*

Fraser, et al, (2006). Newborn Resuscitation: Defining Best Practice for Low-Income Settings

Kenya Emergency Obstetric and Neonatal Care (EmONC) Guidelines, (2013).

Lochia Estimation. Retrieved from: <https://www.pinterest.com>

Managing Complications in Pregnancy and Childbirth: A Guide for Midwives and Doctors; Integrated Management of Pregnancy and Childbirth Department of Reproductive Health and Research; retrieved from [http://apps.who.int/iris/bitstream/10665/43972/1/9241545879\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/43972/1/9241545879_eng.pdf)

Nursing Council of Kenya -Photo Bank (2017):

Penguin-Newborn-Suction (2017): retrieved from <http://www.laerdalglobalhealth.com/doc/2552>

Posner, G. D., et al, (2013). Delivery of the Placenta, Retained Placenta, and Placenta Accreta; Oxorn-Foote: Human Labor & Birth, 6th Ed, McGraw-Hill Global Education Holdings.

Putta, L. V., & Spencer, J. P., (2000). *Assisted Vaginal Delivery Using Vacuum Extractor.* American Family Physician 15;62(6):1316-1320. Retrieved from <http://www.aafp.org/afp/>

Robson, S. & Higgs, P., (2011) Third- and Fourth-Degree Injuries. RANZCOG 13(2); 20–22. Retrieved from [https://www.ranzcog.edu.au/RANZCOG\\_SITE/media/DOCMAN-](https://www.ranzcog.edu.au/RANZCOG_SITE/media/DOCMAN-)

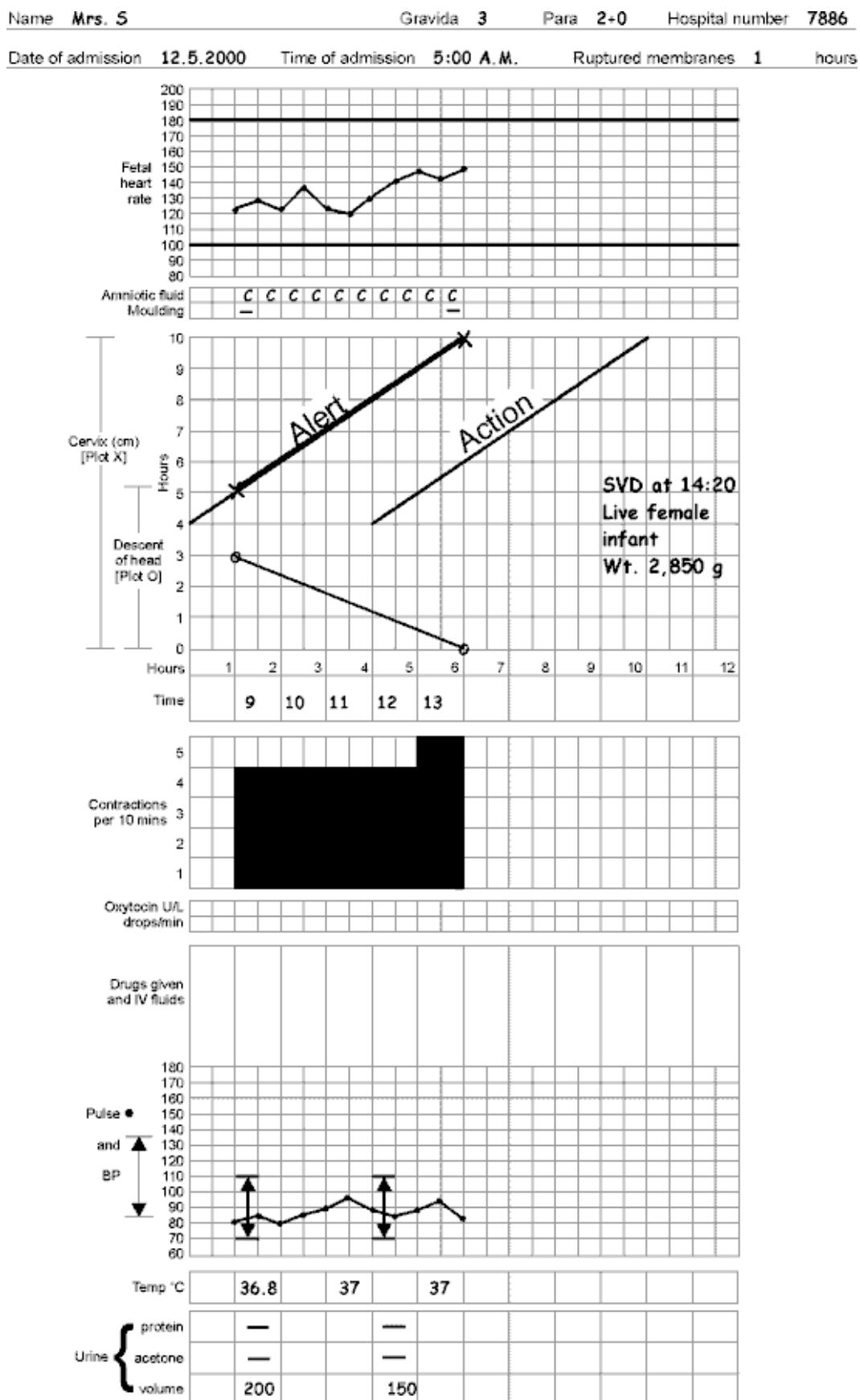
Textbook of Neonatal Resuscitation, Dallas, American Heart Association/American Academy of Pediatrics, 1991)

Tjukurpa, M. K., (2015). *Women's Business Manual: Manual Removal of Placenta.* 5th Edition; Australia; Centre for Remote Health

[http://www.euro.who.int/\\_data/assets/pdf\\_file/0006/146814/EPC\\_FAC\\_guide\\_pt2\\_mod\\_1N\\_7N.pdf](http://www.euro.who.int/_data/assets/pdf_file/0006/146814/EPC_FAC_guide_pt2_mod_1N_7N.pdf) retrieved on 13.10.2016

Reference NICE, (2006). Post natal care; routine postnatal care of women and their babies.

## Appendix 3: Partograph



## Chapter 3: Evaluation Checklist

Please fill this evaluation checklist to help the Nursing Council of Kenya improve the quality of subsequent procedure manuals.

MIDWIFERY AND OBSTETRICS NURSING	YES	NO	COMMENTS
1. Critical procedures in Midwifery and Obstetrics Nursing are included in the chapter			
2. Procedures are placed under their relevant functional patterns/systems			
3. Procedures are arranged from simple to complex within the respective functional patterns/systems			
4. Procedures are correctly defined			
5. Purpose of the procedures is stipulated clearly			
6. Indications for the procedures are correct			
7. Steps in the procedures are accurate			
8. Nursing process is correctly applied:			
➤ Assessment			
➤ Planning			
➤ Implementation			
➤ Evaluation			
➤ Documentation			
9. Scientific rationales are given in assessment, implementation and evaluation			
10. Approach of the nursing process is useful in these procedures			
11. Diagrams are:			
➤ Relevant			
➤ Appropriate			
➤ Arrangement			
12. How would you rate this chapter on a scale of 1 to 10 (where 1 is the lowest & 10 is the highest score)?			
13. Overall comments for this chapter			

## CHAPTER 4

# Mental Health and Psychiatric Nursing

## Chapter Outline

### 4.1: Admission of Patients with Mental Disorders

### 4.2: Comprehensive Mental Health Assessment

#### 4.2.1: Mental health History Taking

#### 4.2.2: Mental State Examination/Assessment (MSE/A)

#### 4.2.3: Physical Examination

### 4.3: Establishing a Therapeutic Nurse.Patient Relationship

### 4.4: Conducting Individual Psychotherapy

### 4.5: Conducting a Group Psychotherapy

### 4.6: Electroconvulsive Therapy (ECT)

#### 4.6.1: Pre-ECT Care

#### 4.6.2: Intra-ECT Care

#### 4.6.3: Post-ECT Care

### 4.7: Care in Psychiatric Emergency Situations

#### 4.7.1: Care of a Patient with Suicidal Behaviour

#### 4.7.2: Care of a Patient with Alcoholic Withdrawal Delirium (Delirium Tremens)

#### 4.7.3: Care of a Patient with Acute Panic Attacks

#### 4.7.4: Care of a Patient with Aggressive and Violent Patients

#### 4.7.5: Care of a Patient Experiencing Acute Dystonia

### 4.8: Conducting Ward Round in a Mental Health Unit

### 4.9: Giving a Report about a Psychiatric Patient

### 4.10: Discharging a Patient from a Mental Health Unit

### 4.11: Conducting Follow up Care

## 4.1: Admission of Patients with Mental Disorders

### Definition:

This is the process of receiving a patient for inpatient care.

### Purpose:

To provide a safe environment for therapeutic interventions.

### Indications:

All persons with mental disorders requiring inpatient care i.e.

- Whose relatives are not able to provide adequate care at home
- Who need close monitoring
- Who are dangerous to themselves and to others
- Suffering from substance related disorders requiring detoxification

## A. Assessment

Assess	Rationale
1. The mental state of the patient	1. To determine if the patient is violent and type of room, emergency interventions and assistance required
2. The physiological state of the patient	2. To determine if the patient can tolerate the complete procedure of admission
3. The environment	3. To provide safety and comfort required for the patient and companion
4. Number of companions for social support	4. To establish the social support system

## B. Planning



### Self

- Review admission requirements for various admission modes/orders
- Reflect on your own emotions and how to control them
- Wash hands to prevent transfer of micro-organisms to the patient and companions



## Patient

- Offer the patient and his/her companions seats
- Explain the procedure to the patient and companions
- Make the patient and companion comfortable



## Environment

- A room that provides privacy, well-lit and ventilated with no dangerous equipment
- Adequate plastic seats or fixed benches and a table
- Sitting arrangement that allows for easy exit, movement and restraint
- Seclusion Strong Room for restraining aggressive patients with a mattress and adequate linen
- Examination coach



## Requirements

Assemble and arrange the following within comfortable reach but away from the patient's reach

- Table with;
  - Patients file containing;
    - Pen
    - Plain papers
    - Continuation sheets
    - Consent forms
    - Nursing notes/cardex
    - Assorted charts: vital signs, fluid charts, treatment, suicide precaution and suicide contract
    - Others: Daily bed return, Admission record book, Report book
    - Emergency medications including benzodiazepines, phenothiazines (e.g. chlorpromazine), 50% dextrose
    - Vital signs (**Refer to procedure 1.1-1, Measuring of Vital Signs**)
    - Hospital uniform

## C. Implementation

Steps	Rationale
1. Greet, Welcome and introduce self to the patient and his/her companion(s)	1. To enhance comfort, relaxation
2. Identify the patient through the accompanying nurse/companion(s)	2. To ensure right interventions to the right patient
3. Receive the report of the patient from the accompanying nurse/companion(s)	3. For commencement or continuity of care and planning interventions
4. Check validity of the admission legal documents	4. To ensure the patient is legally admitted in the hospital and to ensure the patient's protection

Steps	Rationale
5. Release the accompanying nurse (if applicable)	5. To avail time for attending to the patient in the ward
6. Take the history from the patient and/or companion ( <b>Refer to procedure on Mental Health History Taking</b> )	6. To establish a database, and understand the patient
7. Perform mental state assessment ( <b>Refer to procedure 4.2-1, Mental State Examination/Assessment (MSE/A)</b> )	7. To make a plan of care
8. Perform physical examination ( <b>Refer to procedure 4.2-3, Physical Examination</b> ) and take vital signs observations ( <b>Refer to procedure 1.1-3, Measuring Vital Signs</b> )	8. To detect other co-morbid medical conditions; establish presence of any injuries sustained; and establish baseline data
9. Explain the possible modes of treatment and obtain consent	9. To protect the patient's right of autonomy ,obtain cooperation and ensure compliance with treatment
10. Develop a nursing care plan	10. To plan for quality care
11. Complete the request forms for routine investigations such as Blood slide for Malaria parasites, urine for urinalysis, stool for ova and cyst, HIV/AIDS and any other necessary test	11. To rule out other medical conditions that might contribute to the current episode
12. Inspect all the valuables and identify items to be taken home by relatives	12. To ensure safety of the patient's and property
13. Label, make a list and appropriately store items that must be left in the ward	13. To ease identification of the patient's property and avoid loss
14. Orientate the patient to staff, other in- patients, ward annexes and activities	14. To promote quick adjustment to hospital environment, relieve anxiety and promote security
15. Ensure the patient takes a bath (if necessary) and changes into hospital uniform	15. To improve the patient's image and hygiene status
16. Administer/ start treatment	16. To calm the patient
17. Keep the patient's file in the file cabinet	17. To ensure safe custody of legal documents for reference
18. Keep emergency trays in the respective cupboards	18. To ensure safe custody and in readiness for subsequent use
19. Store the equipment for observations of vital signs in the cupboard	19. To ensure safe custody and in readiness for subsequent use

Steps	Rationale
20. Dispose the used supplies, clear equipment according to existing guidelines, and wash hands	20. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Rapport was established	1. To determine the effectiveness of interaction
2. If the patient can locate the various ward premises	2. To determine effectiveness of orientation
3. If data obtained can inform formulation of nursing interventions	3. To identify if more information is required
4. The views of relatives about the patient's admission	4. To determine willingness to participate in the patient's care

## E. Documentation

### Record:

- Date and time
- Mode of admission
- The history obtained
- The findings of physical and mental state examination
- Any treatment administered; dose, time, route and any adverse reactions
- Priority interventions
- Findings of evaluation

■ ■ ■

## 4.2: Comprehensive Mental Health Assessment

### 4.2-1: Mental Health History Taking

**Definition:**

This is a systematic procedure of gathering subjective and objective data or information about the patient's state of health.

**Purpose:**

To establish baseline data to facilitate the process of formulating mental health nursing diagnoses and planning of care.

**Indications:**

- Any patient seeking mental health care
- On first contact with a patient or informant
- On subsequent visits by the patient

## A. Assessment

Assess	Rationale
1. If the environment provides for safety	1. To prevent injury to themselves, staff, companions and other patients
2. If the environment provides for privacy	2. To ensure maintenance of the patient's dignity and comfort thereby promoting cooperation for the patient and companion(s)
3. The client's general physical and mental state	3. To determine the need to validate data from an alternative source (informant) or defer the procedure until history taking is possible
4. The patient's and companion/guardians understanding of the procedure	4. To determine the explanation needed for allaying anxiety and promoting cooperation
5. Determine requirements	5. To confirm availability and suitability

## B. Planning

### Self

- Examine own ability to communicate effectively
- Review history taking procedure and its contents
- Determine own emotions and put it under control
- Wash hands

### Patient

- Greet the patient and companion and introduce self and offer a seat (create rapport)
- Explain the procedure to the patient and companion(s)

### Environment

- Arrange for a quiet and safe room with relative privacy but within full view of other staff
- Arrange seats at the same level, in full view of the patient and companion(s) with no barrier created between the patient, companion and the nurse
- Ensure easy access to the door by the nurse
- Adequate space with adequate lighting
- Adequate fixed chairs and a table

### Requirements

Assemble and arrange the following items neatly on a trolley or table within easy access to the nurse but away from the patient:

- The patient's file
- Plain papers
- Nursing notes
- Continuation sheets
- Pens

## C. Implementation

Steps	Rationale
<b>Introductory Phase</b>	
1. Assume a relaxed sitting position that demonstrates availability and acceptance	1. To ensure relaxation and promote disclosure
2. Explain to the patient or the companion the approximate time history taking is likely to take and what is required of them	2. To promote cooperation
3. Inquire from the companion(s) the relationship with the patient	3. To establish the family support, and determine quality of data that the nurse is likely to obtain from a secondary source

Steps	Rationale
4. Establish rapport	4. To promote dignity and create trust
<b>Working Phase</b>	
5. Observe principles of interviewing techniques	5. To promote effectiveness of obtaining information
6. Observe the patient for non-verbal communication and validate them	6. This reveals information the patient may not express verbally
7. Ask open ended questions and use simple language	7. To encourage free self-expression and promote disclosure
<p>8. Obtain, interpret and record complete information on the following;</p> <ul style="list-style-type: none"> <li>• Identifying data/Biodata</li> <li>• <b>Mode of admission:</b> take into consideration the legal issues concerning each mode of admission</li> <li>• <b>Reason for referral:</b> state in everyday language why the patient has been referred</li> <li>• <b>Chief complaint:</b> (allegations and the patient's response)</li> <li>• History of present illness</li> <li>• History of past illness (mental, medical, surgical, obstetric for women)</li> <li>• <b>Personal history:</b> <ul style="list-style-type: none"> <li>□ Prenatal, intrapartum, post-partum, infancy, childhood, adolescence, adulthood, education, religious, occupation/work record, forensic and socio-cultural background</li> </ul> </li> <li>• <b>Psychosexual:</b> <ul style="list-style-type: none"> <li>□ Begin sexual history by tactfully asking how the client acquired information about sexual matters</li> <li>□ Ask whether the patient's sexual life is satisfying or not</li> <li>□ Enquire about methods of contraception</li> </ul> </li> <li>• Family history to include family tree or genogram</li> <li>• <b>Habits:</b> tobacco, alcohol and other substances of abuse</li> <li>• <b>Premorbid personality</b></li> </ul>	8. To determine the actual, and potential problems, identify support systems, precipitating factors and plan appropriate interventions

Steps	Rationale
<ul style="list-style-type: none"> <li><input type="checkbox"/> Leisure activities</li> <li><input type="checkbox"/> Mood</li> <li><input type="checkbox"/> Character</li> <li><input type="checkbox"/> Attitudes and standards towards the body, health, illness, religious and moral standards</li> <li><input type="checkbox"/> Early childhood signs of emotional disorders (sleep walking, stammering)</li> </ul>	
<b>Termination Phase</b>	
<p>9. Explain to the client that the information required for the time being has been obtained, however, if more information is required then he/she may be called upon</p>	<p>9. To prepare the patient and companion for end of history taking</p>
<p>10. Ask the patient and companion(s) if they have questions to ask</p>	<p>10. To encourage the patient/companion to clarify their issues of concern</p> <ul style="list-style-type: none"> <li>• To signal the end of the working session while still maintaining a therapeutic relationship.</li> <li>• Allows clarification of matters and response to concerns</li> </ul>
<p>11. Thank the patient and companion(s) and release them</p>	<p>11. To make the patient and companion feel important to the whole process</p>
<p>12. Keep the patient's notes and files in respective cabinet and store unused stationary in the store</p>	<p>12. To ensure safe custody and confidentiality of the patient's notes</p>
<p>13. Wash and dry hands</p>	<p>13. For infection prevention and control</p>

## D. Evaluation

Evaluate	Rationale
<p>1. Adequacy of history obtained</p>	<p>1. To determine if further history is required</p>
<p>2. Adequacy of history in planning interventions</p>	<p>2. To help plan interventions</p>
<p>3. The client's reaction during the interview</p>	<p>3.</p> <ul style="list-style-type: none"> <li>• To reveal the relationship between the patient, staff and companions</li> <li>• To help evaluate effectiveness and preparation for the procedure</li> </ul>
<p>4. Consistency of verbal and non-verbal communication with findings of</p>	<p>4. To validate data for accurate diagnosis and intervention</p>

Evaluate	Rationale
physical examination and diagnostic investigations	

## E. Documentation

### Record:

- Full history obtained
- Specific issues of concern to the patient and companion
- Any anxiety observed from the patient or companion
- Areas of history that require further investigation
- Relationship between the patient, staff and companion(s) during interaction
- Date and time
- Name and signature of the nurse

■ ■ ■

## 4.2-2: Mental Status Examination/Assessment (MSE/A)

### **Definition:**

This is a systematic assessment of a client/patient's cognitive functions, thoughts perceptions, speech, mood, appearance and behaviour.

### **Purpose:**

To establish baseline data to facilitate the process of formulating mental health nursing diagnosis and planning for the care.

### **Indications:**

- Any patient with mental disorder seeking health care
- On first contact with a client/patient
- During routine monitoring of the patient's progress
- For forensic purposes
- In-patients before discharge

## A. Assessment

Assess	Rationale
1. Environment for quietness, safety and privacy	<ol style="list-style-type: none"> <li>1. To prevent excessive stimuli</li> <li>• To ensures maintenance of the patient's dignity and promote cooperation</li> </ol>
2. The client's general physical state	<ol style="list-style-type: none"> <li>2. To determine if the patient is likely to turn violent</li> </ol>
3. The client's/patient's companion(s) understanding of the examination	<ol style="list-style-type: none"> <li>3. To promote cooperation</li> </ol>

## B. Planning



### **Self**

- Examine own ability to communicate effectively
- Review the procedure for mental state examination



### **Patient**

- Explain the procedure to the patient and companion(s) and seek informed consent



## Environment

- Quiet and safe room within full view of other staff
- Arrange seats to make provision for same level, eye contact, in full view of the patient with no barrier created between the patient and the mental health nurse
- Easy access to the door by the nurse
- Adequate sitting space with adequate lighting
- Fixed chairs and a table



## Requirements

- Patient's file and previous mental state examination assessment findings (where applicable)
- Nursing notes
- Continuation sheets
- Pen

**NB:** The items should be on a trolley or a table within easy access to the nurse but a way from the patient

## C. Implementation

Steps	Rationale
1. Assume a relaxed sitting position in full view of the patient	1. To enhance the patient's concentration
2. Maintain adequate space as tolerated by the patient	2. To enhance appropriate perception may interpret being too close as intruding into his/her personal space and this can precipitate irritability
3. Explain to the patient and companion(s) the approximate duration of assessment and what is required of him/ her	3. To prepare the patient for concentration and cooperation
4. Establish rapport	4. To allow for relaxation and encourages the patient to answer questions without feelings of interrogation
5. Observe principles of interviewing techniques	5. To promote effectiveness in obtaining information
6. Observe the patient for non-verbal communication and validate them	6. To reveal information and mental processes that the patient may not express verbally
7. Ask open ended questions and use simple language	7. To facilitate understanding and enhance self-expression

Steps	Rationale
<p>8. Obtain, interpret and record complete information on the following:</p> <ul style="list-style-type: none"> <li>• <b>Appearance:</b> Physical restraints; Dressing (whether appropriate, symbolic), grooming (kempt or unkempt), eye contact held, facial expression, posture and gait, body built, indication of recent weight loss</li> <li>• <b>Behaviour and psycho-motor activity:</b> Restlessness, agitated, lethargic, mannerisms, tics, echopraxia, echolalia, waxy flexibility, Parkinson like symptoms including, akathisia and dyskinesia</li> <li>• <b>Attitude:</b> bodily state of readiness to respond in a characteristic way to a stimuli <ul style="list-style-type: none"> <li>□ Whether established and maintained or not (friendliness, cooperation, or hostility and defensive)</li> </ul> </li> <li>• <b>Speech:</b> expression of thought in spoken word <ul style="list-style-type: none"> <li>□ Normal flow rate, pressure of speech, volubility (soft or high), spontaneous or non-spontaneous, poverty of speech, mute, monosyllabic</li> </ul> </li> <li>• <b>Mood:</b> subjective expression of emotion <ul style="list-style-type: none"> <li>□ Depressed, irritable, anxious, angry, expansive, euphoric, elation, diurnal variation, labile.</li> </ul> </li> <li>• <b>Affect:</b> visible manifestation of facial expression <ul style="list-style-type: none"> <li>□ Appropriate, constricted, flat, blunted</li> </ul> </li> <li>• <b>Form of Thought:</b> <ul style="list-style-type: none"> <li>• <b>Thought process:</b> <ul style="list-style-type: none"> <li>□ Logical, coherent, understandable</li> </ul> </li> </ul> </li> </ul>	<p>8. To enable the nurse identify and classify the mental disorder the patient is suffering from, mental capabilities and establish a data base for planning and evaluating effectiveness of interventions, rehabilitation and follow up care</p>

Steps	Rationale
<ul style="list-style-type: none"> <li><input type="checkbox"/> Neologisms</li> <li><input type="checkbox"/> Word salad</li> <li><input type="checkbox"/> Circumstantialities and tangentialities</li> <li><input type="checkbox"/> Confabulation</li> <li><input type="checkbox"/> Loosening of association</li> <li><input type="checkbox"/> Flight of ideas</li> <li><input type="checkbox"/> Clanging (rhyming)</li> </ul> <ul style="list-style-type: none"> <li>• <b>Thought content:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> What is contained in the thought including overvalued ideas</li> <li><input type="checkbox"/> Delusions, obsessions, compulsions, phobias and suicidal ideas</li> </ul> </li> <li>• <b>Perception:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Awareness of the elements of the environment through physical sensation</li> <li><input type="checkbox"/> Illusions, hallucinations, View of self (self-concept)</li> </ul> </li> <li>• <b>Sensorium and cognition:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Including abstract reasoning, consciousness, orientation, memory, alertness, concentration and attention</li> </ul> </li> <li>• <b>Judgement:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> The ability to identify the consequences of actions</li> </ul> </li> <li>• <b>Insight:</b> power or act of seeing into a situation           <ul style="list-style-type: none"> <li><input type="checkbox"/> Whether present, partly or absent</li> </ul> </li> <li>• <b>Vegetative Symptoms:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Appetite increased or decreased</li> <li><input type="checkbox"/> Insomnia or Hypersomnia</li> <li><input type="checkbox"/> Loss of interest or energy in everyday activities</li> </ul> </li> </ul>	

Steps	Rationale
9. Explain to the patient that the information required for the time being has been obtained	9. To prepare the patient for the end of mental state examination so that the patient does not feel he/she is being rejected
10. Ask the patient if he/she has any questions to ask	10. To encourage the patient to clarify his/her issues of concern
11. Thank the patient, give feedback on findings and plan of action where possible, and release him/her	11. To demonstrate appreciation and promotes cooperation
12. Keep the patient's notes and files in respective cabinet	12. To ensure safe custody and confidentiality of the patient's notes
13. Store unused stationary appropriately	13. To ensure safe custody for subsequent use
14. Wash and dry hands	14. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Adequacy of information obtained	1. To determine plan of action

## E. Documentation

### Record:

- Full findings of mental state examination/assessment
  - Specific issues of concern to the patient identified
  - Any anxiety observed from the patient
  - Areas of examination that require further clarification
  - Comparison of findings from previous mental state examination (if applicable)
  - Date and time
- ■ ■

## 4.2-3: Physical Examination

### Definition:

The systematic review of the body systems and structures by use of inspection, palpation, percussion and auscultation techniques.

### Purpose:

- To establish a database for the patient's normal abilities, determine risk factors for dysfunction and current pathology
- To formulate clinical diagnosis on current health state and plan for appropriate interventions

### Indications:

- All new patients on first contact or admission
- Prerequisite to planning patient care
- On routine monitoring of a patient's progress
- After an incident such as restraint, seclusion or escape
- All patients due for discharge

## A. Assessment

Assess	Rationale
1. Environment for safety	1. To prevent harm to staff, the patient and others
2. Environment for privacy	2. To promote confidence and ensure co-operation from the client and provision of information by the client
3. The client's present general condition	3. To determine if assistance from other members of staff is required
4. The patient/companion's understanding of the procedure	4. To determine the client's receptiveness to the physical examination process
5. The client/patient's experience and data from previous physical assessment	5. To help plan ways of reducing anxiety and improving cooperation during examination
6. Determine the required equipment	6. To facilitate the process of conducting systemic examination

## B. Planning



### Self

- Review the procedure of physical examination



### Patient

- Introduce self to the patient
- Explain the procedure to the patient and obtain consent



### Environment

- Ensure a well-lit quiet room free of disturbances and interruptions
- Ensure a clean well covered examination couch with drapes



### Requirements

- A well-lit room with a couch and running water
- Ensure all equipment are clean, assembled

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. For infection prevention and control
2. Place equipment and instruments within easy reach	2. To promote efficiency
3. Review the client's history <i>(Refer to procedure 4.2-1, Mental Health History Taking and procedure 4.2-2, Mental State Examination/Assessment (MSE/A))</i>	3. To provide important clues on areas of focus or follow up during physical examination
4. Take vital signs	4. To establish baseline data for which further references shall be based upon
5. Position the patient on the couch	5. To ensure the patient's comfort and easy accessibility of the areas to be examined
6. Depending on the MSE, Start systematic examination using the techniques of inspection, palpation, auscultation and percussion	6. To ensure that no body systems are overlooked and that time is used efficiently
7. Analyse data collected	7. To make meaning of the data collected and facilitate planning of quality care
8. Formulate a nursing care plan	8. To facilitate provision of quality and evidence based individualized nursing care
9. Clean, replace and discard equipment according to the institution's waste disposal and decontamination protocols	9. To promote safety for clients, patient and staff
10. Wash and dry hands	10. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The quality of data obtained from the physical examination	1. To determine if data is adequate for formulating accurate nursing diagnoses
2. If the client's needs have been identified	2. To enhance planning of quality care
3. The client's behaviour during examination	3. To determines preparedness for examination
4. Give feedback and discuss appropriate interventions	4. To close and communicate feedback

## E. Documentation

### Record:

- Outcome of the evaluation
- Date, time, and duration of assessment
- Chief concern of the patient and findings during the examination of abnormalities
- Interventions implemented
- Date and time

■ ■ ■

## 4.3: Establishing a Therapeutic Nurse-Patient Relationship

### Definition:

The therapeutic nurse-patient relationship is a relationship that is established between a healthcare professional and a client for the purpose of assisting the client to solve his/ her problem.

### Purpose:

To assist clients/patients develop insight into their problems and develop effective problem solving abilities that enable them utilize their potentials and adapt to life situations.

### Indications:

- All patients experiencing emotional problems or mental disorders

## A. Assessment

Assess	Rationale
1. The language best understood by the client/patient	1. To establish the language the client/patient understands best
2. Perception and thought	2. To ensure interpretation of facts
3. Cultural background	3. To establish presence of cultural factors that affect the client's/patient's verbal and non-verbal interaction patterns
4. Utilization of physical space in non-verbal communication	4. To ensure safety of the patient and others
5. Any speaking or communication disabilities	5. To facilitate communication

## B. Planning



### Self

- Review the client's notes to obtain full information about the client/patient
- Plan for specific points and information gaps for clarification with the client/patient
- Reflect on own feelings and behaviours that are likely to negatively influence the client's /patient's response
- Review the communication, observation and interviewing skills



## Patient

- Greet the patient and introduce self
- Obtain consent from the client/companion(s)
- Explain to the patient the activity that he/she is to be involved in



## Environment

- Ensure a quiet room or space free of disturbances and interruptions
- Provide comfortable, safe seats for the nurse and the client/patient
- Plan for an appropriate seating arrangements
- Organize seating arrangement that allows the nurse to have a full view of the client and yet not intimidating



## Requirements

- Chairs and table
- Patient notes
- Stationery

## C. Implementation

Steps	Rationale
1. Welcome the client/patient to the seat	1. To facilitates relaxation and co-operation
2. During therapeutic meeting the sitting arrangement should allow the nurse to have full view of the client/patient with similar seats	2. To allow for observations and eye contact without intimidation
3. Maintain eye contact with the client	3. To conveys one's interest in the client/patient
4. Speak with the client/patient using appropriate language	4. To enhance understanding and participation
5. Give full concentration to the client/patient and avoid interruptions during the interaction	5. To build trust that promotes concentration and disclosure
6. Start the interaction with general topics	6. To put the client/patient at ease and allow for the patient to give information that allays anxiety
7. Speak slowly and distinctly using appropriate tone variations	7. To sustain the client/patient's interest and concentration
8. Use open ended questions when asking the client/patient what his/her concerns are	8. To allow the client/patient open up and actively participate in the interaction process
9. Give the patient time to respond, exercise tolerance and patience	9. To promote self-esteem and convey respect

Steps	Rationale
10. Observe facial expressions	10. To identify any conflicting messages conveyed
11. Establish regular meeting times and observe punctuality	11. For consistency and confidence that promotes a trusting relationship
<b>Introduction Phase</b>	
12. For new patients, introduce a summary of the need for interaction sessions	12 - 13. To orientate the client/patient and encourage participation
13. For continuing clients/patient (one with whom interaction sessions are already in progress), briefly review the previous discussion and then introduce the topic for the day	
14. Observe the client/patient's behaviour during this phase	14. To determine the client's mood and provide direction for further interaction
15. Help the client/patient identify his/her needs and challenges	15. To promote the client/patient's insight and perception
16. Discuss the details of expectations and responsibilities of both the patient and the nurse	16. To outline each person's roles and responsibilities in the formulation of the relationship
17. Gather more data from the client/patient and Identify the patient's strength's and limitations	17. To build strong data base and reduce the possibility of the client/patient being frustrated
18. Formulate nursing diagnosis, set goals that are agreeable to both the patient and nurse	18. To provide bases for implementation and evaluating effectiveness of the relationship
19. Develop a plan of action that is realistic for meeting established goals	19. To mitigate the already identified patient's actual and potential health needs
20. Explore feelings for discomfort and anxiety	20. To prepare for appropriate interventions if need be
<b>Working Phase</b>	
21. Guide the client/patient along topics of discussion	21. To prevent deviation and circumstantiality
22. Discuss the client/patient's problems and reality orientation	22. To promote the client/patient's insight and perception
23. Observe the client/patient for signs of anxiety that may arise in response to the discussion of painful experiences	23. To provide data for planning interventions
24. Continuously observe if the client/patient is ready for termination phase	24. To give time for expression of emotions

Steps	Rationale
25. Ask open ended questions	25. To facilitate understanding and enhance self-expression
26. Offer silence and other appropriate therapeutic techniques of communication and deal with needs that may require immediate attention	26. To promote and allow self-expression fully
27. Evaluate and set goals from time to time and change them where necessary	27. To obtain more information from the client/patient
<b>Termination Phase</b>	
28. Recognize and explore feelings of the client/patient about termination	28. To determine what goals are realized and the benefits to the client/patient
29. Encourage the client/patient to discuss the identified feelings	29. To promote direction and growth process during termination
30. Continuously evaluate the outcome of the set objectives during each session	30. To ensure that planned activities are done
31. Summarize what has been discussed with the client/patient and allow him/her to ask questions	31. To clarify any factors that may hinder interaction
32. Refer the client/patient depending on the outcome of the objectives	32. To ensure maximum benefit to the client/patient
33. Thank the patient for being tolerant and release as appropriate	33. To convey appreciation and respect
34. If the interaction sessions are to continue, then set the next time and date of meeting with the client/patient	34. To ensure continuity
35. Explain to the client/patient that the meetings are over	35. To allay the client/patient's anxiety
36. Give room for consultation as necessary	36. For continuity and consistency

**NB:** If the client/patient's behaviour to delay termination becomes evident, the nurse must establish the reality of the separation and resist being manipulated into repeated delays by the patient by observing the following:

- Several interaction sessions from a therapeutic nurse-patient relationship
- Avoid a social type of relationship during any interaction session
- Avoid excessive writing during an interaction session as it may distract the patient's attention and may prevent the therapist from eliciting important information from the patient
- Maintain confidentiality throughout the interaction sessions
- Keep to the set time (15-20 minutes per session)
  - A very short session may not enable the therapist time to meet the objective
  - A very long session may be boring for the client/patient
- If a patient becomes restless during any phase of an interaction session:
  - Terminate immediately and thank him for his co-operation; then handle the immediate problem appropriately
  - Ask if the patient would like to have another session

## D. Evaluation

Evaluate	Rationale
1. If the patient was satisfied with the interaction sessions	1. To determine the effectiveness of the relationship
2. The extent to which the patient is able to solve or cope with similar situations in the future	2. To confirm that the patient's emotional growth was effective
3. If the patient verbalized his/her problems	3. To confirm that trust was achieved in orientation phase
4. Whether the patient is comfortable with termination	4. To determine the effectiveness of therapeutic closure

## E. Documentation

### Record:

- Outcomes of the evaluation
  - Any concerns verbalized by the patient
  - Any concerns that need follow up care by health care team or other professionals
  - Date and Time
- ■ ■

## 4.4: Conducting Individual Psychotherapy

### Definition:

A form of psychological treatment in which an individual suffering from an emotional illness is carefully selected and meets regularly with a therapist to establish a professional relationship with the objective of removing, modifying or retarding the existing symptoms, mediating disturbed patterns of behaviour and promoting personality growth or development.

### Purpose:

To help the client/patient understand self and his/her current condition through relating the link between his feelings and behaviour that may have been unrecognized previously.

### Indications:

- Any person with an emotional problem or mental disorder

## A. Assessment

Assess	Rationale
1. Self understanding	1. To identify some of the self needs/behaviour that may affect the therapeutic process
2. General condition of the client/patient and their understanding of the procedure	2. To help determine the preparation required
3. Environment for: <ul style="list-style-type: none"> <li>• Privacy</li> <li>• Safety</li> </ul>	3. <ul style="list-style-type: none"> <li>• To ensure cooperation and confidentiality</li> <li>• To prevent the patient from causing harm to self and the therapist</li> </ul>

## B. Planning



### Self

- Revise the procedure
- Review the patient's history and previous interventions
- Identify and attend to own feelings, fears and anxiety about working with a particular client/patient
- Prepare information to share with the client/patient
- Schedule the therapeutic sessions with the client/patient



## Patient

- Introduce self to the client/patient
- Explain the procedure to the client /patient and obtain informed consent
- Plan with the patient on the session and the expectations



## Environment

- Provide a clean quiet, well ventilated and lit room
- Ensure a quiet room or space free of disturbances and interruptions
- Provide comfortable and safe seats for the nurse and the client/patient
- Plan for an appropriate seating arrangement
- Organize seating arrangement that allows the nurse to have a full view of the client and yet not intimidating



## Requirements

- Avail tools for assessment
- Assemble and arrange equipment
- Two seats, one for the client/patient and the other for the therapist
- Table for placing stationery if need be
- The patient's file
- Continuation sheets
- Pen
- The sitting arrangement is square and allows the therapist full view of the client
- Sitting spaces that allows for easy exit
- Inform your colleagues about the room being used and organize for support if needed



Figure 4.1 An Individual Psychotherapy Session

## C. Implementation

Steps	Rationale
<b>Introductory (Orientation) Phase</b>	
1. Create a conducive environment for the procedure	1. To establish trust and rapport
2. Explain the procedure to the client/patient, obtain a consent and sign a working contract	2. To observe the patient's right of autonomy and promote cooperation
3. Review the client's history together with client and identify his/her needs	3. To enhance adequate data collection and promote active participation in the process
4. Together with the client / patient, set goals that are comfortable for the client and therapist	4. To enhance the patient's participation in their own care
5. Draw a working schedule of the therapeutic process	5. To ensure systematic intervention that facilitates efficiency and effectiveness
<b>Working Phase</b>	
6. Begin the therapeutic scheduled sessions on time	6. To promote confidence and compliance; enhance established relationship
7. Win and maintain the client's trust and rapport that was established earlier on	7. To ensure effective interactions
8. By use of appropriate psychotherapeutic techniques, help the client to bring out gradually the suppressed experiences/ emotions in the subconscious mind	8. To allow working out on the expressed feelings/emotions
9. Assist the patient in pointing out on the expressed emotions	9. To foster therapeutic participation in the recovery process
10. Interpret both the verbal and non-verbal communication during the sessions	10. To identify the client's reaction
<b>Termination Phase</b>	
11. Prepare the client/patient for termination of the sessions	11. To allay anxiety associated with separation
12. Review the set therapeutic goals	12. To determine the extent that goals were met
13. Discuss openly own and the patient's feelings of termination	13. To allow emotional evaluation for both the patient and the therapist
14. Inform the client/patient that therapeutic sessions are over	14. To allow the patient attend to other activities
15. Wash and dry hands	15. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. If the set goals were achieved	1. To determine effectiveness of the therapeutic process
2. Open expression of feelings and reactions	2. To ensure painful experiences were resolved
3. Readiness of the patient to end the therapeutic sessions	3. To ensure emotional growth was achieved
4. Feeling of independence and development of effective problem solving techniques	4. To ensure satisfaction with the therapeutic process

## E. Documentation

### Record:

- Identified problems and how they were solved
- The patient's response to therapy
- The quality of the termination phase
- Date and time

■ ■ ■

## 4.5: Conducting Group Psychotherapy

### Definition:

Treatment in which a group uses a particular activity as the structure around which the interaction of the group members is built, encouraging the growth of ego strengths and control.

### Purpose:

To manage the behaviour and emotional responses required for change in the group members during the activity sessions.

### Indications:

- Anybody suffering from a mental disorder or emotional problem

## A. Assessment

Assess	Rationale
1. The mental state of each patient involved	1. To determine ability to participate
2. The scheduled group activities	2. To determine appropriateness of the environment
3. Each client's behaviour	3. To ensures adherence to therapeutic process
4. Selection criteria for the group members	4. To cater for differences that might negatively affect interaction sessions
5. Qualifications ,experience and number of staff available	5. To help in allocating staff and selection of therapist and co-therapist

## B. Planning



### Self

- Review the procedure of group activity
- Reflect on own fears and control them
- Determine criteria for selection of group members
- Set objectives of the group activities



### Patients

- Obtain consent from the patients
- Identify 6-8 patients according to the criteria of selection and introduce self
- Explain to each patient the time and venue of the therapeutic activity sessions



## Staff

- Explain to staff the time, duration and venue of the activity
- Ask staff to join if possible
- Discuss with the co-therapist and staff their roles during the activity



## Environment

- Provide a safe, quiet, clean and well ventilated room
- Provide adequate comfortable and fixed seats
- Provide a sitting arrangement where group members have clear view of one another



## Requirements

- Tables and chairs
- Room with visual and audio privacy



Figure 4.2 Group Psychotherapy Session

## C. Implementation

Steps	Rationale
1. Assemble the selected patients to the prepared venue	1. To make the patients ready to start the activity
2. Offer the patients seats in a circle (if necessary)	2. To allow for full view of one another

Steps	Rationale
<b>Introductory Phase</b>	
3. Greet all patients, introduce self, colleagues and explain the reason for the activity	3. To allay anxiety and promotes readiness and willingness for participation
4. Invite every group member to do a self-introduction session	4. To promote feeling of acceptance and being part of the group
5. Facilitate group members to select group chairman and secretary from among themselves	5. To reduce feelings of intimidation and facilitates coordination of group's activity
6. Identify group norms and sign a working contract	6. To promote responsibility by each member while observing patient's autonomy and rights
7. Facilitate the group to schedule meeting times and duration	7. To ensure consistency and continuation
8. Facilitate patients to sit at a comfortable space	8. To promote feeling of belonging and acceptance without feeling of intrusions into one's space
9. Facilitate group members to plan with the therapist the time frame	9. To promote working towards achieving objectives within specified time limits
10. Facilitate the group to identify goal and objectives of the group	10. To allow evaluation of effectiveness of activities
11. Observe for signs of establishment of acceptance, respect and trust	11. To ascertain the progress made and facilitates disclosure
12. Guide members in their interaction and allow them to proceed at their own pace	12. To help the group to remain focused while at the same time reducing feeling of intimidation
13. Facilitate self-disclosure	13. To allow for expression of repressed material which can then be dealt with
<b>Working Phase</b>	
14. Observe the extent to which members show willingness to become involved with one another	14. To promote evidence of mutual trust and success of working phase
15. Use the group pressure in facilitating behaviour change	15. To modify behaviour in response to group pressure
16. Facilitate interaction between members by reflecting each member's questions and answers back to the group for discussion	16. To facilitate development of problem solving skills
17. Show positive attitude to member's contribution however irrelevant they may appear	17. To convey respect and encourage disclosure

Steps	Rationale
18. Interpret the various tasks and roles members assign to themselves and to other members	18. To help the therapist get the broader perception of each member of the group, which can later be used to promote self-esteem of group members
19. Determine if objective for each session are being met	19. To detect factors that may hinder achievement of goals and plan appropriate interventions
<b>Termination Phase</b>	
20. Provide members with opportunity to express feelings of separation from other members	20. To enable the nurse plan for appropriate interventions
21. Allow members to discuss any achievements made as a feedback mechanism	21. To evaluate effectiveness of therapeutic activity
22. Set the date for next session	22. To ensure consistency and continuity
23. Allow members to disperse to their respective activities	23. To prepare for the next session
24. Discuss with co-therapist observations and experiences during the session	24. To identify areas of corrections before next sessions
25. Return seats, stationary and group file to their respective areas	25. For safe custody

## D. Evaluation

Evaluate	Rationale
1. Ability to address one another by name	1. To demonstrate the clients' ability to show respect and establish an interpersonal relationship
2. Ability to self-disclosure	2. To demonstrate the client's ability to express their experiences
3. Ability of each patient to discuss with group members challenges and develop strategies he/she plans to apply	3. To demonstrate achievements made in developing problem solving and coping skills
4. Ability to deal positively with feelings of loss and separation	4. To demonstrate achievement of emotional growth

## E. Documentation

### Record:

- Outcome of the evaluation of each session
- Members who need close observation or referral
- Achievements made by each member
- Date and time

■ ■ ■

## 4.6: Electroconvulsive Therapy (ECT)

### 4.6-1: Pre-ECT Care

#### Definition:

The care given to a patient from the time ECT is prescribed until the patient is taken to the ECT room. It involves assessment and preparation (social, psychological, spiritual and physiological) of the patient.

#### Purpose:

- To identify risk factors, and potential problems and manage them in order to put the patient in optimal condition before ECT and prevent complications during and after the procedure

#### Indications:

- Patients who have not responded to pharmacotherapy
- All patients for whom ECT has been prescribed

#### Contraindications:

- Patients with phaeocromocytoma
- Increased intracranial pressure
- Intracranial haemorrhage
- Recent history of myocardial infarction
- Vascular aneurysm
- Retinal detachment

## A. Assessment

Assess	Rationale
1. The patient's or companion(s) attitudes and values towards the ECT	1. To facilitate identification of interventions
2. The patient's perception of previous ECT experience (if applicable)	2. To ensure appropriate planning of care
3. The patient's knowledge about ECT	3. To identify information to share with the patient and allay misconceptions about the procedure

## B. Planning

#### Self

- Have full information about the patient
- Review ECT procedure and care
- Prepare information to be shared with the patient



## Patient

- Ensure the patient is ready for the procedure through nurse/patient therapeutic relationship
- Explain the purpose, process and effects of ECT
- Obtain informed consent



## Environment

- Clean quiet room that is well lit
- A recovery room with well-made recovery bed
- A sink with clean running water
- A full equipped emergency box



## Requirements

- Vital signs observation equipment (**Refer to procedure 1.1-1, Measuring Vital Signs**)
- The patient's file containing notes and duly signed consent form
- Treatment chart
- Vital signs chart
- Pre-ECT check list
- Container for dentures and glasses if required
- Pre-medication on a tray

## C. Implementation

Steps	Rationale
1. Educate the patient on basic concepts of ECT <ul style="list-style-type: none"> <li>• Benefits</li> <li>• Side effects</li> </ul>	1. To ensure that the patient gets factual information about ECT
2. Take vital signs	2. To detect any physiological abnormalities and set a baseline data for comparison
3. Establish baseline memory for short and long term events	3. To detect any memory loss after the procedure
4. Urinalysis	4. To detect any renal and/or diabetic conditions that may complicate the procedure
5. Ensure the patient has observed nil by mouth for six hours before the procedure	5. To prevent regurgitation during the procedure and reduce risk of aspiration pneumonia post the procedure
6. Ensure a good night sleep	6. To provide rest in readiness for ECT
7. Ensure the patient has taken a bath	7. To maintain hygiene and prevent infection

Steps	Rationale
8. Ensure the patient has emptied the bladder/bowel	8. To facilitate the patient's comfort and prevention of release of urine/faeces during fits
9. Check the patient for dentures, jewellery	9. To prevent risk for electrocutions and injury during the procedure
10. Change the patient into a theatre gown	10. To minimize transfer of micro-organisms to the operative room
11. Administer prescribed premeditation 30 minutes before the procedure	11. To calm down the patient and to dry secretions
12. Assemble the patient's documents (file, nursing notes, treatment sheet)	12. To identify the patient, accurate handing over and documentation of procedure
13. Accompany the patient to ECT room	13. To provide safety to the patient and presence of the nurse reassures the patient

## D. Evaluation

Evaluate	Rationale
1. The level of anxiety during pre ECT period	1. To determine the need for clarifications and intervention of pre-ECT preparation
2. Interpret the vital signs	2. To determine the physiological status of the patient and if he/she can withstand the procedure
3. The patient's readiness for ECT procedure	3. To enhance the recovery process

## E. Documentation

### Record:

- Date and time
- Completed pre-ECT check list
- Any adverse observations made
- Condition of the patient during handing over to the ECT room nurse



## 4.6-2: Intra-ECT Care

### Definition:

Nursing care given to a patient from the time he/she enters an ECT room to the time ECT is performed and the patient taken to recovery room.

### Purpose:

- To facilitate effectiveness of ECT, promote patient safety and minimize its complications

### Indications:

- Patients undergoing ECT

## A. Assessment

Assess	Rationale
1. The patient's preparation for ECT	1. To promote and ensure all preparations pertaining to the procedure have been fulfilled
2. Requirements for ECT procedure	2. To determine whether they have been achieved
3. Appropriateness of the room	3. To determine its preparedness
4. Assistance required from other staff	4. To determine need for help

## B. Planning



### Self

- Review the procedure of ECT and the role of the nurse
- Wash and dry hands



### Patient

- Greet the patient by name
- Introduce self to the patient
- Confirm with the ward nurse if it is the right patient



### Environment

- Clean room
- Prepare all required equipment, instruments and supplies
- Ensure the room provides for;
  - Privacy

- Adequate working space
- Adequate ventilation and lighting

## ■ ■ ■ Requirements

- Oxygen delivery set
- Mouth gag
- Laryngoscope
- Endotracheal tubes of assorted sizes
- Syringes in various sizes, I.V. infusion sets
- Adequate anesthetics
- Needles of various sizes, cannulas / brannulas
- Suction machine
- Electrocardiogram (ECG) machines
- Vital signs observation machine and instruments
- EEG machine and pulse oximeter
- Strapping, bandages, methylated spirit, swabs gallipots, scissors, tray
- Cut down tray
- Anesthetic machine and Ventilator,
- Theatre table
- Urinalysis equipment
- ECT machine
- Resuscitation medications in a tray including;
  - Adrenaline
  - Dextrose 5%
  - Aminophylline, Hydrocortisone
  - Sodium bicarbonate
  - Frusemide, calcium gluconate
  - Diazepam, potassium hydrochloride
  - Intravenous fluids e.g. Dextrose 5%, 10%. Normal saline
- Assorted stationery including;
  - Continuation sheets
  - Consent forms
  - Treatment sheets



Figure 4.3 An ECT Room

## C. Implementation

Steps	Rationale
1. Greet the patient by name	1. To identify the patient positively and helps the patient feel appreciated
2. Introduce self and other staff to the patient	2. To allay the patient's anxiety and promotes comfort
3. Assist the patient on to the ECT table	3. To ensure safety and allay anxiety
4. Place the patient on supine position with hyperextension of the neck	4. To allow for the intubation and fixing of ECT, EEG, ECG and oxygenation machines
5. Explain to the patient in simple language steps of the procedure /activities being performed on him/her while still conscious	5. To allay anxiety and promote cooperation
6. Ensure EEG machine and pulse oximeter are accurately placed	6. To allow for accurate measurements and readings of brain activity and oxygenation status of the patient during ECT
7. Ensure all other ECG apparatus are appropriately applied on the patient	7. To maintain patent airway and prevent aspiration
8. Provide suctioning if needed	8. To detect signs of acidosis and other abnormalities indicative of homeostatic imbalance in electrical activity of the brain and cardiovascular systems
9. Monitor the vital signs, cardiac activity, oxygenation, electrical activity of the brain	9. To prevent possible fractures and dislocation
10. Provide gentle and firm support to the patient's arms, legs and joints when Electroconvulsive current is administered until seizures are over	10. To determine the need for intervention and injuries during the process
11. Observe the nature and duration of seizures, body parts affected and intensity	11. To ensure a patients safety
12. After the procedure place the patient in the recovery position in bed and transfer the patient to recovery room if $\text{SaO}_2$ is $\geq 95\%$	12. To allow for post ECT observation as the patient gains consciousness before transfer to the ward. Ensure the patient does not leave ECT table in acidosis state
13. Dispose off the used supplies and prepare the equipment for next use	13. To enhance preparations for subsequent procedures
14. Wash and dry hands	14. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. If vital signs and pulse oximeter level remained within normal levels during ECT procedure and before returning to the ward	1. To evaluate status of the patient prior to transfer
2. Observe any crackling sounds and abnormal joints movement	2. To determine if the patient sustained injury during seizures
3. If EEG machine indicated expected alteration in brain activity	3. For confirmation of brain pathology and need for further interventions
4. If interventions were appropriate	4. To determine the response to the treatment

## E. Documentation

**Record:**

- The condition of the patient as received in ECT room
- Indicate the dose session
- Medications administered during the procedure
- The success of the procedure
- Vital signs, ECG and SaO<sub>2</sub> readings
- Nature and duration of seizures during the procedure
- Any adverse observations and intervention measures taken during the procedure
- Date and time

■ ■ ■

## 4.6-3: Post-ECT Care

### Definition:

Nursing care given to the patient in the recovery room and the subsequent 24 hours after ECT procedure.

### Purpose:

- To minimize post-ECT complications and promote quick recovery from its effects

### Indications:

- All patients after ECT procedure

## A. Assessment

Assess	Rationale
1. Observation instruments and resuscitation equipment	1. To determine availability and working condition
2. Seizure levels achieved	2. To determine effectiveness of ECT
3. Level of consciousness	3. Helps establish the effects of anaesthesia and any other neurological changes
4. Signs of brain and musculoskeletal injury	4. To detect intra-ECT injury associated with fits and anaesthesia

## B. Planning



### Self

- Wash and dry hands
- Review the client's notes to determine the type of anaesthesia and medications administered during the procedure



### Patient

- Explain to the patient the reason for various equipment used
- Inform the patient of expected experiences and how to cope with them
- Explain reasons for frequent observations and the need for his/her cooperation



### Environment

- Clean, quiet and well lit room
- A Recovery room with well-made recovery bed
- A sink with clean running water

- A full equipped emergency box
- Date and time



### Requirements

A clean trolley with;

#### **Top shelf;**

- Vital signs observation equipment; Stethoscope, Sphygmomanometer, Blood pressure machine, Thermometer and Pulse oximeter
- The patient's observation charts
- The patient's treatment chart
- The patient's file
- Clean hospital gown

#### **Bottom shelf;**

- Receiver for dirty swabs

## C. Implementation

Steps	Rationale
1. ¼ - ½ hourly observations of respirations, pulse and blood pressure	1. To detect adverse changes in the physiological state of the patient
2. Maintain the patient in recovery position	2. To facilitate the flow of secretion, prevent tongue from falling back and ensure patent airway
3. When awake explain to the patient his/her whereabouts	3. To promote orientation, allays anxiety and facilitates cooperation
4. Assess the level of memory	4. To determine memory loss associated with ECT
5. Stay with the patient until he is fully awake and oriented	5 – 6. To ensure the patient's safety
6. Escort the patient back to the ward	
7. Receive report /give report from the recovery nurse	7. Facilitates effective handing over of the patient for continuity of care
8. Allow the patient to verbalize experiences, fears and anxiety related to ECT	8. To help the patient cope with ECT experiences and promote recovery and compliance with care
9. Assist the patient to a quiet place or low bed	9. To allow adequate rest and promote comfort and safety
10. Take vital signs observation every 4 hours and reduce to once a day as appropriate	10. To monitor progress on recovery from the effects of anaesthesia and ECT

Steps	Rationale
11. Provide the patient with highly structured schedules of routine activities	11. To promote recovery and minimize confusion
12. Observe the patient for the following: <ul style="list-style-type: none"> <li>• Ability to perform self-care activities</li> <li>• Ability to remember ward routines</li> <li>• Ability to remember staff and other patients</li> </ul>	12. To detect signs of confusion and loss of memory which are common post ECT
13. Observe gait of the client/patient when walking	13. To detect signs of fracture post ECT
14. Perform mental state examination regularly	14. To establish if patient has achieved full orientation and determine whether the patient benefited from ECT
15. Wash and dry hands	15. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Mental state of the client/patient	1. To determine success of ECT
2. If the patient's level of anxiety was maintained at manageable levels	2. To determine if the patient's psychological preparation was achieved pre-ECT
3. If the patient/family can verbalize understanding of the procedure	3. To determine if the patient/family learning needs were met
4. If the patient recovered from effects of ECT within expected time and without/minimal complications	4. To determine effectiveness of pre, intra and post ECT care

## E. Documentation

### Record:

- The general progress of the patient and the memory status
- Treatment given during and post ECT
- Findings of all the vital observations taken
- Signs of fractures
- Concerns verbalized by the patient/family members
- Date and time

■ ■ ■

## 4.7: Care in Mental Illness Emergency Situations

### 4.7-1: Care of a Patient with Suicidal Behaviour

**Definition:**

Nursing interventions for a client /patient who is at high risk of committing suicide or deliberate self-harm.

**Purpose:**

- To prevent the client/patient from performing self-destructive acts (injury) that can lead to death by bringing him/her to self-realization and assisting him/her to develop effective coping abilities

**Indications:**

Patients who/with;

- Have verbalized desire to commit suicide
- Are suffering from depressive illnesses
- Are suffering from severe anxiety or agitation
- Are actively abusing alcohol or substances
- History of attempted suicide
- A family history of suicide
- Terminal/chronic illnesses

## A. Assessment

Assess	Rationale
1. Own ability as a therapist to deal with the situation	1. To determine if assistance is required
2. Own knowledge of the condition/patient	2. To ensure effective planning of care
3. The general condition of the patient	3. To ascertain the wellbeing of the patient
4. Physical, Emotional/psychological needs of the patient	4. To plan for appropriate interventions
5. The number, qualifications and experiences of nursing staff on duty	5. To assign appropriately a nurse to closely monitor the client/patient
6. Appropriateness of the environment for therapy	6. To determine if the environment is safe and allows for quick response
7. Understanding and willingness of the relatives to participate in the care of the patient	7. To ensure continuation of care and social support that reduces suicidal risk

## B. Planning

### Self

- Review management of patients at risk of suicide
- Reflect on own fears/feelings/anxiety and how to control them

### Patient

- Identify the client by name
- Explain to the client/ companion his/her experiences and obtain informed consent for care
- Explain to the patient, the staff's concern about him/her that all interventions will be for his safety

### Environment

- A clean well ventilated padded room with minimal stimulation (no wall pictures) and interruptions with an opening from where to observe the patient
- A low bed with no bedding

### Requirements

- Clean the tray containing emergency medications
- Clean the tray containing observation equipment for vital signs
- Clean tray containing resuscitation equipment
- Assorted sizes of syringes, needles, cannulas and Intravenous infusion sets
- Intravenous fluids such as dextrose (in different concentrations) and sodium chloride.
- Observation and fluid charts

## C. Implementation

Steps	Rationale
1. Give and receive report about the client/patient to include; findings of suicide assessment. (the adapted SAD persons scale)	1. To assess the level of suicidal risk
2. Allocate specific nurse(s) to attend the client/ patient during the crisis period until the patient gains self-control	2. To ensure close monitoring, provision of security and support
3. Search the patient and his room mates' belongings and remove all items considered unsafe	3. To prevent self-harm/suicide
4. Encourage the client/ patient to verbalize and explore feelings	4. To promote feelings of acceptance, improves self-esteem with subsequent ability to evaluate options and develop problem solving skills

Steps	Rationale
5. Secure a “no suicide contract” from the patient	5. To demonstrate the client’s/patient’s commitment to abide by therapeutic decisions
6. Discuss with the client/patient and give a message of hope, that life is worth living	6. To allow the client/patient an opportunity to reflect on their insight
7. Assign the client/patient’s recreational activities such as volley balls	7. To help the patient release tension/feelings of inward aggression
8. Ensure the client/patient is always within view of the nurse at all times	8. To promote close observation and ensure the client/patient’s safety
9. <b>Do not seclude</b> nor allow the patient to sleep alone	9. To reduce the possibility of attempting suicide
10. Maintain suicide caution card observations and recording including 15-minute visual check on the client/patient; carefully observe and record mood and suicide indicators	10. To recognize any suicidal attempts early and take appropriate interventions promptly
11. Physically hand over the client/patient at the end of every shift	11. To monitor the safety of the client/patient

## D. Evaluation

Evaluate	Rationale
1. The patients self-concept	1. To reduce contemplation of suicide
2. The patient’s plan to cope with suicide and other challenges in future	2. To develop effective coping and problem solving skills
3. The patients’ ability to interact with other people	3. To access the patient/client’s ability to integrate into the family and community

## E. Documentation

### Record:

- Any suicidal attempts or verbal threats, interventions and their outcome
- Summary of every 15-minutes recording on suicide precaution and no suicide contract
- Visitors received; relationship and nature of their interactions with the client/patient
- Date and time

■ ■ ■

## 4.7-2: Care of a Patient with Alcohol Withdrawal Delirium Delirium (Tremens)

### **Definition:**

Nursing interventions for a client/patient suffering from acute confusion states and autonomic nervous system hyperactivity occurring within 40 hours - 1 week after cessation of or reduction in long term heavy alcohol ingestion.

### **Purpose:**

- Is to minimize and correct autonomic nervous system effects within the shortest duration and ensure the client/patient's safety

### **Indications:**

- Patients in acute confusion states and autonomic nervous system hyperactivity following alcohol withdrawal

## A. Assessment

Assess	Rationale
1. Own feelings, fears and anxiety related to handling the situation	1. To promote readiness and enhances ability to carry out effective interventions
2. Procedure on emergency management of acute alcohol withdrawal delirium (Delirium Tremens)	2. To promote efficiency and effectiveness
3. The patients' understanding of his/her current experiences	3. To identify and plan for the clients/ patient's learning needs
4. Presenting physical, psychological/emotional social and spiritual needs	4. To plan for appropriate interventions and determine assistance required
5. The safety of the environment	5. To prevent risk of injury
6. The amount of light in the room	6. To plan for adequate lighting that reduces risk of illusions common in alcoholic delirium

## B. Planning



### **Self**

- Review institutional policy on emergency patient management
- Review care of patient experiencing alcohol withdrawal syndrome
- Remove any accessories that may cause injury to the patient during the care of such patients/clients
- Wash and dry hands



## Client/Patient

- Explain to him/her what he/she is experiencing and the need to be calm



## Staff

- Explain to the members of staff that their assistance is required
- Explain to staff their specific roles during the care of such patients/clients



## Environment

- Well ventilated room with minimal stimulation (no wall pictures) and interruptions
- A low bed with bed rails
- Restraints of different types according to hospital policy
- Dimly lit room



## Requirements

- Clean tray containing parenteral anxiolytics and antipsychotics, assorted sizes of syringes, needles, Branulas, I.V sets, pack of sterile cotton wool, antiseptics such as methylated spirit and iodine
- Intravenous fluids including dextrose (in different concentrations) and sodium chloride.
- Resuscitation tray
- Oxygen administration set
- Pabrinex 1 and 2

## C. Implementation

Steps	Rationale
1. Assist the patient to the prepared room and settle him in bed	1. To control the patient's anxiety to minimal levels
2. Remove any dangerous objects with the patient or in the environment	2. To ensure safety of patient, staff and others
3. Administer prescribed anxiolytics /antipsychotics	3. To control hallucinations through their dopamine antagonist effects
4. Ensure close monitoring of the patient	4. To promote the patient's safety
5. Conduct and record mental status examination and vital signs observations four hourly	5. To monitor hyperactivity of the Autonomic Nervous system and plan of care
6. Explain to the patient the experiences he had and the interventions carried out	6. To promote participation
7. Obtain an informed consent from the patient once they can understand what is expected of them	7. To prevent feelings of self-blame and facilitate compliance/cooperation; observe the client's rights of autonomy

Steps	Rationale
8. Wash, dry, prepare and store equipment for subsequent use	8. To ensure safety
9. Wash and dry hands	9. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Outcome of interventions: any injuries sustained during the management	1. To determine effectiveness of the management
2. Preparedness of the patient to continue with the care	2. To reduce the risk of non-adherence to therapy
3. Whether an informed consent was obtained	3. To determine the legality of care given

## E. Documentation

### Record:

- Duration of acute confusion, agitation and autonomic nervous system hyperactivity
  - Interventions including medications, restraints measures and their outcomes
  - Summary of vital signs and mental state examination findings
  - Outcome of evaluation
  - Date and time
  - Recommended plan for further action
- ■ ■

## 4.7-3: Care of a Patient with Acute Panic Attacks

### **Definition:**

This is the care given to a patient with sudden onset of intense fear that triggers severe physical reactions when there is no real danger or apparent cause.

### **Purpose:**

- To control the hyperactivity of autonomic nervous system associated with high levels of anxiety while promoting the patients' safety and enhancing effective coping mechanisms

### **Indications:**

- Patients with panic attack

## A. Assessment

Assess	Rationale
1. The patient's mental state	1. To determine the intervention required
2. The environment	2. To ensure the patient and staff's safety
3. Availability of vital signs measuring equipment	3. To ensures efficiency in monitoring Autonomic Nervous System dysfunction

## B. Planning



### **Self**

- Review institutional policy on handling of mental illness emergency
- Review institutional procedures of managing acute panic attacks
- Review the patient's treatment notes
- Reflect on own feelings and ability to handle the situation



### **Patient**

- Explain to the patient their experiences
- Explain the planned interventions to the patient



### **Environment**

- A quiet environment with minimum stimulation and adequate light



## Requirements

Ensure cleanliness, assemble and organize the following:

- Tray (s) containing:
  - Emergency medications including anxiolytics and  $\beta$ -adrenergic receptor antagonists.
  - Intravenous medication administration equipment
  - Vital signs observation equipment

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. For infection prevention and control
2. Take the patient to a quiet room with minimum stimulation and explain to him/her all actions being taken	2. To minimize levels of anxiety
3. Remove any dangerous items within the environment	3. To ensure safety to both the patient and the nurse/staff
4. Stay with the patient and encourage him/her to discuss his/ her experiences	4. To reduce feelings of abandonment
5. Maintain calmness and patience when attending to the patient	5. To prevent escalation of anxiety in the patient
6. Take vital signs observations 2 hourly and reduce to 4-hourly as appropriate	6. To provide data for assessing progress of the patient
7. Administer the prescribed anxiolytics and $\beta$ -adrenergic receptor antagonists	7. To reduce sympathetic stimulation
8. Assess the patient's mental status every 4 hours	8. To monitor the progress of the cognitive functions
9. Use simple brief words and messages spoken calmly and clearly	9. To reduce anxiety and comprehend elementary communication
10. Reinforce reality if distortions occur	10. To stress awareness of physical needs
11. Attend to physical needs as necessary	11. To prevent manifestation of anxiety as physical needs
12. When levels of anxiety are reduced, explore reasons of occurrence	12. To help in planning interventions
13. Teach the patient signs of escalating anxiety and how to interrupt them	13. To identify signs of anxiety that interrupt progression to panic state
14. Dispose syringes and used needles according to infection control measures	14. To promote the patient and staff's safety
15. Wash and dry hands	15. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. If vital signs were maintained within the normal parameters	1. To determine effectiveness of medications
2. The patient's ability to control the anxiety levels	2. To validate happenings in the environment; Prevents future re-occurrence
3. The patient's feelings about his/her care	3. To determine presence of quality management

## E. Documentation

**Record:**

- The range of vital signs during the panic attack
- Findings of the evaluation
- Current state of the patient in general
- Date and time

■ ■ ■

## 4.7-4: Care of a Patient with Aggressive and Violent Behaviour

### **Definition:**

Nursing intervention aimed at controlling the patients and providing safety to the patients, staff and the public.

### **Purpose:**

- To control a patient's aggressive and violent behaviour while promoting effective coping mechanisms and providing safety to the patients, staff, relatives and members of the public

### **Indications:**

- Patients presenting with rage, aggression and poor impulse control
- Patients engaged in a fight or conflict
- Patients likely to harm self, other patients, staff and members of the public if urgent measures are not taken to control them

## A. Assessment

Assess	Rationale
1. Previous violent and aggressive behaviours	1. To predict outcome of current behaviour and plan for appropriate interventions
2. The number, gender and level of preparation of staff to deal with such emergencies	2. To determine need for more staff
3. The environment for dangerous items that can be used by the patient e.g. stones, sharp objects and broken wood	3. To safeguard the patient, other patients and staff from injury
4. The level of motor agitation and verbal aggression	4. To determine when to exercise restraint measures and the type of restraint technique to apply
5. Mental health nursing interventions that may be antecedent to aggression	5. To minimize further provocation
6. Adequacy of resources to take care of the patients e.g. beddings, food and utensils	6. To ensure the patient's comfort

Assess	Rationale
<p>7. Perform self-assessment for the presence of accessories that can be destroyed or can cause harm to self and patient. Accessories may include staff's:</p> <ul style="list-style-type: none"> <li>• Long fingernails</li> <li>• Long hair left hanging</li> <li>• Pens, labels, bangles and ear rings</li> </ul>	<p>7. To determine the need to remove them so as to minimize risk of injury to self, other staff and the patient</p>

## B. Planning



### Self

- Review the patient's current treatment and when it was last given
- Review facts on how to handle aggression and violence
- Review available resources
- Reflect on own emotions and competence required to manage aggression and violence
- Remove any accessories that may cause injury to self, patient and others during restraint
- Stay in a safe environment with clear exit



### Patient

- Ensure short fingernails
- Remove any instrument and equipment that can be injurious to the patient
- Explain to the patient that he is not under punishment but that all interventions are necessary for his safety and that of others



### Environment

- Ensure availability of staff in the ratio of at least four staff to one patient
- Explain to other staff members the aggressive condition of the patient
- Explain to other staff members the strategic positions in readiness to restrain



### Requirements

- Restraint board and other immobilizing gadgets
- Adequate number of clean blankets
- Seclusion room
- Clean injections tray containing;
  - Injectable anxiolytic and antipsychotic medications
  - Needles and syringes of assorted sizes
  - Pack of sterile cotton wool
  - Antiseptic lotion/solution such as methylated spirit
  - Kidney dish and gallipot
  - Emergency box
  - Receiver for used items
  - Sharps' safety box

## C. Implementation

Steps	Rationale
1. Approach the patient carefully keeping at arm's length	1. To ensure safety
2. Address the patient by name	2. To help orientate the patient and demonstrate respect
3. Request other patients to leave the room	3. To maintain a safe environment
4. Keep verbal communication briefs when talking with the patient; don't fold arms and maintain an open posture	4. To demonstrate acceptance and encourages verbalization
5. Talk calmly, clearly and firmly keeping the voice neutral; ask open questions using "how" and "where" to help clarify the problem	5. To give opportunity to the patient to express anger verbally
6. Slowly show the patient that there is nothing in your hands	6. To help the patient feel that he/she is not being pursued
7. Adopt an attentive expression but do not stare at the patient	7. To enable the nurse to gauge the patient's level of frustration
8. Call for assistance by shouting, using any signaling system or request another patient to summon help	8. To manage the situation
9. Ask colleagues to lead other patients away when the patient is being restrained	9. To prevent distressing other patients
10. Organize staff and identify a leader who gives direction on how to contain the situation	10. To ensure coordination and efficiency
11. One mental health nurse to prepare and administer prescribed parental antipsychotic or benzodiazepines	11. To help calm down the patient
12. Give clear instructions on how to restrain the patient	12. To promote coordination and efficiency
13. Explain to each staff what part of the patient to hold and from where to approach the patient	13. To facilitate efficiency in full immobilization of the patient
14. Allocate one member of the group whom the patient is more familiar with to talk with him/her throughout the procedure	14. To sustain a therapeutic communication and convey to the patient that restraint is not punitive
15. Minimize force used for restraint to be appropriate to the degree of resistance	15. To avoid risk of injury to the patient
16. Take the patient to a comfortable and isolated room	16. To provide safe environment and facilitate recovery

Steps	Rationale
17. Ensure that the restraint is released gradually one limb at a time	17. To minimize the possibility of the patient striking the staff
18. Observe the patient's respiration rate half hourly and change gradually until the condition improves	18. To determine progress of the patient <ul style="list-style-type: none"> <li>• To allow for observation of mood and behaviour</li> <li>• To monitor the effectiveness of sedatives/anxiolytics</li> </ul>
19. Withdraw staff from the patient gradually	19. To facilitate recovery and reduce anxiety
20. Withdraw the patient from isolation as soon as he is no longer violent	20. To observe the patient's rights of associations
21. When the patient calms down discuss the incident with the patient	21. To allow the patient to verbalize experiences and identify provoking factors
22. Dispose used needles and syringes as per protocol	22. To provide safety to the patient and staff
23. Wash, dry and prepare equipment	23. For subsequent use
24. Wash and dry hands	24. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. Determine if the patient suffered any injuries during the restraint	1. To plan for appropriate interventions
2. Staff safety status	2. To allow for correction of any negative perceptions
3. Determine the reason for violence and aggression	3. To determine effectiveness of the restraint methods used
4. The RESPONSE of the patient towards the restraint	4. To identify areas of future improvement
5. View of the staff towards the management of the incident	5. To allow staff to share experiences

## E. Documentation

### Record:

- The duration of restraint
- Medications given during restraint and effect
- Any adverse effects of the restraint on the patient
- Outcomes of evaluation
- Date and time



## 4.7-5: Care of a Patient Experiencing Acute Dystonia

### Definition:

Nursing intervention for patients experiencing life threatening muscle spasms of the neck, tongue, face, jaws, eyes and laryngeal/pharyngeal tract associated with medications (first generation antipsychotics).

### Purpose:

- To control spasms, ensure patent airway and manage anxiety associated with the dystonic experience

### Indications:

- Patients experiencing oculogyric crisis, torticollis, trismus, tongue protrusions and extra pyramidal side effects of antipsychotic medications

## A. Assessment

Assess	Rationale
1. The patency of airway and breathing patterns	1. To determine the need for oxygen since spasms of the larynx and pharynx affect air way
2. Level of pain	2. To determine the type of analgesia needed
3. Level of anxiety	3. To reduce fear and anxiety
4. Intensity of spasms	4. To determine type of muscle relaxants and anticholinergics required
5. The presence of dangerous equipment in the patient's surrounding	5. To ensure the patient and staff's safety

## B. Planning



### Self

- Review institutional policy on emergency patient management
- Review care of patient experiencing acute dystonia
- Remove any accessories that may cause injury to the patient during the care



### Patient

- Explore the patient's experience and the need to remain calm



## Staff

- Explain to the staff that their assistance is required
- Explain to the staff their specific roles during the care



## Environment

- Safe, well ventilated room with low bed with rails (side rails)
- Screened bed (if applicable)



## Requirements

Clean and assemble the following equipment:

- Intravenous injection tray containing anticholinergics such as:
  - Benztropine
  - Trihexyphenidyl
- Muscle relaxants such as benzodiazepines
- Oxygen administration set
- Venipuncture set

## C. Implementation

Steps	Rationale
1. Wash and dry hands	1. For infection prevention and control
2. Quickly and gently move the patient to the prepared room	2. To manage life threatening situations
3. Lower side rails and gently place the patient on the bed	3. To ensure safety of the patient
4. Assess the airway patency and breathing pattern of the patient	4. To prevent hypoxia
5. Administer oxygen if necessary ( <b>Refer to procedure 2.2-1, Administration of Oxygen</b> )	5. To ensure SaO <sup>2</sup> level is maintained at ≥95%.
6. Administer I.V benzodiazepine and anticholinergics as appropriate	6. To facilitate muscle relaxation; counteract extra pyramidal effects of antipsychotic thus releasing the acute dystonia
7. Perform vein puncture and administer IV fluids	7. To rehydrate the patient since pharyngeal muscle spasms may interfere with feeding
8. Return the bed rails in place and leave the patient comfortable	8. To prevent the patient from falling off the bed
9. Take vital observations half hourly, gradually changing to one hourly until dystonia is over and vital signs are normal	9. To determine the degree of physiologic functioning and plan for further intervention

Steps	Rationale
10. When the patient recovers from the dystonia, perform mental status examination ( <b>Refer to procedure 4.2-2, Mental Status Examination/Assessment (MSE/A)</b> )	10. To assess the psychological status of the patient; Helps to monitor the patients' recovery from neuropsychiatric symptoms
11. Discuss with the patient his/her experience	11. To improve the patient's knowledge on his/her medications and related side effects
12. Explain to the patient that acute dystonia is a side effect of antipsychotic medications	12. To allay anxiety
13. Explain to the patient how to recognize its early signs, the need to notify the nurse and how to control it with anticholinergics and muscle relaxants	13. To reduce the patient's anxiety and enhance compliance with treatment
14. Clear all the equipment used during the procedure <ul style="list-style-type: none"> <li>• Store the equipment in accordance with hospital policy</li> <li>• Dispose waste materials according to the infection prevention and control procedure</li> </ul>	14. To improve ward hygiene and promote safety of the equipment, patient and staff
15. Wash and dry hands	15. To minimize transfer of infections

## D. Evaluation

Evaluate	Rationale
1. The patient's level of consciousness	1. To establish the seriousness of the side effects and the need for further neurological evaluation
2. Effectiveness of the treatments given	2. To ensure similar use in future experiences
3. The patient's response to care	3. To determine the effectiveness of interventions
4. Areas of intervention identified	4. To ensure improvement in patient care

## E. Documentation

### Record:

- The duration of the dystonic reaction
- Findings of the evaluation
- The vital signs taken during the dystonic reaction
- Treatments given and outcomes: For medications indicate dosages
- Current physiological and psychological state of the patient
- Date and Time

**NB:** Remember to explain to the patient every activity being carried out since this is a very frightening experience to the patient

■ ■ ■

## 4.8: Conducting a Ward Round in a Mental Health Unit

### Definition:

The process of reviewing all patients' management plan and evaluating progress made or the need for change in the management.

### Purpose:

- To make a collective clinical judgment and conclusion regarding the patients' management

### Indications:

- All in-patients

## A. Assessment

Assess	Rationale
1. Information on the clients'/patients' and their problems	1. To anticipate the type of clients'/patients' being managed
2. Own level of knowledge in relation to the current management of the clients'/patients' conditions	2. To plan appropriate care
3. The number, qualifications and experience of nurses on duty	3. To determine whether assistance is needed <ul style="list-style-type: none"> <li>• To determine the learning needs and anticipated quality of contribution from the other mental health nurses</li> </ul>
4. The number and type of patients to be reviewed	4. To adequately allocate time
5. Preparedness of the patients for the procedure	5. To encourage the cooperation and contribution to care
6. Patients' needs <ul style="list-style-type: none"> <li>• Physical</li> <li>• Emotional/psychological</li> <li>• Social</li> <li>• Spiritual</li> </ul>	6. To ensure individualized response <ul style="list-style-type: none"> <li>• To determine physiological and personal hygiene state</li> <li>• To allay anxiety and enhance cooperation</li> <li>• To gain support of family members in care</li> <li>• To enhance the wellbeing of the patient</li> </ul>
7. The patient's understanding of his/her condition	7. To determine teaching needs of the patient during the round
8. The state and the quality of the environment	8. To ensure privacy and encourages the patient's participation

Assess	Rationale
9. Required equipment and supplies	9. To determine availability of equipment to ensure efficiency

## B. Planning

### Self

- Organize for more staff as necessary and accustom them to what is expected of them
- Review the patients' notes to familiarize yourself with the various mental disorders of the patients in the ward/unit
- Alert the nursing staff/students to join the ward round as necessary

### Patient

- Encourage the patient to take a bath and change into clean clothes prior to the ward round
- Explain to the patient that his/her presence will be required
- Explain to the patient that his/her condition and management will be discussed and will be free to contribute in the discussion

### Environment

- Provide a quiet and safe environment free of interruptions
- Prepare a quiet room with adequate lighting.
- A clean and neat examination couch
- Adequate seats and table for participating staff and relatives

### Requirements

A clean trolley or cabinet with stationery including-;

- Patients' files
- Patients charts (observation, fluid)
- Mental health nursing care notes
- Continuation sheets
- Pen
- Request forms for consultation, laboratory, radiological and other diagnostic investigations

## C. Implementation

Steps	Rationale
1. Prepare the room and welcome the patient, offer a seat, introduce self and staff and establish rapport	1. To allay anxiety and promote cooperation
2. Explain to the patient that a report about him will be given and discussed and that he/she is free to ask	2. To encourage participation from patient

Steps	Rationale
questions and give suggestions concerning his/her care.	
<p>3. Allow the primary nurse to give full report on the progress of the patient including:</p> <ul style="list-style-type: none"> <li>• Mental health nursing assessment and findings</li> <li>• Both medical/nursing diagnoses</li> <li>• Objectives set for management</li> <li>• Interventions</li> <li>• Evaluations</li> </ul>	3. Primary nurses have full progress report of the patients by virtue of having been with the patient for a reasonable length of time; and have progressively been assessing and monitoring the patient
4. Allow time for response from the rest of the staff and students while maintaining the patient's privacy and confidentiality	4. To promote discussion on management and evaluation of effectiveness of interventions
5. Allow the patient to verbalize any concern about his/her care.	5. To encourage the patient's participation in care; Clarifies misconceptions and promotes compliance
6. Explain to the patient respectfully that his turn is over and release him from the room	6. To prepare the room for the next patient
7. Clear the room and equipment and store them in accordance with the institutional protocol after all patients have been reviewed.	7. For safety, infection prevention and control
8. Wash and dry hands	8. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The patients' reaction during the ward round	1. To determine if the patients benefited from the round
2. Any outstanding interventions that had been planned for	2. To identify cause and prevent future repeats that delay recovery
3. If the patient, staff and students benefited from the round	3. To determine if teaching objectives of the round were met and subsequent adjustments required
4. Any areas of improvement identified during the round	4. To promote quality of patient care

## E. Documentation

### Record:

- Current mental state of the patient
- Physical examination findings
- Any investigations ordered/done
- Evaluation outcome
- New plan of management
- Date and time

■ ■ ■

## 4.9: Giving a Report about a Psychiatric Patient

### Definition:

It is the process of disseminating information about a client/patient to the staff reporting on duty, the institutional management and/or during the nurses' ward round.

### Purpose:

- To communicate logically organized information about a client/patient so as to plan for care and its continuity

### Indications:

- Changing over shifts
- Referral/transfer of patients
- Ward rounds
- As a routine to the institutions' management

## A. Assessment

Assess	Rationale
1. Own knowledge of the client's/patient's diagnosis and the current management	1. To ensure inclusion of accurate information on report
2. The mental state of the patient	2. To get the exact state of the patient during the report writing since this is likely to change as the client/patient continues with care
3. The current care of the patient	3. To determine the nature of the report and continuity of care
4. The activities taking place in the environment	4. To ensure accurate report

## B. Planning



### Self

- Wash and dry hands
- Meet with the incoming staff and discuss the method of giving the report
- Review the patient's notes, treatment charts and all other information about the patient
- Perform physical check to determine presence of patients in the respective beds/cubicles



## Patient

- Obtain informed consent from the patient
- Explain to the client/patient the importance of sharing his information with other members of staff
- Encourage the client/patient to ask any questions and make any comments if he/she wishes



## Environment

- Provide for a quiet and safe environment free of interruptions



## Requirements

- Patients' notes
- Treatment sheets
- Observation charts, continuation sheets and any other necessary charts

# C. Implementation

Steps	Rationale
1. Move to the first patient and ensure that information is given in a logical, organized and conscious manner	1. To facilitate understanding of the report and reduce chances of skipping other patients
2. Give the following information about each patient: <ul style="list-style-type: none"> <li>• The room number, the bed number/cubicle number, Identification data</li> <li>• The mental health nursing /medical diagnoses, Primary mental health nurse and psychiatrist of the patient</li> <li>• Investigations done and findings, Investigations due and preparations required</li> <li>• Treatments given during the last 24 hours and the patient's response</li> </ul>	2. To provide necessary information <ul style="list-style-type: none"> <li>• To identify information for accuracy</li> <li>• For comparing the relevance of the interventions being implemented</li> <li>• For planning appropriate interventions</li> <li>• To determine if the patient is improving or if change in treatment is required</li> </ul>
3. Give the following information about patients on special instructions and requirements including: <ul style="list-style-type: none"> <li>• Input/output measurements</li> <li>• Changing position; when last changed.</li> <li>• Blood transfusions</li> <li>• Suicidal alert</li> <li>• Seclusion</li> </ul>	3. To enable planning
4. Current needs of each patient: <ul style="list-style-type: none"> <li>• Any severe pain</li> </ul>	4. <ul style="list-style-type: none"> <li>• To enable the nurse to prioritize care for these patients;</li> </ul>

Steps	Rationale
<ul style="list-style-type: none"> <li>• Assistance needed with activities of daily living</li> <li>• Mental state requiring immediate interventions</li> <li>• Scheduled treatment</li> <li>• Need for change in treatments</li>   <li>• Any visitors for the patient and the type of relationship</li>   <li>• Any significant changes in the patient's behaviour after the visit</li> <li>• Significant changes in the client's condition during the shift, intervention measures taken and outcomes</li> <li>• Current prescribed orders</li> </ul>	<ul style="list-style-type: none"> <li>• To allocate a nurse to assist</li> <li>• To ensure new treatment are not overlooked</li> <li>• To facilitate quick recovery</li> <li>• To help identify significant others useful in the patient's rehabilitation</li> <li>• To evaluate effectiveness of the visit/family therapy</li> <li>• To facilitate planning for patient oriented goals and interventions</li> <li>• For continuity of care</li> </ul>
<p>5. For newly admitted patients, give the following additional information:</p> <ul style="list-style-type: none"> <li>• Referring agent</li> <li>• Legal admission requirements</li> <li>• Mode of admission</li> <li>• Reasons for transfer/discharge</li> <li>• The destination</li> </ul>	<p>5. To facilitate planning for quality nursing care</p> <ul style="list-style-type: none"> <li>• To give reasons for some patients' absence from the ward</li> <li>• To explain addition of patients in the ward</li> </ul>
<p>6. Do not elaborate on routine background data. Give the report for each patient within 2-3 minutes</p>	<p>6. To avoid wasting time</p>
<p>7. Ensure the report is given in low tones</p>	<p>7. For confidentiality</p>

## D. Evaluation

Evaluate	Rationale
<p>1. Comprehensive report of the round</p>	<p>1. To determine the quality of the report and helps to identify gaps for inclusion</p>
<p>2. Area of concern during the report giving</p>	<p>2. For correction and improvement in subsequent reports</p>

## E. Documentation

### Record:

- Changes made in interventions
- New drugs
- Investigations scheduled and preparations required
- Concerns raised by the patient during the round
- Progress made by the patient
- Any other important information



## 4.10: Discharging a Patient from a Mental Health Unit

### Definition:

This refers to mental health nursing interventions during the care of a patient being released from an in-patient care environment.

### Purpose:

- To facilitate integration of the client/patient in the family/society/community for optimal functioning with minimal ongoing professional support

### Indications:

- Patients who have recovered
- Patients who are ready to be rehabilitated in the environment of their choice (presumably home environment)
- Patients who have requested and are found to be stable after MSE/A
- For forensic purposes e.g. discharge back to prison

## A. Assessment

Assess	Rationale
1. The type of admission	1. To determine legal requirements for the discharge
2. The level of readiness of the patient	2. To determine mental health care needs of the patient and plan for follow up care
3. The level of preparedness of the patient's guardian	3. To determine teaching needs for the guardian and plan for the client's follow up care
4. The psychological, physical, spiritual and social needs of the patient	4. To determine and plan for appropriate holistic interventions
5. The mode of travel and residence	5. To confirm transport arrangements in place and if assistance is required
6. The patient's perception of previous discharge experience (if any).	6. To identify and apply positive experiences that facilitate recovery
7. Resources availability	7. To confirm availability and provide information of where to seek help

## B. Planning

### Self

- Ensure resolution to therapy
- Review the patient's notes
- Review discharge procedure and legal implications
- Prepare information to share with the patient
- Assign adequate time for the procedure

### Patient

- Greet the patient, guardian and confirm the patient's awareness of discharge details.
- Arrangement for clearance of hospital bill
- Prepare the patient's belongings
- Organize for the patient's transport and escort if required

### Environment

- Provide a conducive room with furniture

### Requirements

Assemble equipment/stationery required for the patient's discharge including:

- The patient's notes, charts and property
- Nursing notes and discharge book
- Ensure long term prescriptions/drugs are available and appropriate legal forms for discharge

## C. Implementation

Steps	Rationale
1. Provide the patient with a comfortable place to sit on	1. To promote concentration and readiness to receive information
2. Explain the discharge procedure to the patient/guardian	2. To allay anxiety and facilitate understanding of the patient's / guardians role in follow up care
3. Discuss with the patient his/her experiences from previous discharge	3. To identify strategies that are successful and can be reinforced and those likely to precipitate relapse
4. Carry out physical and mental state examination	4. To identify suitability for discharge
5. Share information with the patient on his/her mental disorder including treatment and follow up care	5. To promote compliance to treatment while promoting healthy behaviour

Steps	Rationale
6. Give instructions on how to take and store drugs	6. To ensure compliance, drug safety
7. Educate the patient on the expected side effects and how to manage them	7. To promote adherence and compliance
8. Give return date	8. To ensure follow up

## D. Evaluation

Evaluate	Rationale
1. The patients understanding of his/her role in the treatment at home	1. To establish his/her roles in compliance to regimen while at home
2. The extent to which the patient was ready for discharge	2. To determine the need for immediate assessment of the home environment and plan intervention for prevention of relapse
3. Contents of discharge notes, medication and follow up schedules	3. To determine if there was legal authority for discharge and quality of documentation and care given

## E. Documentation

### Record:

- Physical and mental state of the patient on discharge
- Drugs on discharge
- Companion of the patient and the relationship
- The follow up schedule
- The date/time of discharge
- The expected destination of the patient

■ ■ ■

## 4.11: Conducting Follow up Care

### Definition:

Follow up care is the mental health nursing care provided to the client/patient and family members within their own familiar environment (s), mental health units/rehabilitation centers.

### Purpose:

- To provide guidance that aids family/community integration as well socio-occupational functioning of the patients within the environment of their choice

### Indications:

Patients with:

- All patient with mental disorders
- Identified psychosocial problems
- Frequent relapse
- History of non-adherence to their medication regimen

## A. Assessment

Assess	Rationale
1. Own knowledge about the patient, his/her condition, fears and related anxiety	1. To determine appropriate preparation
2. The patient's notes and identify his/her needs	2. For planning of care
3. The community resources	3. To identify resources that enhance care of the patient
4. The type of equipment /supplies to be used	4. To ascertain their status and availability
5. The scheduled time of the follow up visit	5. To determine the availability of the patient/family members
6. Distance to cover during the follow up visit	6. For organization of means of transport
7. Availability of the client's relatives	7. To ensure family members presence

## B. Planning



### Self

- Review the patient's notes
- Formulate objectives for the visit
- Prepare information to be shared with the patient and relatives
- Assign time/date for the follow up visit



## Patient

- Discuss the purpose of the visit with the patient and the relatives and obtain consent
- Ensure that the patient and his/her relatives are aware and ready for the follow up visit



## Environment

- Safe, well ventilated room with adequate lighting
- Chairs and tables
- Screened bed (if applicable)



## Requirements

- Ensure availability of transport
- Prepare the required equipment and supplies
- Follow up visit bag with the following:
  - Assorted syringes, needles
  - Drugs (psychotropic and other necessary drugs)
  - Pack of sterile cotton wool
  - Antiseptic lotion
  - Note book/cards
  - Follow up visit register
  - Lesson plan
  - Teaching aid

## C. Implementation

Steps	Rationale
1. Review the patient's records	1. To determine appropriate intervention
2. Attend to self-identified needs	2. For effective therapeutic relationship
3. Confirm that the patient/relatives are waiting for you	3. For acceptance and cooperation
4. Carry the required equipment/supplies to be used	4. To enhance completion of planned activities
5. On arrival, wait to be received	5. To show respect for the family
6. As you meet the family members introduce self and explain your mission if not done before	6. To gain acceptance and recognition
7. Identify the head of the family	7. To determine the center of power/decision maker in the family
8. Observe the relationship between the client/patient and the family members	8. To identify the patient's acceptance or rejection in the family
9. Once settled, interact with the family members and observe reactions from all participants	9. To have a broader understanding of the family and identify nonverbal communication

Steps	Rationale
10. If it is a revisit, give the health message and evaluate the outcome of the previous visit	10. To determine the impact of the previous visit; To determine the care to be given to the patient/family
11. Encourage the patient and family members to ask questions	11. To correct /clarify misconceptions and allay their fears
12. Plan with the patient/family the next visit and leave them satisfied with the session	12. To schedule for continued care
13. Fill in the details of the visit in the card and file record in the register book and indicate the date/time of the next visit	13. For reference, continued care and legal purposes
14. Plan for any other necessary intervention that may need other expertise	14. To determine need for further referral management
15. Thank the patient and family members	15. To enhance their cooperation and participation

## D. Evaluation

Evaluate	Rationale
1. If the objectives of the home visit were achieved	1. To determine effectiveness of the visit
2. Readiness of the family for follow up visit	2. To determine appreciation for the services offered and understanding of the previous discussion on the importance of follow up visit
3. The patient's compliance with medication	3. To determine participation in his/her care
4. Strategies used in dealing with challenges	4. To determine effective coping skills are developed

## E. Documentation

### Record:

- Information obtained during the family interaction with the therapist
- Non-verbal communication
- The interventions carried out
- The date/time of the next visit



## References

American Psychiatric Association (2012-2013). *Diagnostic and Statistical Manual of Mental Disorders, DSM-5* .5th ed. Washington, USA. American Psychiatric Publishing Association.

Mental Health Act, CAP 248 [Act No. 10 of 1989, &Act No. 11 of 1993]

Townsend, M.C. (2012). *Psychiatric Mental Health Nursing: Concepts of Care in Evidence-based Practice*.7th ed. Philadelphia. F.A Davis Company.

Varcarolis. E.M. & Halter, M.J (2012). *Essentials of Psychiatric Mental Health Nursing: A communication: Approach to Evidenced Based Nursing Care*. 6th ed. New York: Elsevier Health Sciences.

## Chapter 4: Evaluation Checklist

Please fill this evaluation checklist to help the Nursing Council of Kenya improve the quality of subsequent procedure manuals.

MENTAL HEALTH NURSING	YES	NO	COMMENTS
1. Critical procedures in Mental Health Nursing are included in the chapter			
2. Procedures are placed under their relevant functional patterns/systems			
3. Procedures are arranged from simple to complex within the respective functional patterns/systems			
4. Procedures are correctly defined			
5. Purpose of the procedures is stipulated clearly			
6. Indications for the procedures are correct			
7. Steps in procedures are accurate			
8. Nursing process is correctly applied:			
➤ Assessment			
➤ Planning			
➤ Implementation			
➤ Evaluation			
➤ Documentation			
9. Scientific rationales are given in assessment, implementation and evaluation			
10. Approach of the nursing process is useful in these procedures			
11. Diagrams are:			
➤ Relevant			
➤ Appropriate			
➤ Arrangement			
12. How would you rate this chapter on a scale of 1 to 10 (where 1 is the lowest & 10 is the highest score)?			
13. Overall comments for this chapter			

# Appendix 4: Guidelines for Preparing a Patient for Electroencephalogram (EEG)

## Definition

This is an investigation carried out to evaluate the electrical activity of the brain.

## Purpose

- To determine the origin of abnormal electrical activity in the brain for making a diagnosis, classification of the type of epileptic seizures and choice of medication to be prescribed

## Purpose

- Epilepsy
- Head injury
- Brain tumour
- Encephalitis
- Sleep disturbance
- Memory disorders
- Stroke
- Neurocognitive disorders (Dementia in DSM – IV)

## Preparing a Patient for EEG

- Identify the client/patient by name
- Review the patient's notes and confirm the order
- Explain the procedure to the client/patient and relatives to obtain informed consent
- Allay the client's/patient's anxiety
- Ensure the patient does not take any drink /food containing caffeine for at least 8 hours prior to the test
- Determine whether there is need for certain drugs/medications to be withheld
- Prior to the procedure wash the patient's head but do not use creams, hair conditioner or gels
- Take the client/patient's vital signs observations and document in the patient's notes
- Accompany patient to the procedure room
- Ensure emergency drugs and equipment are available
- Assist to position the patient in supine position on the bed/theatre table
- After the investigation, observe the client/patient's vital signs, behaviour, and response and intervene appropriately
- Receive interpreted results for evaluation by the clinician
- Accompany the patient back to the ward
- Continue monitoring the patient for at least 24 hours
- Document investigation results and any necessary action to be instituted

# CHAPTER 5

# Community Health Nursing

## Chapter Outline

### 5.1: Immunizations

- 5.1-1:** Managing Cold Chain
- 5.1-2:** Administration of Bacillus Calmette-Guerin (BCG)
- 5.1-3:** Administration of Oral Polio Vaccine (OPV)
- 5.1-4:** Administration of Pentavalent Vaccine
- 5.1-5:** Administration of Measles Vaccine
- 5.1-6:** Administration of Tetanus Toxoid (TT) Vaccine
- 5.1-7:** Administration of Yellow Fever Vaccine
- 5.1-8:** Administration of Rota Virus Vaccine
- 5.1-9:** Administration of Pneumococcal conjugate vaccine (PCV 10)
- 5.1-10:** Administration of Inactivated Polio Vaccine (IPV)

### 5.2: Family Planning Preparations

- 5.2-1:** Counseling for Family Planning (FP)
- 5.2-2:** Performing Breast Examination
- 5.2-3:** Pelvic Examination

### 5.3: Methods of Family Planning (FP)

- 5.3-1:** Administration of Hormonal Injectable Contraception
- 5.3-2:** Administration of Hormonal Oral Contraception
- 5.3-3:** Insertion of Hormonal Implants
- 5.3-4:** Removal of Hormonal Implants
- 5.3-5:** Insertion of an Intrauterine Contraceptive Device (IUCD)
- 5.3-6:** Insertion of a Postpartum Intrauterine Contraceptive Device (PPIUCD)
- 5.3-7:** Removal of an Intrauterine Contraceptive Device (IUCD)
- 5.3-8:** Barrier Methods
  - 5.3-8.1:** Demonstrating Application of Male Condom
  - 5.3-8.2:** Demonstrating Insertion of Female Condom

### 5.4: Cervical Cancer Screening Methods

- 5.4-1:** Taking a Papanicolaou Smear (Pap Smear)
- 5.4-2:** Visual Inspection of Cervix using Acetic Acid (VIA) and/or Lugol's Iodine (VILI)

## 5.5: Community Nursing Activities

- 5.5-1:** Conducting a Community Diagnosis
- 5.5-2:** Conducting a School Health Program
- 5.5-3:** Conducting a Home Visit
- 5.5-4:** Conducting Health Education
- 5.5-5:** Conducting a Mobile Clinic Service

## 5.1: Immunizations

### 5.1-1: Managing the Cold Chain

**Definition:**

Nursing interventions for a client /patient who is at high risk of committing suicide or deliberate self-harm.

**Purpose:**

- To prevent the client/patient from performing self-destructive acts (injury) that can lead to death by bringing him/her to self-realization and assisting him/her to develop effective coping abilities

**Indications:**

Patients who/with;

- Have verbalized desire to commit suicide
- Are suffering from depressive illnesses
- Are suffering from severe anxiety or agitation
- Are actively abusing alcohol or substances
- History of attempted suicide
- A family history of suicide
- Terminal/chronic illnesses

## A. Assessment

Assess	Rationale
1. Functional status of all the cold chain equipment	1. To ensure maintenance of cold chain and potency of the vaccines is maintained
2. The capacity of cold chain equipment	2. To facilitate planning for safe and adequate storage of vaccines
3. The status of vaccine chain monitor	3. To ensure potency of the vaccine and monitor continuity of cold chain maintenance

## B. Planning



**Self**

- Review the current knowledge on the process
- Ensure functional status of all cold chain equipment
- Prepare all cold chain equipment according to activities to be undertaken



## Environment

- Well ventilated room with adequate lighting and equipment



## Requirements

- Refrigerators
- Cold boxes
- Vaccine carriers with sponge
- Ice packs
- Fridge thermometers
- Refrigerator temperature charts
- Vaccines
- Source of power (Gas/solar/electricity)
- Well ventilated spacious room with minimal physical movement
- Vaccine ledger books

## C. Implementation

Steps	Rationale
<b>Refrigerator</b>	
1. Connect refrigerator to the power source	1. To initiate the cooling process and maintain the right temperature
2. Set the thermostat	2. To regulate the temperature
3. Place vaccine fridge thermometer/fridge tag in the refrigerator	3. To monitor the temperature of the fridge
4. Four hours after connecting the refrigerator to the power source, check the temperature (The recommended temperature is +2°C to +8°C)	4. To ensure that temperature is within the recommended storage ranges
5. Arrange vaccines in the fridge according to sensitivity i.e. <ul style="list-style-type: none"> <li>• <b>Top shelf</b> – Keep polio and measles vaccines</li> <li>• <b>Second shelf</b> – Store Bacillus Calmette-Guérin (BCG), pentavalent and Tetanus toxoid (TT) and all diluents</li> <li>• <b>Bottom shelf</b> – Store spare ice packs</li> </ul>	5. To maintain vaccine potency according to the required specification for each vaccine
<b>For RCW 42 EG Fridge</b>	
1. Vaccines arranged from the bottom as follows: <ul style="list-style-type: none"> <li>• <b>First tray</b> – Polio</li> <li>• <b>Second tray</b> – Measles and BCG</li> <li>• <b>Third tray</b> – Rota virus</li> <li>• <b>Fourth tray</b> – TT and Inactivated Polio Vaccine (IPV)</li> <li>• <b>Fifth tray</b> – Pentavalent</li> </ul>	1. To maintain vaccine potency

Steps	Rationale
<ul style="list-style-type: none"> <li>• <b>Sixth tray</b> – Pneumococcal vaccine</li> </ul> <p><b>NB:</b> For other types of refrigerators, follow the manufacturer's instructions</p>	
<b>Cold Boxes</b>	
1. Place frozen ice packs side by side against the inside walls of the cold box	1. To maintain cold temperatures within the cold box
2. Place polio, BCG and measles vaccines directly on the ice packs	2. To maintain vaccine potency
3. Wrap packing material around TT and Pentavalent vaccines	3. To prevent the vaccines from freezing
4. Place ice packs on top of the vaccines and diluents	4. To maintain the recommended temperatures (+2°C to +8°C)
5. Place thermometer on top of the ice packs	5. To monitor temperature
6. Secure the lid tightly	6. To avoid air from getting into the cold box thus interfering with the temperature
<b>Vaccine Carriers</b>	
1. Place four frozen ice packs inside the vaccine carrier	1. To maintain cold temperatures within the vaccine carrier
2. Place vaccines and diluents carefully into the carrier	2. To facilitate safety and maintain vaccine potency
3. Place plastic foam or packaging material around Tetanus Toxoid and pentavalent	3. To prevent vaccines from freezing
4. Place a dial thermometer inside the vaccine carrier	4. To monitor the temperatures
5. Secure the lid tightly	5. To prevent warm air from entering the vaccine carrier and interfering with temperatures
<b>Ice Packs</b>	
1. Fill ice pack with water and freeze in the refrigerator	1. To attain the prescribed temperatures for maintaining cold chain
2. Place frozen ice pack on the immunization table	2. Vaccines are placed on the ice packs to maintain potency
3. Remove the vaccines being used during the immunization session	3. To facilitate efficiency of immunization while limiting unnecessary exposure to light and interference of the temperature for the other vaccines

Steps	Rationale
4. Wrap the vaccines with emery paper and place them on the frozen ice packs	4. To protect vaccines from lights and maintain them within the right temperature
5. Change the ice pack as soon as it melts	5. To maintain the right temperatures for the vaccines

## D. Evaluation

Evaluate	Rationale
1. Maintenance of cold chain between +2°C to +8°C was attained from the manufacturer to the client	1. To ensure that the vaccines administered are potent
2. Maintenance of temperature charts was undertaken in the morning and evening as required	2. To confirm that the vaccines administered are potent
3. Refrigerators and other cold chain equipment were maintained in line with cold chain management principles	3. To ensure the functional status of the refrigerators for potency of the vaccines

## E. Documentation

### Record:

- Temperature of the refrigerator in the morning and evening on the cold chain monitoring chart
  - Observations made on temperature variations
  - The number of vaccines in the storage equipment and the number of vaccines removed
- ■ ■

## 5.1-2: Administration of Bacillus Calmette-Guerin (BCG)

### Definition:

This is the process of injecting Bacillus Calmette-Guérin (BCG) vaccine.

### Purpose:

- To safely and correctly administer potent BCG vaccines to stimulate the body to produce antibodies that protect the body against tuberculosis (TB)

### Indications:

- At birth or first contact with a client
- Children under 5 years with no BCG scar

## A. Assessment

Assess	Rationale
1. Current immunization status of the client	1. To determine if the client needs the vaccination
2. Health status of the client	2. To detect any contraindication to the BCG vaccine
3. Equipment/stationery/vaccine	3. To ascertain their availability, adequacy, functionality and potency of the vaccine to be administered

## B. Planning



### Self

- Review the cold chain procedure
- Review the health record card
- Review literature about BCG vaccine
- Wash and dry hands



### Client/Caretaker

#### Explain:

- The procedure to the caretaker and the child where applicable
- The reason for the vaccination
- The route of administration and assistance required during the procedure
- How the vaccine works, the expected side effects and how to manage them
- The importance of the mother-child booklet



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- A BCG syringe with needle gauge 26
- Sterile 2ml reconstituting syringe and needle gauge 21
- Safety box
- Vaccine carrier with icepacks, diluted BCG vaccine and sponge
- Refuse bin
- Kidney dish/gallipot with dry swabs for the skin
- Table, chairs, benches
- A tray
- Tally sheets
- Immunization registers
- Mother - child booklet

## C. Implementation

Steps	Rationale
1. Prepare the vaccination session indoors or under a shade	1. To avoid interference with the potency of the vaccines
2. Welcome the caretaker and the client	2. To make the client comfortable and allay anxiety
3. Confirm whether the client is due for the vaccine	3. To determine whether the vaccine is required
4. Read the manufacturer's instruction	4. To comply with the manufacturer's instructions
5. Record the color of the vaccine vial monitor (VVM) and expiry date of both the diluent and the vaccine	5. To confirm the potency of the vaccine
6. Record the batch number	6. For follow up in case of adverse reaction
7. Wash and dry hands	7. For infection prevention and control
8. Mix the vaccine and diluents in sterile condition (the diluents should be the same temperature with the vaccines)	8. To reconstitute and make vaccine ready for administration
9. Record time of reconstitution	9. To note the time of reconstitution since BCG's potency lasts for 6 hours after reconstitution

Steps	Rationale
10. Keep the reconstituted vaccine in a sponge with a slit in a vaccine carrier	10. In readiness for administrations and to preserve potency
11. Allow ampoule/vial to stand upright on the sponge in the vaccine carrier for about 1 min	11. To let bubbles settle
12. Fill the syringe with the required dose using the BCG auto-disable (AD) syringe. Measure the volume of vaccine to be injected according to the markings on the barrel of the 0.05 ml syringe for children less than 1 year and 0.1 ml syringe for children over 1 year	12. To ensure that the client receives the right dose
13. With the left hand, gently but firmly hold the left forearm of the child to be immunized	13. To restrain the child, immobilize injection site and avoid injury to the nurse and the child
14. Stretch the skin over the site between the left index finger and the thumb	14. For ease of access to the skin
15. Introduce the needle into the skin at $15^{\circ}$ on the outer (dorsal) aspect of the left forearm at the junction of the upper and middle thirds ( <i>intradermal</i> )	<p>15. To ensure that the needle is in the intradermal tissues to deposit the vaccine in the right place.</p> <p><b>N.B:</b> The left arm is recommended for standardization in the Kenya National Immunization Schedule</p>
16. Inject BCG vaccine slowly observing for the formation of a wheal that appears (about 7-8mm) with small pits on it like an orange peel (Fig 5.1)	16. To avoid interfering with the process of the absorption of the vaccine
 <p>Figure 5.1 BCG Injection Administered Slowly on the Dorsal Aspect Intradermally</p>	
17. Remove the needle gently and <b>DO NOT RUB</b> the injection site	17. To avoid interference with the injection site

Steps	Rationale
18. Educate the caretaker/ client on the care of the injection site	18 - 19. To allay anxiety and ensure that the caretaker/client monitors for any side effects and takes appropriate action
19. Provide appropriate advice on the vaccine	
20. Thank the caretaker/ client and give a return date as appropriate	20. To appreciate and promote cooperation and ensure timely follow up
21. Discard all the un-used vaccine after 6 hours according to policy guidelines	21. Potency of BCG expires after 6 hours of reconstitution
22. Clear the table, empty the vaccine carrier and return the ice packs to the fridge	22. To ensure safety of clients and staff, and facilitate preparation for subsequent immunization sessions

## D. Evaluation

Evaluate	Rationale
1. The procedure was done as per the standard guidelines	1. To ensure that the client receives potent vaccine in a sterile environment
2. The caretaker/ client understood the expected side effects of the vaccine and the need for return date	2. To identify further educative needs and plan for interventions
3. All records were appropriately filled in the mother - child booklet, tally sheets and permanent registers	3. For reference and planning for adequate vaccine requirements

## E. Documentation

### Record:

- Vaccination in: mother - child booklet, immunization tally sheet and permanent register
- Findings of evaluation
- Date vaccine administered and return dates given
- Any adverse events following vaccination and actions taken

■ ■ ■

## 5.1-3: Administration of Oral Polio Vaccine (OPV)

### Definition:

This is the process of administering Oral Polio Vaccine (OPV).

### Purpose:

- To safely and correctly administer oral polio vaccine which will stimulate the body to produce antibodies against polio virus, to protect the child against poliomyelitis

### Indications:

The vaccine is given at:

- Birth or at first contact with child up two weeks (Zero dose)
- At six weeks or at first contact with child after that age (1st polio)
- At 10 weeks or next contact with the child after that age (second polio)
- At 14 weeks or at next contact with child (third polio)
- National immunization days e.g. supplementary immunization activities

## A. Assessment

Assess	Rationale
1. The current immunization status of the child	1. To determine the need for immunization
2. Health status of the child	2. To detect any contraindication to the vaccine
3. Equipment/stationery/vaccine required for the immunization session	3. To ascertain the availability, adequacy, functionality and potency of the vaccine to be administered

## B. Planning



### Self

- Review the current knowledge of the procedure
- Prepare all documents required for the session: i.e. permanent register, immunization tally sheets, mother - child booklet
- Check cold chain equipment and ascertain that the temperature is +2°C to +8°C



### Client/Caretaker

#### Explain:

- The procedure and obtain consent from the caretaker
- The mode of administration of the vaccine
- To the caretaker how the vaccine works, the expected side effects and how to manage them
- The importance of the mother - child booklet



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- Polio vaccine
- Vaccine carrier with sponge and frozen icepacks
- Droppers
- Immunization registers
- Tally sheets
- Mother - child booklet
- Tray
- Table/chairs/benches
- Waste disposal bin
- Safety box

## C. Implementation

Steps	Rationale
1. Prepare the vaccination session indoors or under a shade	1. To avoid interference with the potency of the vaccines
2. Welcome the caretaker and the child	2. To make them comfortable and allay anxiety
3. Confirm whether the child is due for the vaccine	3. To determine whether the vaccine is required
4. Wash and dry hands	4. For infection prevention and control
5. Record the batch number, the color of Vaccine Vial Monitor (VVM) and expiry date of the vaccine	5. For follow-up in case of an adverse reaction
6. Keep OPV in a vaccine carrier throughout the immunization session between +2°C to +8°C	6. To maintain potency of the vaccine
7. Use the dropper or device supplied with the vaccine, administer 2 drops or as prescribed by the manufacturer into the child's mouth (or) if the child does not open the mouth gently squeeze the child's nose between two fingers (Fig. 5.2)	7. To ensure accurate administration of the recommended dose

Steps	Rationale
	
<p>8. Do not touch the child's lips or tongue with the dropper. Should this happen, discard the dropper after administering the vaccine to the child</p>	<p>8. To avoid cross infection to other children</p>
<p>9. Confirm that the child has swallowed the vaccine. If the child spits/ vomits the vaccine out within 30 minutes, repeat the dosage</p>	<p>9. To ensure that the child has had the right dose</p>
<p>10. Provide appropriate advice on the vaccine</p>	<p>10. To allay anxiety and ensure that the caretaker monitors for any side effects and takes appropriate action</p>
<p>11. Thank the caretaker, give the date for the next dose and give the necessary advice</p>	<p>11. To appreciate the caregiver, promote compliance, avoid drop out and missed opportunity</p>
<p>12. Clear the tables, empty the vaccine carrier and return the ice packs and remaining vaccines to the fridge</p>	<p>12. To promote safety for clients and staff and allow for preparation for subsequent immunization sessions</p>

## D. Evaluation

Evaluate	Rationale
<p>1. If the procedure was done as per the standard guidelines</p>	<p>1. To ensure the client receives a potent vaccine</p>
<p>2. The caretaker understood the expected side effects of the vaccine and the need for return date</p>	<p>2. To identify further education needs and plan for interventions</p>
<p>3. All the records are appropriately filled in mother - child booklet, tally sheets and permanent register</p>	<p>3. For reference and planning for adequate vaccine requirements and facilitate monitoring of missed opportunity and dropout rates</p>

## E. Documentation

### Record:

- Vaccination in: mother - child booklet, immunization tally sheet and permanent register
- Findings of evaluation
- Date of vaccine administration and return dates given
- Any adverse reactions by the client during vaccination and actions taken

■ ■ ■

## 5.1-4: Administration of Pentavalent Vaccine

### Definition:

This is the process of injecting pentavalent vaccine.

### Purpose:

- To safely and correctly administer pentavalent vaccine to stimulate the body to produce antibodies that protect the body against Diphtheria, Pertusis, Tetanus, Hepatitis B, Pneumonia, Meningitis and epiglottitis caused by Haemophilus influenza type B

### Indications:

Given:

- At 6 weeks or at first contact with the child any time after that age
- Second dose at 10 weeks or second contact with the child
- Third dose at 14 weeks or at the next contact with the child after that age

## A. Assessment

Assess	Rationale
1. The current immunization status of the child	1. To make decision whether the child needs to be vaccinated
2. The health status of the child	2. To detect any contraindication to the vaccine
3. The equipment/stationery /vaccine required for the immunization session	3. To ascertain the availability, adequacy, functionality and potency of the vaccine to be administered

## B. Planning



### Self

- Review the current knowledge of the procedure
- Prepare all documents required for the session: i.e. Permanent register immunization tally sheets, mother - child booklets
- Check the cold chain equipment and ascertain that the temperature is +2°C to +8°C
- Read the manufacturer's manual



### Client/Caretaker

Explain:

- The procedure to the caretaker
- The mode of injection and expose the site
- To the caretaker how the vaccine works, the expected side effects and how to manage them
- The importance of the mother - child booklet



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- Prepare all documents required for the session:
  - Permanent register
  - Immunization tally sheets
  - Mother - child booklets
  - Check the cold chain equipment and ascertain that the temperature is +2°C to +8°C
- Assemble the following;
  - Auto Disable (AD) syringe and needle
  - Sterile 2mls reconstituting syringe and needle gauge 21
  - Vaccine carrier with sponge
  - Pentavalent vaccine
  - Waste disposal bin
  - Dry single use cotton wool in a gallipot
  - Vial top remover
  - Safety boxes
  - Tray

## C. Implementation

Steps	Rationale
1. Prepare the vaccination session indoors or under a shade	1. To avoid interference with the potency of the vaccines
2. Welcome the caretaker and the baby	2. To make them comfortable and allay anxiety
3. Confirm whether the child is due for the vaccine	3. To determine whether the vaccine is required
4. Record the batch number and expiry date of the Pentavalent	4. For follow up in case of adverse reactions and also to ensure potency
5. Wash and dry hands	5. For infection prevention and control
6. Clean the injection site with a fresh swab prepared in plain clean water	6. To reduce the presence of microorganisms
7. Divide the thigh into three equal parts and select the middle third (vastus lateralis muscle) as the injection site	7. To avoid injury to the nerves and the major blood vessels
8. Place your thumb and index finger on the site and stretch the skin slightly	8. To ensure vaccine is injected in the muscles with minimal discomfort

Steps	Rationale
9. Refer to procedure 1.4.2.1, <b>Administering Intramuscular Injections</b> and inject into the muscle at 90°	9. To facilitate needle entry into the tissues
10. Withdraw the needle and immediately discard it into the safety box	10. To promote safety to the client and staff
11. If the injection site is bleeding apply slight pressure with a dry swab	11. To stop further bleeding and to enhance absorption of the administered vaccine
12. Discard all used swabs into a waste disposal bin and clear the table	12. To prevent cross infection
13. Educate the caretaker on care of the injection site and possible side effects	13. To avoid interference with the injection site and to take appropriate action
14. Provide appropriate advice on the vaccine	14. To allay anxiety, promote compliance and ensure that the caretaker monitors and takes appropriate action for any side effects
15. Thank the caretaker and give a return date	15. To indicate appreciation of the caregiver, promote compliance, avoid drop out and missed opportunity
16. Clear the table, empty the vaccine carrier and return the ice packs to the fridge	16. To promote safety for clients and staff and allow for preparation for subsequent immunization sessions

## D. Evaluation

Evaluate	Rationale
1. Immunization sessions are conducted as per the standard guidelines	1. To ensure the client receives a potent vaccine
2. The caretaker understood the expected effects of the vaccine and the return date	2. To identify further education needs and plan for interventions
3. All records are filled in mother - child booklets, tally sheets and permanent register	3. For reference and planning for adequate vaccine requirements; facilitates monitoring of missed opportunity and dropout rates

## E. Documentation

### Record:

- Vaccines in: mother - child booklet, tally sheets and permanent register
- Any reactions observed and interventions during vaccinations
- Date of vaccine administration and return dates given
- Findings of evaluation

■ ■ ■

## 5.1-5: Administration of Measles Vaccine

### Definition:

This is the process of injecting measles vaccine.

### Purpose:

- To safely and correctly administer measles vaccine to stimulate the body to produce antibodies that protects the body against measles

### Indications:

- All children at nine and 18 months old or at first contact with child after that age
- All HIV exposed infants at 6 months of age
- During supplementary immunization to children from 9 months to 15 years
- During measles outbreak (children 6 months up to 15 years)

## A. Assessment

Assess	Rationale
1. The current immunization status of the child	1. To make a decision on whether the child needs the vaccine
2. Health status of the child	2. To detect any contraindication to the specified vaccine
3. Equipment/ stationery / vaccine required for the immunization session	3. To ascertain the availability, adequacy, functionality and potency of the vaccine to be administered

## B. Planning



### Self

- Review the procedure for administration and literature of measles vaccine
- Prepare all documents required for the session: i.e. Permanent register immunization tally sheets, mother - child booklets
- Check the cold chain equipment and ascertain that the temperature is +2°C to +8°C
- Read the manufacturer's instructions



### Client/Caretaker

#### Explain:

- The procedure to the caretaker
- The mode of injection and expose the site
- To the caretaker how the vaccine works, the expected side effects and how to manage them
- The importance of the mother - child booklet



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- Prepare all documents required for the session
  - Permanent register
  - Immunization tally sheets
  - Mother - child booklets
  - Check cold chain equipment and ascertain that the temperature is +2°C to +8°C
- Assemble the following;
  - Auto-disable (AD) syringe 0.5mls and needle
  - Sterile 5mls reconstitution syringe and needle gauge 21
  - Vaccine carrier with sponge
  - Measles vaccine and diluents
  - Waste disposal bin
  - Swabs in a gallipot with water
  - Safety boxes
  - Tray

## C. Implementation

Steps	Rationale
1. Prepare the vaccination session indoors or under a shade	1. To avoid interference with the potency of the vaccines
2. Wash and dry hands	2. For infection prevention and control
3. Welcome the caretaker and the child	3. To make them comfortable and allay anxiety
4. Confirm whether the child is due for the vaccine	4. To determine whether the vaccine is required
5. Record the batch number, the color of VVM and expiry date of both diluents and vaccine	5. For follow up in case of adverse reactions and also to ensure potency of the vaccine
6. Remove the top cover of the diluents and vaccine to expose the rubber cap and clean both tops with cotton swab soaked in plain water	6. To access the vaccine and avoid contamination of the vaccine
7. Draw 5 ml of diluent using a sterile syringe and introduce the contents to the vaccine. (Diluents should be of the same temperature with the vaccines)	7. To transform the vaccine into a liquid state that can be administered

Steps	Rationale
8. Gently turn the bottle up and down until the vaccine is thoroughly mixed before withdrawal. Withdraw the required amount (0.5mls)	8. To ensure that the vaccine is homogenous and to allow for withdrawal of the right dose
9. Keep the remaining vaccine in a sponge in the vaccine carrier	9. To maintain potency of the vaccine
10. Keep the lid clean by swabbing with a clean cotton swab soaked in water	10. To ensures safety of the vaccine and avoids contamination
11. Demonstrate to the caretaker how to hold the child, see below	11. To restrain the child so as to avoid unnecessary injuries to the child and the nurse during the procedure
12. Swab the injection site with cotton wool soaked in water	12. To clean the injection site
13. Administer measles vaccine on the outer side of the right upper arm, in the deltoid muscle at 45° subcutaneously	13. To ensure the vaccine is injected in the subcutaneous muscles
14. Remove the needle and discard into the safety box immediately	14. To promote safety for the client and the nurse
15. Educate the caretaker on care of injection site and possible side effects	15. To avoid interference with the injection site and to take appropriate action
16. Provide appropriate advice on the vaccine	16. To allay anxiety, promote compliance and ensure that the caretaker monitors and takes appropriate action for any side effects
17. Thank the caretaker	17. To indicate appreciation and avoid drop outs and missed opportunities
18. Clear the table, empty the vaccine carrier and return the ice packs and remaining vaccines to the fridge	18. Ensures safety of the clients and staff, and facilitates preparation for subsequent sessions

## D. Evaluation

Evaluate	Rationale
1. Immunization sessions conducted as per the standard guidelines	1. To ensure the client receives a potent vaccine
2. The caretaker understood the expected effects of the vaccine and the return date	2. To identify further education needs and plan for interventions

Evaluate	Rationale
3. All records are filled in mother - child booklets, tally sheets and permanent register	3. For reference and planning for adequate vaccine requirements; facilitate monitoring for missed opportunity and dropout rates

## E. Documentation

### Record:

- Vaccines in: mother - child booklet, tally sheets and permanent register
- Any reactions observed and interventions during vaccinations
- Date of vaccine administration and return date
- Findings of evaluation

■ ■ ■

## 5.1-6: Administration of Tetanus Toxoid (TT) Vaccine

### Definition:

This is the process of injecting Tetanus Toxoid (TT) vaccine.

### Purpose:

- To safely and correctly administer Tetanus Toxoid vaccine which will stimulate the body to produce antibodies against tetanus

### Indications:

- Clients with fresh wounds
- Antenatal mothers
- Five (5) TT schedule for girls/women of reproductive age
- Women in reproductive age during TT immunization campaigns

## A. Assessment

Assess	Rationale
1. The TT immunization status of the client	1. To determine if the client needs the vaccine
2. The equipment/ stationery/ vaccine required for the immunization session	2. To ascertain the availability, adequacy, functionality and potency of the vaccine to be administered

## B. Planning



### Self

- Review the procedure of TT administration and literature on tetanus toxoid vaccine
- Prepare all documents required for the session: i.e. daily activity register, immunization tally sheets, mother - child booklets
- Check the cold chain equipment and ascertain that the temperature is +2°C to +8°C
- Read the manufacturer's manual



### Client/Caretaker

#### Explain:

- The procedure and obtain consent from the caretaker
- The site of injection
- To the caretaker how the vaccine works, the expected effects of the vaccine and how to manage them
- The importance of the TT and/or Antenatal care (ANC) card



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- Prepare all documents for the session:
  - ANC register
  - Tally sheets
  - ANC cards
  - TT cards
  - Daily activity register
  - Immunization summary sheets
  - Check the cold chain equipment and ensure the temperature is between +2°C to +8°C
- Assemble the following;
  - Auto-disable (AD) syringe and needle
  - Vaccine carrier with sponge
  - TT vaccine
  - Waste disposal bin
  - Swabs
  - Safety box
  - Tray
  - Immunization tally sheet, client register, daily activity register
  - Immunization summary sheets
  - Antenatal register

## C. Implementation

Steps	Rationale
1. Prepare the vaccination session indoors or under a shade	1. To avoid interference with the potency of the vaccines
2. Welcome the client	2. To make the client comfortable and allay anxiety
3. Confirm whether the client is due for the vaccine	3. To determine whether the vaccine is required
4. Wash and dry hands	4. For infection prevention and control
5. Record the batch number, color of the VVM and expiry date	5. For follow up in case of adverse reaction and to ensure potency
6. Clean the rubber cap gently, shake the vaccine and draw 0.5mls of vaccine into the AD sterile syringe	6. To prevent contamination and to have a smooth homogeneous suspension for administration

Steps	Rationale
7. Clean the injection site with cotton wool soaked in plain water	7. For infection prevention and control
8. <b>Refer to procedure 1.4.2.1, Administering Intramuscular Injections</b> and inject at the deltoid muscle stretching the skin slightly	8. To ensure the vaccine is injected into the deltoid muscles
9. Provide appropriate advice on the vaccine	9. To allay anxiety, promote compliance and ensure that the client monitors for any side effects and takes appropriate action
10. Thank the client and give the return date	10. To indicate appreciation and ensure compliance
11. Return all unused vaccine to the refrigerator at the end of the day	11. TT potency is maintained when kept under recommended temperatures
12. Empty the vaccine carrier, return ice packs to the fridge and clear the table	12. To ensure the safety of clients and staff and facilitate preparation for subsequent sessions

## D. Evaluation

Evaluate	Rationale
1. The procedure was done as per standard guidelines	1. To ensure the client receives a potent vaccine
2. The client understood expected side effects of the vaccine and need for return visit	2. To identify further education needs and plan for interventions
3. All records were appropriately filled in the ANC card, tally sheet and daily activity register	3. For reference and planning for adequate vaccine requirements; facilitates monitoring for missed opportunity and dropout rates

## E. Documentation

### Record:

- Vaccines in: mother - child booklet, tally sheets and permanent register
- Any reactions observed and interventions during vaccinations
- Date of vaccine administration and return date
- Findings of the evaluation



## 5.1-7: Administration of Yellow Fever Vaccine

### Definition:

This is the process of injecting Yellow Fever Vaccine.

### Purpose:

- To safely and correctly administer yellow fever vaccine to stimulate the formation of antibodies against yellow fever virus

### Indications:

- At nine months or at first contact after that age in identified regions
- When visiting countries requiring vaccination against yellow fever at least 4 weeks before travel
- When there are outbreaks of yellow fever disease

**NB:** Yellow fever vaccine in childhood is administered routinely in yellow fever endemic zones in Kenya

## A. Assessment

Assess	Rationale
1. The current immunization status of the child/client	1. To determine if the client needs the vaccine
2. The health status of the child/client	2. To detect any contraindication to the vaccine
3. The equipment/stationery/vaccine required for the immunization session	3. To ascertain the availability, adequacy, functionality and potency of the vaccine

## B. Planning



### Self

- Review the procedure of yellow fever vaccination
- Read the manufacturer's instructions
- Prepare all documents required for the session: i.e. daily activity register, immunization tally sheets, mother - child booklets
- Check the cold chain equipment and ascertain that the temperature is +2°C to +8°C
- Read the manufacturer's manual



### Client/Caretaker

#### Explain:

- The procedure and obtain consent from the caretaker
- The site of injection
- To the caretaker how the vaccine works, the expected effects of the vaccine and how to manage them
- The importance of the mother - child booklet



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- Prepare all the documents required for the session:
  - Permanent register
  - Immunization tally sheets
  - Mother - child booklets
  - Check cold chain equipment and ascertain that the temperature is between +2°C to +8°C
- Assemble the following:
  - Sterile AD 5mls syringe and needle gauge 21
  - Vaccine carrier with sponge
  - Yellow fever vaccine and diluents
  - Waste disposal bin
  - Swabs in a gallipot with plain water
  - Safety boxes
  - Table, chairs, benches
  - Tray

## C. Implementation

Steps	Rationale
1. Prepare the vaccination session indoors or under a shade	1. To avoid interference with the potency of the vaccines
2. Welcome the client	2. To make the client comfortable and allay anxiety
3. Confirm whether the client is due for the vaccine	3. To determine whether the vaccine is required
4. Wash and dry hands	4. For infection prevention and control
5. Record the batch number, the color of VVM and expiry date of both diluents and vaccine	5. For follow up in case of adverse reaction and to ensure the vaccine potency
6. Using a sterile syringe, withdraw 5 ml of diluent and then introduce it to the vaccine	6. To dilute the vaccine and make the right concentration
7. Gently turn the bottle up and down before withdrawing vaccine. Withdraw the required amount (0.5mls). Keep the	7. To attain homogenous mixture of the vaccine; obtain accurate dose and maintain vaccine safety

Steps	Rationale
remaining vaccine in a sponge in the vaccine carrier	
8. If the client is a child , demonstrate to the caretaker how to hold the child	8. To restrain the child and to avoid injury
9. Swab the skin with a cotton wool soaked in plain water	9. To clean the site of injection
10. Administer the vaccine subcutaneously about half way down the outer side of the left upper arm in the deltoid muscle (enter at an angle of 45°)	10. Ensures delivery of the vaccine in the right tissues
11. Remove the needle and discard into the safety box immediately	11. To avoid needle prick injury and environment contamination
12. Educate the caretaker/ client on care of injection site and possible side effects	12. To avoid interference with the injection site and to take appropriate action
13. Provide appropriate advice on the vaccine	13. To allay anxiety and ensure that the client monitors and takes appropriate action for any side effects
14. Thank the care taker/client	14. To indicate appreciation and avoid drop outs and missed opportunities
15. Clear the tables, empty the vaccine carrier and return the remaining vaccines to the fridge	15. To promote the client's and staff's safety and facilitate preparation for subsequent immunization sessions

## D. Evaluation

Evaluate	Rationale
1. The procedure was done as per the standard guidelines	1. To ensure the client receives a potent vaccine
2. The caretaker understood the expected side effects of the vaccine and the need for return date	2. To identify further education needs and plan for interventions
3. All the records were appropriately filled in mother - child booklets, tally sheets and permanent register	3. For reference and planning for adequate vaccine requirements; facilitates monitoring for missed opportunity and dropout rates

## E. Documentation

### Record:

- Immunization in: mother - child booklet/ yellow fever card, immunization tally sheet, permanent registers
- Any reactions observed and interventions during vaccinations
- Date of vaccine administration and return date
- Finding of the evaluation
- For international travellers, issue and stamp the immunization travel booklet

**NB:** For international travelers, administer a single dose prior to traveling (4 weeks in advance)

■ ■ ■

## 5.1-8: Administration of Rota Virus Vaccine

### Definition:

This is the process of administering Rota virus vaccine.

### Purpose:

- To safely and correctly administer Rota virus vaccine to stimulate the body to produce antibodies against rotavirus related gastroenteritis

### Indications:

- First dose at 6 weeks
- Second dose at 10 weeks

## A. Assessment

Assess	Rationale
1. The current immunization status of the child	1. To make a decision on whether the child needs vaccine
2. The health status of the child	2. To detect any contraindication to the specified vaccine
3. Equipment/stationery/ vaccine required for the immunization session	3. To ascertain the availability, adequacy, functionality and potency of the vaccines

## B. Planning



### Self

- Review the procedure of Rota virus vaccination
- Read the manufacturer's instructions
- Prepare all documents required for the session: i.e. Permanent register, immunization tally sheets, mother - child booklet
- Check the cold chain equipment and ascertain that the temperature is +2°C to +8°C



### Client/Caretaker

#### Explain:

- The procedure and obtain consent from the caretaker
- The site of injection
- To the caretaker how the vaccine works, the expected effects of the vaccine and how to manage them
- The importance of the mother - child booklet



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- Rota virus vaccine
- Permanent register
- Immunization tally sheets
- Mother - child booklets
- Vaccine carrier with sponge and frozen icepack
- Tray
- Table/chairs/benches
- Waste disposal bin
- Safety box

# C. Implementation

Steps	Rationale
1. Prepare the vaccination session indoors or under a shade	1. To avoid interference with the potency of the vaccines since the vaccine is sensitive to heat and light
2. Welcome the caretaker and the baby	2. To make them comfortable and allay anxiety
3. Confirm whether the child is due for the vaccine	3. To determine whether the vaccine is required
4. Wash and dry hands	4. For infection prevention and control
5. Note the batch number, the color of Vaccine Vial Monitor (VVM) and expiry date of both diluents and vaccine (depending on the dosage form)	5. For follow up in case of adverse reaction and to ensure vaccine potency
6. If the dose is in powder form, remove the top cover of the diluents and vaccine to expose the rubber cap and clean both tops with cotton swab soaked in water	6. To access the vaccine and avoid contamination of the vaccine
7. Reconstitute according to the manufacturer's instructions	7. To transform the vaccine into a liquid form that can be easily administered
8. Gently turn the bottle up and down to mix the contents thoroughly	8. To ensure that the vaccine is homogenous
9. Keep the Rota Virus Vaccine in a vaccine carrier throughout the immunization session	9. To maintain potency of the vaccine

Steps	Rationale
10. Administer the dose slowly or as prescribed by the manufacturer into the child's mouth along the child's cheek	10. To ensure accurate administration of the recommended dose
11. Confirm that the child has swallowed the vaccine. If the child spits/ vomits within 30 minutes, repeat the dosage	11. To ensure that the child has had the right dose
12. Provide appropriate advice on the vaccine	12. To allay anxiety, promote compliance and ensure that the care taker monitors for any side effects and takes appropriate action
13. Thank the caretaker and give the date for the next dose	13. To indicate appreciation of the caregiver, promote compliance, avoid drop out and missed opportunity
14. Clear the working area, empty the vaccine carrier and return the ice packs and remaining vaccines to the fridge	14. To promote safety for clients and staff and allow for preparation for subsequent immunization sessions

## D. Evaluation

Evaluate	Rationale
1. If the procedure was done as per the standard guidelines	1. To ensure the client receives a potent vaccine
2. The caretaker understood the expected side effects of the vaccine and the need for return date	2. To identify further education needs and plan for interventions
3. All the records are appropriately filled in the mother - child booklet, tally sheets and permanent register	3. For reference and planning for adequate vaccine requirements; facilitates monitoring of missed opportunity and dropout rates

## E. Documentation

### Record:

- Vaccination in the mother - child booklet, immunization tally sheet and permanent register
- Date of vaccine administration and return dates given
- Any adverse reactions by the client during vaccination and actions taken



## 5.1-9: Administration of Pneumococcal Conjugate Vaccine (PCV 10)

### **Definition:**

This is the process of injecting Pneumococcal Conjugate Vaccine (PCV).

### **Purpose:**

- To safely and correctly administer pneumococcal conjugate vaccine (PCV 10) vaccine to stimulate the body to produce antibodies that protects the body against Streptococcal pneumonia bacteria

### **Indications:**

- First dose at 6 weeks
- Second dose at 10 weeks
- Third dose at 14 weeks

## A. Assessment

Assess	Rationale
1. The current immunization status of the child	1. To make decision on whether the child needs vaccine
2. Health status of the child	2. To detect any contraindication to the specified vaccine
3. Equipment/stationery/vaccine required for the immunization session	3. To ascertain the availability, adequacy, functionality and potency of the vaccines

## B. Planning



### **Self**

- Review the procedure of pneumococcal conjugate vaccination
- Prepare all documents required for the session: i.e. Permanent register (permanent) immunization tally sheets, mother -child booklets
- Check the cold chain equipment and ascertain that the temperature is +2°C to +8°C



### **Client/Caretaker**

#### Explain:

- The procedure and obtain consent from the caretaker
- The site of injection
- To the caretaker how the vaccine works, the expected effects of the vaccine and how to manage them
- The importance of the mother - child booklet



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- Pneumococcal vaccine (PCV 10)
- Permanent register
- Immunization tally sheets
- Mother - child booklet
- Vaccine carrier with sponge and frozen icepack
- Tray
- Table/chairs/benches
- Waste disposal bin

## C. Implementation

Steps	Rationale
1. Prepare the vaccination session indoors or under a shade	1. To avoid interference with the potency of the vaccines since the vaccine is sensitive to heat and light
2. Welcome the caretaker and the baby	2. To make them comfortable and allay anxiety
3. Confirm whether the child is due for the vaccine	3. To determine whether the vaccine is required
4. Wash and dry hands	4. For infection prevention and control
5. Note the batch number, the color of vaccine Vial Monitor (VVM) and expiry date of the vaccine	5. For follow-up in case of an adverse reaction and to ensure vaccine potency
6. Keep Pneumococcal vaccine in a vaccine carrier throughout the immunization session	6. To maintain potency of the vaccine
7. Withdraw 0.5mls of PCV 10 in a sterile AD syringe	7. To ensure accurate administration of the recommended dose
8. Clean the site with a fresh swab prepared in plain water	8. To clean the site of injection
9. Divide the thigh into three equal (see under pentavalent adm. above) parts and select the middle third (vastus lateralis muscle) as the injection site	9. To avoid injury to the nerves and major blood vessels
10. Place your thumb and index finger on the injection site and stretch the skin	10. To facilitate needle entry into the tissues

Steps	Rationale
slightly, if the child is emaciated, you need to pull the skin folds together	
11. Push the needle carefully into the space between your fingers deep into the muscle at 90°	11. To ensure that the vaccine is injected into the muscles with minimal discomfort
12. Withdraw the needle and immediately discard it into the safety box	12. To promote safety to the client and staff
13. If the site is bleeding apply slight pressure with a dry swab	13. To stop further bleeding and enhance absorption of the administered vaccine
14. Discard all used swabs into a waste disposal bin	14. To promote safety to the client and staff
15. Provide appropriate advice on the vaccine	15. To allay anxiety, promote compliance and ensure that the care taker monitors for any side effects and takes appropriate action
16. Thank the caretaker and give the date for the next visit	16. To indicate appreciation of the caregiver, promote compliance, avoid drop out and missed opportunity
17. Clear the working area, empty the vaccine carrier and return the ice packs and remaining vaccines to the fridge	17. To promote safety for clients and staff and allow for preparation for subsequent immunization sessions

## D. Evaluation

Evaluate	Rationale
1. If the procedure was done as per the standard guidelines	1. To ensure the client receives a potent vaccine
2. The caretaker understood the expected side effects of the vaccine and the need for return date	2. Identifies further education needs and plan for interventions
3. All the records are appropriately filled in mother - child booklet, tally sheets and permanent register	3. For reference and planning for adequate vaccine requirements; facilitates monitoring of missed opportunity and dropout rates

## E. Documentation

### Record:

- Vaccination in: mother - child booklet, immunization tally sheet and permanent register
- Findings of evaluation
- Date of vaccine administration and return dates given
- Any adverse reactions by the client during vaccination and actions taken

■ ■ ■

## 5.1-10: Administration of Inactivated Polio Vaccine (IPV)

### Definition:

This is the process of injecting Inactivated Polio Vaccine (IPV).

### Purpose:

- To safely and correctly administer inactivated polio vaccine (IPV) vaccine to stimulate the body to produce antibodies that protects the body against all three types of poliovirus

### Indications:

- At 14 weeks only

## A. Assessment

Assess	Rationale
1. The current immunization status of the child	1. To make a decision on whether the child needs the vaccine
2. Health status of the child	2. To detect any contraindication to the specified vaccine
3. Equipment/stationery/ vaccine required for the immunization session	3. To ascertain the availability, adequacy, functionality and potency of the vaccine

## B. Planning



### Self

- Review the procedure of IPV vaccination
- Prepare all documents required for the session: i.e. Permanent register immunization tally sheets, mother - child booklets
- Check the cold chain equipment and ascertain that the temperature is +2°C to +8°C



### Client/Caretaker

#### Explain:

- The procedure and obtain consent from the caretaker
- The site of injection
- To the caretaker how the vaccine works, the expected effects of the vaccine and how to manage them
- The importance of the mother - child booklet



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- Inactivated polio vaccine (IPV)
- Child health register (permanent)
- Immunization tally sheets
- Mother - child booklet
- Vaccine carrier with sponge and frozen icepack
- Tray
- Waste disposal bin
- Safety box

## C. Implementation

Steps	Rationale
1. Prepare the vaccination session indoors or under a shade	1. To avoid interference with the potency of the vaccines since the vaccine is sensitive to heat and light
2. Welcome the caretaker and the baby	2. To make them comfortable and allay anxiety
3. Confirm whether the child is due for the vaccine	3. To determine whether the vaccine is required
4. Wash and dry hands	4. For infection prevention and control
5. Note the batch number, the color of Vaccine Vial Monitor (VVM) and expiry date of the vaccine	5. For follow-up in case of an adverse reaction and to ensure vaccine potency
6. Keep inactivated polio vaccine in a vaccine carrier throughout the immunization session	6. To maintain potency of the vaccine
7. Withdraw 0.5mls of IPV in a sterile AD syringe	7. To ensure accurate administration of the recommended dose
8. Clean or swab the site with a fresh swab prepared in plain water	8. To clean the injection site
9. Divide the thigh into three equal parts and select the middle third (vastus lateralis muscle) as the injection site (see under pentavalent above.) The injection site should be 2 cm away from the PCV 10 injection site	9. To avoid injury to the nerves and major blood vessels

Steps	Rationale
10. Place your thumb and index finger on the injection site and stretch the skin slightly	10. To facilitate needle entry into the tissues
11. Push the needle carefully into the space between your fingers deep into the muscle at 90°	11. To ensure that the vaccine is injected into the muscles with minimal discomfort
12. Withdraw the needle and immediately discard it into the safety box	12. To promote safety to the client and staff
13. If the site is bleeding, apply slight pressure with a dry swab	13. To stop further bleeding and enhance absorption of the administered vaccine
14. Discard all used swabs into a waste disposal bin	14. To promote safety to the client and staff
15. Provide appropriate advice on the vaccine	15. To allay anxiety, promote compliance and ensure that the care taker monitors for any side effects and takes appropriate action
16. Thank the caretaker and give the date for the next visit	16. To indicate appreciation of the caregiver, promote compliance, avoid drop out and missed opportunity
17. Clear the working area, empty the vaccine carrier and return the ice packs and remaining vaccines to the fridge	17. To promote safety for clients and staff and allow for preparation for subsequent immunization sessions

## D. Evaluation

Evaluate	Rationale
1. If the procedure was done as per the standard guidelines	1. To ensure the client receives a potent vaccine
2. The caretaker understood the expected side effects of the vaccine and the need for return date	2. To identify level of understanding of the client
3. All the records are appropriately filled in Mother - child booklet, tally sheets and permanent register	3. For reference and planning for adequate vaccine requirements; facilitates monitoring of missed opportunity and dropout rates

## E. Documentation

### Record:

- Vaccination in: mother - child booklet, immunization tally sheet and permanent register
- Findings of evaluation
- Date of current vaccine administration and return dates given
- Any adverse reactions by the client during the vaccination and actions taken

■ ■ ■

## 5.2: Family Planning Preparations

### 5.2-1: Counseling for Family Planning (FP)

**Definition:**

It is the process of educating clients on family planning (FP) methods.

**Purpose:**

- To inform clients the various methods of family planning to enable them make informed choice

**Indications:**

- Person/couples intending to their family

## A. Assessment

Assess	Rationale
1. The client's readiness for counseling	1. To facilitate clinical decision on whether to provide family planning method and type of information required
2. The client's suitability for family planning	2. To facilitate clinical decision interventions that ensure maximum cooperation

## B. Planning



**Self**

- Review the procedure on family planning counseling
- Reflect on own values and attitudes regarding family planning
- Assemble the visual aids and contraceptive samples for counseling



**Client**

- Explain the procedure to the client
- Ensure privacy and comfort



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- A quiet, private and well ventilated counseling room
- A table and chairs
- Screened couch
- Samples of all types of contraceptives
- Visual aids i.e. FP flip charts, models e.g. breast, pelvic
- Appropriate stationery e.g. forms and charts
- A family planning register

## C. Implementation

Steps	Rationale
1. Welcome the client(s)	1. To indicate appreciation, promote the client's self-esteem and allay anxiety
2. Greet the client, introduce self and offer the client a seat	2. To promote relaxation and facilitates creation of rapport
3. Discuss with the client what to expect during the counseling session, show interest and concern. If first visit, take medical and social history	3. To promote the client involvement, facilitate openness and enhance full disclosure of the client's information for clinical decision on the appropriate family planning method
4. Perform physical examination to the client; follow steps as outlined in chapter 1 of this manual; include breast examination and pelvic examination	4. To establish baseline data for the client and rule out conditions that would contraindicate the method chosen by the client
5. During the visit, tell the client about all the available family planning methods and explain each method: <ul style="list-style-type: none"> <li>• How the method works</li> <li>• Advantages, disadvantages, side effects and adverse effects</li> </ul>	5. To help the client make an informed choice
6. Guide the client to choose appropriate methods to start their family planning	6. To ensure effective family planning using the client's preferred method with minimum health risks

Steps	Rationale
7. Give instruction clearly noting any possible side effects and warning signs	7. To facilitate ability to cope with mild side effects, make decision on when to seek provider's help and prevent complications
8. Ask the client selected questions on the preferred method	8. To confirm if the client understood the information about the method and allow for identification of further education needs
9. If the method requires a procedure, for example IUCD insertion, or tubal-ligation, explain the procedure and tell the client how, where, and when it will be provided	9. To guide the client on making informed choice and discourage limiting him/her/ them to methods only available at the current facility
10. Thank the client(s) for listening and cooperating during the session	10. To indicate appreciation, non-judgmental attitude and encourage the client to make subsequent visits

**NB:** Use the acronym - **GATHER** or **REDI** in counseling

**G – Greet** the client in a culturally acceptable way

**A – Ask** about the client/ couple about their reproductive health needs

**T – Tell** the client about different contraceptive methods

**H – Help** the client/ couple to choose a method/service

**E - Explain** and /or demonstrate how to use the method

**R – Return/ Refer:** Schedule a return visit and follow up

**R- Rapport building**

**E- Exploration**

**D- Decision making**

**I- Implementing the decision**

## D. Evaluation

Evaluate	Rationale
1. The client's knowledge on family planning method	1. To confirm that the client made an informed choice
2. The client(s) has made the right choice of family planning method	2. To determine areas of improvement for quality family planning counseling

## E. Documentation

### Record:

- The choice of the FP method in the family planning register and the client's file
- Observed verbal and non-verbal signs of any unexpected behaviors and actions taken

■ ■ ■

## 5.2-2: Performing Breast Examination

### **Definition:**

This is a detailed examination of the breast tissue through inspection and palpation.

### **Purpose:**

- To teach the client self- breast examination (SBE)
- To detect any abnormalities early and take appropriate action

### **Indications:**

- All postnatal mothers
- Before starting any family planning method
- Routine breast examination
- On client's request

**NB:** Perform breast examination to all FP clients

**Refer to procedure 3.1.3, Breast Examination**



## 5.2-3: Pelvic Examination

### Definition:

It is a procedure whereby the vulva, vagina, cervix, uterus, rectum and pelvis including ovaries are examined for infection, masses, growths or other abnormalities.

### Purpose:

- To detect any abnormality or infection in the pelvis

### Indications:

- All women seeking family planning services
- Women with suspicion of abnormality or infection of the pelvic organs

## A. Assessment

Assess	Rationale
1. Availability of the required equipment	1. For efficiency during the procedure
2. General condition of the client	2. To determine the suitability of the patient for the procedure
3. Environment	3. For safety, appropriateness and privacy

## B. Planning



### Self

- Review the procedure of performing a pelvic examination
- Prepare all the documents required for the session
- Assemble the requirements



### Client

- Explain the nature and steps of the procedure
- Ask the client to empty the bladder



### Environment

#### Ensure:

- A safe, well ventilated room with adequate light; torch or examination lamp
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- A trolley containing:

### Top shelf;

- Sterile pelvic examinations pack containing;
- One gallipot
- Cotton wool swabs
- Sterile pads
- Four draping towels
- Bivalve speculum
- One sponge holding forceps

### Bottom shelf;

- Sterile gloves
- Water – based lubricant – Obstetric cream
- A container with disinfectant for used equipment
- Extra sterile cotton swab in a drum
- Antiseptic lotion
- Receiver for used swabs

**NB:** When carrying out pelvic examination, speculum examination precedes digital examination.

## C. Implementation

Steps	Rationale
1. Greet and welcome the client	1. To indicate appreciation; promotes the client's self-esteem and allays anxiety
2. Explain the procedure to the client and seek verbal consent	2. To allay anxiety and gain cooperation
3. Ask the patient to empty bladder and help her to change into a gown	3. To ensure comfort during the procedure
4. Screen the couch, close the nearby windows	4. To guarantee privacy and maintain the client's dignity
5. Assist the client to assume lithotomy position	5. For easy access to the pelvic organs
6. Wash, dry hands and put on sterile gloves	6. For infection prevention and control
7. Expose the genitalia and drape the client	7. To maintain client's dignity
8. Start by inspecting the external genitalia	8. To detect any infection and abnormalities
9. Swab the vulva ( <b>Refer procedure 3.2.2, Vaginal Examination</b> )	9. To avoid introducing infection to the internal organs
10. Alert the client that you want to insert the speculum	10. To reduce discomfort during the insertion of the speculum

Steps	Rationale
11. Lubricate the speculum with the water-based lubricant	11. To avoid trauma and discomfort to the patient
12. Part the labia minora with the non-dominant hand	12. To visualize the cervix and vaginal walls
13. Insert the speculum horizontally and gently rotate upwards	13. To detect signs of infection abnormality and obtain data on clinical judgement for appropriate contraceptive method
14. Inspect the cervix and the vaginal walls	14. To avoid trauma and terminate the procedure
15. Remove the speculum gently while still in the horizontal position	15. To inform the client on the examination findings
16. Explain to the client that you now want to do digital examination using your two fingers	16. To allay anxiety
17. Lubricate the middle and index fingers with water-based lubricant, part the labia and insert the fingers gently into the vagina	17. To avoid trauma and discomfort to the client
18. Examination <ul style="list-style-type: none"> <li>• Assess the walls of the vagina for rugae and any abnormalities.</li> <li>• Locate the cervix and check for:               <ul style="list-style-type: none"> <li><input type="checkbox"/> Position</li> <li><input type="checkbox"/> Masses</li> <li><input type="checkbox"/> Consistency</li> <li><input type="checkbox"/> Whether the os is open or closed</li> </ul> </li> <li>• Excite the cervix and observe the client's reaction</li> <li>• Assess the uterus for:               <ul style="list-style-type: none"> <li><input type="checkbox"/> Position (anteverted, mid or retroverted)</li> <li><input type="checkbox"/> Masses</li> </ul> </li> <li>• Assess the adnexa for any masses and signs of infection               <ul style="list-style-type: none"> <li><input type="checkbox"/> Tap the trigone muscle</li> <li><input type="checkbox"/> Rule out cystocele then rectocele</li> <li><input type="checkbox"/> Palpate the Bartholin's glands</li> <li><input type="checkbox"/> Milk the Skene's glands</li> <li><input type="checkbox"/> Palpate the inguinal glands using the non-dominant hand</li> </ul> </li> </ul>	18. To detect any abnormalities
19. Teach Kegel's exercises – Ask the client to tighten the pelvic floor muscles while your fingers are still in the vagina	19. To tighten the pelvic floor muscles

<b>Steps</b>	<b>Rationale</b>
20. Remove your fingers and assess for odour and colour of the vaginal discharge on the examining finger	20. To detect any abnormalities
21. Remove the drapes and assist the client to a comfortable position	21. To terminate the procedure
22. Give feedback on the findings	22. To allay anxiety from the client created during the examination process
23. Clean the couch, clear the trolley and decontaminate the used instruments	23. To prevent cross infection and for safe handling of the instruments
24. Wash and dry hands	24. For infection prevention and control

## D. Evaluation

<b>Evaluate</b>	<b>Rationale</b>
1. Steps followed during pelvic examination	1. To ensure the standard guidelines were followed during the procedure
2. Any abnormalities detected	2. To provide the necessary interventions

## E. Documentation

**Record:**

- The findings
- The interventions instituted
- Advice given to the client

■ ■ ■

## 5.3: Methods of Family Planning (FP)

**NB:** Breast examination **MUST** be performed to all family planning clients before provision of the family planning method.

### 5.3-1: Administration of Hormonal Injectable Contraception

#### Definition:

This is the process of providing contraception through injection, which influences the normal hormones resulting in alteration of the pattern of ovulation, thickening cervical mucus and thinning the endometrium.

#### Purpose:

- To safely administer the hormonal contraception through intramuscular injection

#### Indications:

- Clients who meet the Medical Eligibility Criteria (MEC) (**Refer to the current World Health Organization (WHO)/ MEC Guidelines**)

## A. Assessment

Assess	Rationale
1. The client's knowledge regarding contraceptives	1. To determine education needs of the client
2. The various injectable hormonal contraceptives available	2. To ensure the client accesses all FP methods from which to choose
3. Requirements for injectable hormonal contraceptives	3. To determine their availability and functional status

## B. Planning



#### Self

- Review the pharmacology and the procedure of administering injectable hormonal contraceptives
- Reflect on own perception and values on injectable hormonal contraceptives
- Prepare all the stationery: Family planning register, client's file, client's card
- Prepare the various contraceptive methods available



## Client

- Make the client comfortable
- Explain the methods to the client
- Advice the client on the mode of action, advantages and disadvantages, side effects and danger signs of the methods



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- A quiet, private, well ventilated and lit room
- A tray containing hormonal injectable contraceptives
- Stationery i.e. FP Register, FP cards, calendars
- Needles and syringes
- Weighing scale
- Dry swabs and methylated spirit
- Blood pressure machine
- Safety box
- Pedal bin

## C. Implementation

Steps	Rationale
1. Greet and welcome the client/couple, offer a seat and introduce self	1. To establish rapport
2. Ask the client's/couples' birth spacing plan	2. To guide on the most appropriate method of contraception
3. Take reproductive and basic medical history from the client including any medical conditions	3. To identify any contraindications to the method selected
4. Take the weight and the blood pressure of the client	4. To establish baseline data and adhere to limits of weight and blood pressure which are permissible for injectable contraception
5. Ask the client/couple what they already know about injectable contraceptives	5. To identify and correct any misinformation that the client may have
6. Briefly give health education on the injectable contraceptives emphasizing on the mode of action, merits and	6. To make the client understand the method and to monitor the progress of the client while on the method

Steps	Rationale
demerits, and warning signs of adverse effects and return to fertility	
7. Emphasize to the client that she may discontinue the method anytime she wants to for any reason	7. To give the client freedom of choice
8. While observing injection safety protocol, inject the contraceptive on the upper outer quadrant of the gluteal muscle of the client	8. To avoid injury to the major nerves and blood vessels
9. Discard the needle in the safety box and the swabs appropriately	9. To ensure safety of the staff/client
10. Ask the client/couple if she/they have any questions or concerns	10. To clarify issues of concern that may cause non-compliance
11. Discuss return visits with the client for follow up visits or in case of any concerns	11. To ensure that there is compliance and follow up
12. Thank the client/couple	12. To appreciate her/them

## D. Evaluation

Evaluate	Rationale
1. The right procedure and technique was used in the injection	1. To determine quality of care
2. The knowledge of the client on hormonal injectable contraception and side effects	2. To determine the client's ability to cope with mild side effects, decide on when to seek help from the provider and promotes compliance

## E. Documentation

### Record:

- Record the procedure in the family planning register, the clients file and in the client's card
- Any unexpected reactions
- Findings of evaluation

■ ■ ■

## 5.3-2: Administration of Hormonal Oral Contraception

### Definition:

This is the process of providing contraception orally, which influences the normal hormones resulting in alteration in the pattern of ovulation, thickening cervical mucus and thinning the endometrium.

### Purpose:

- To safely administer the oral hormonal contraceptives and educate the client about the method

### Indications:

- Clients who meet the Medical Eligibility Criteria (MEC) (**Refer to the current World Health Organization (WHO) / MEC Guidelines**)

## A. Assessment

Assess	Rationale
1. The various oral hormonal contraception in use	1. To have a variety of methods to choose from
2. The process of counseling the clients	2. To give the right information and reassurance to the client

## B. Planning



### Self

- Review the pharmacology and the procedure of administering oral contraceptives
- Reflect on own perception and values on oral hormonal contraceptives
- Prepare all the stationery: Family planning register, client's file and client's card
- Prepare the various contraceptive methods available



### Client

- Make the client comfortable
- Explain the methods to the client
- Advice the client on the mode of action, advantages and disadvantages, side effects and danger signs of the methods



### Environment

#### Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness

- Adequate working space
- Privacy
- Availability of standard operating procedures

■ ■ ■

### Requirements

- Quiet, private, well ventilated and lit room
- A table and chairs
- A tray containing oral contraceptives
- Stationery: FP register, FP cards, calendars

## C. Implementation

Steps	Rationale
1. Greet and welcome the client/couple, offer a seat and introduce self	1. To establish rapport
2. Ask the client's/couples' birth spacing plan	2. To guide on the most appropriate method of contraception
3. Take reproductive and basic medical history from the client including any medical conditions	3. To identify any contraindications to the method selected
4. Take the weight and the blood pressure of the client	4. To establish baseline data and adhere to limits of weight and blood pressure which are permissible for oral contraception
5. Ask the client/couple what they already know about oral contraceptives	5. To identify and correct any misinformation that the client may have
6. Give the client information on the pills effectiveness, mode of action, instructions for use, advantages, disadvantages, side effects and the warning signs for which the client must return to the clinic	6. To make the client understand the method and to monitor the progress of the client while on the method
7. Emphasize to the client that she may discontinue the method anytime she wants to for any reason	7. To give the client freedom of choice
8. Provide oral contraception to the client and give the instruction on how to take the oral contraception	8. To ensure compliance
9. Allow the client/ couple to repeat the instructions	9. To ensure that she/ they have understood
10. Ask the client/couple if she/they have any questions or concerns	10. To clarify issues or concerns
11. Discuss return visits and follow up in case of any concerns	11. To ensure that there is compliance and follow up
12. Thank the client/couple	12. To appreciate her/them

## D. Evaluation

Evaluate	Rationale
1. The client's understanding of the method and possible side effects	1. To determine quality of care
2. The knowledge of the client on hormonal oral contraception and side effects	2. To determine the client's ability to cope with mild side effects and decide on when to seek help from the provider and promote compliance

## E. Documentation

**Record:**

- Record the procedure in the family planning register, the clients file and in the client's card
- Any unexpected reactions
- Findings of evaluation

■ ■ ■

## 5.3-3: Insertion of Hormonal Implants

### Definition:

This is the process of introducing small hormonal (progestin) loaded capsules or rods placed under the skin of a woman's upper arm.

### Purpose:

- To safely insert the implant for hormonal contraception and educate the client about the method

### Indications:

- Clients who meet the Medical Eligibility Criteria (MEC) (**Refer to the current World Health Organization (WHO)/ MEC Guidelines**)

## A. Assessment

Assess	Rationale
1. The types of implants used or available	1. To identify the type available for proper client counseling
2. Process used to insert the implants	2. To ensure that implants are inserted as per standard guidelines
3. Instruments and equipment required for insertion and removal of implants	3. To determine availability and functional state

## B. Planning



### Self

- Review the pharmacology and the procedure of inserting hormonal implant
- Reflect on own perception and values on implant hormonal contraceptives
- Prepare all the stationery: Family planning register, client's file, client's card
- Prepare the various contraceptive methods available



### Client

- Make the client comfortable
- Explain the methods to the client
- Advice the client on the mode of action, advantages and disadvantages, side effects and danger signs of the methods



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- A table and chairs
- A couch
- A trolley with:

### **Top shelf;**

- A sterile pack containing:
  - Surgical drapes
  - A kidney dish
  - Gallipot
  - Dry sterile swabs and gauze
  - Sterile trocar and plunger (for Jadelle insertion where applicable)

### **Bottom shelf;**

- Pressure bandage
- Hormonal implants
- A sterile 5cc syringe and needle G21
- Sterile gloves
- Surgical blades
- Elastoplasts or adhesive tape
- A container with antiseptic solution
- Local anesthesia (1% concentration without epinephrine)

## C. Implementation

Steps	Rationale
1. Greet and welcome the client/couple, offer a seat and introduce self	1. To establish rapport
2. Prepare the couch and screen it	2. For the client's comfort and privacy
3. Instruct the client to lie on the couch in supine position and position the hand (in 90°)	3. For ease of access to the insertion site
4. Wash hands with soap and running water and dry them	4. To prevent cross infection
5. Put on a sterile pair of gloves (free of talc)	5. To prevent cross infection
6. Locate insertion site (8-10cm from the medial epicondyle of the humerus)	6. To ensure that the implant is inserted at the right site
7. Clean the insertion site with the antiseptic and drape	7. To prevent cross infection

Steps	Rationale
8. Open the sterile implant pouch and drop the rods in the sterile gallipot	8. In readiness for insertion
9. Administer the local anesthetic (1% lignocaine without epinephrine) injection under the skin	9. To prevent pain in the arm where the procedure is carried out
<b>Insertion of one rod (Implanon)</b>	
i. Prepare the trocar by removing the transparent protection cap. <b>Do not touch the slider</b>	i. To avoid contamination
ii. Check for anesthetic effect using the blunt end of the blade	ii. To ensure the client is free of pain and is comfortable during the procedure
iii. Stretch the skin around the insertion site. Use the tip of the trocar to puncture the skin	iii. For ease of access to the insertion site
iv. Lower the applicator to horizontal position. Use the tip of the needle to lift the skin then slide the needle to the marked area	iv. To ensure the implant is correctly inserted
v. Press the slider downwards, release and remove the applicator/ trocar	v. To retain the implant in position
	
<p>Figure 5.3 Insertion of Jadelle (Adapted from Family Planning Global Handbook for Providers)</p>	
	
<p>Figure 5.4 Insertion of Implanon</p>	
<b>Insertion of two rods (Jadelle)</b>	
i. Prepare the trocar and the rods/ capsules	i. To prepare for insertion of the implant
ii. Check for anesthetic effect using the blunt end of the blade	ii. To ensure the client is free from pain and is comfortable during the procedure
iii. Introduce the trocar and cannula at the incision site	iii. To ease the process of insertion
iv. Remove the cannula and insert the first implant	iv. To create room for the rods in the trocar

Steps	Rationale
v. Change the position of the trocar and insert the second implant. Aim to make a "V" shape with the rods	v. To avoid unnecessary injury to the patient during removal and ease the process of removal
vi. Remove the trocar and the cannula	vi. To terminate the insertion process
vii. Discard the sharps in the safety box and any other waste appropriately	vii. To ensure infection prevention and control
10. Verify the presence of the implant by palpation	10. To confirm that the rods are instituted
11. Cover the incision with an adhesive tape	11. To keep the site clean and dry
12. Apply pressure bandage and remove the drapes	12. To prevent the site from bleeding
13. Remind the client of post-insertion instructions, thank her and give a return date	13. For compliance and continuity of use of the contraceptive
14. Immerse the instruments in the appropriate disinfectant	14. To decontaminate them
15. Clean the couch and clear the trolley	15. To make the room tidy and prepare for the next procedure
16. Wash hands with soap and running water and dry them	16. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The technique used during the procedure	1. To determine quality of care
2. The client understands possible side effects and danger signs	2. To determine the client's ability to cope with mild side effects and decide on when to seek help from provider

## E. Documentation

### Record:

- Record the procedure in the family planning register, the clients file and in the client's card
- Any unexpected reactions
- Findings of evaluation



## 5.3-4: Removal of Hormonal Implants

### Definition:

This is the process used to extract the hormonal implants from the subcutaneous tissue.

### Purpose:

- To safely remove the hormonal implant and provide education on after care

### Indications:

Clients who:

- Desire to conceive
- Cannot tolerate the side effects of hormonal implants
- Want to change to other family planning methods
- Upon expiry of the implant

## A. Assessment

Assess	Rationale
1. Readiness for the removal of the implants	1. To determine the clients readiness for removal
2. Preparedness of the health care provider for the procedure	2. To ensure that implants are removed as per standard guidelines

## B. Planning



### Self

- Review the pharmacology and the procedure of removal implant contraceptives
- Prepare all the stationery: Family planning register, client's file, client's card



### Client

- Make the client comfortable
- Explain the procedure to the client



### Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- A table and chairs
- A couch
- A trolley

### **Top shelf;**

- A sterile pack containing:
- Surgical drapes
- A kidney dish
- Gallipot
- Dry sterile swabs and gauze
- Curved mosquito artery forceps
- Straight mosquito artery forceps

### **Bottom shelf;**

- Pressure bandage
- A sterile 5cc syringe and needle G21
- Sterile gloves
- Surgical blades
- Elastoplasts or adhesive tape
- A container with antiseptic solution
- Local anesthesia (1% concentration without epinephrine)

## C. Implementation

Steps	Rationale
1. Greet and welcome the client/couple, offer a seat and introduce self	1. To establish rapport
2. Prepare the couch and screen it	2. To give comfort and privacy to the client
3. Instruct the client to lie on the couch in supine position and position the hand in a right angle ( $90^{\circ}$ ) and locate the rods	3. For ease of access to the insertion site
4. Wash hands with soap and running water and dry them	
5. Put on sterile gloves	4 - 6. To prevent cross infection
6. Swab the injection site with antiseptic and drape	
7. Inject 2 - 3mls of local anesthesia (without epinephrine) under the tip of the implant	7. To prevent pain while removing the implants
8. Check for anesthetic effect by using the blunt end of the blade before making the incision	8. To ease pain and make the patient comfortable during the procedure
9. Make a horizontal incision (2-3mm) at the lower tip of the implant(s) closest to the elbow	9. To access the actual area where the capsules are
10. Push the capsules towards the incision site, grasp the rod using a curved mosquito artery forceps and pull it out	10. To expose the rod beneath the surface of the skin to be grasped by the forceps

Steps	Rationale
through the incision. Repeat the procedure for the two rods implant	
11. Show the client the rods after decontaminating them in a gallipot containing disinfectant	11. For affirmation that they have been removed and reassure the client
12. Discard the waste appropriately  <b>NB:</b> If the client wishes to continue using the implant, the new capsule is/are inserted at the same incision site	12. For infection prevention and control
13. Clean the client's skin with antiseptic solution	13. To prevent risks of infection
14. Apply an adhesive tape and bandage the site with a gauze roll to prevent bleeding	14. To prevent bleeding and exposure to infection
15. Provide post-insertion counseling including return to fertility	15. To ensure that all the family planning needs are met
16. Thank the client and give a return date	16. For compliance and continuity of use of the contraceptive
17. Soak the instruments in the appropriate disinfectant	17. To decontaminate the instruments
18. Clean the couch and clear the trolley	18. To make the room tidy and prepare for the next procedure
19. Wash hands and dry them	19. For infection prevention and control

## D. Evaluation

Evaluate	Rationale
1. The technique used during the procedure	1. To determine quality of care
2. The client's understanding of possible post-removal complications	2. To determine the client's ability to cope and decide on when to seek help from the provider

## E. Documentation

### Record:

- The procedure in the family planning register and the client's file
- Any unexpected reactions
- Findings of evaluation



## 5.3-5: Insertion of an Intrauterine Contraceptive Device (IUCD)

### **Definition:**

This is the process of introducing Intra-Uterine Contraceptive Device (IUCD) into the uterine cavity for the purpose of contraception.

### **Purpose:**

- To insert IUCD using the right technique and to educate the client about the method

### **Indications:**

- Client's choice provided there are no contraindications
- Clients who cannot use other family planning methods
- Re-insertion at the expiry of the previous IUCD

## A. Assessment

Assess	Rationale
1. The client's knowledge of IUCD	1. To determine information to be given to the client
2. Required instruments and equipment	2. To determine their availability and functional state

## B. Planning



### **Self**

- Review the procedure of IUCD insertion
- Reflect on own perception and values on IUCD insertion
- Prepare all the stationery: Family planning register, client's file, client's card
- Prepare the various contraceptive methods available



### **Client**

- Make the client comfortable
- Explain the methods to the client
- Advise the client on the mode of action, advantages and disadvantages, side effects and danger signs of the methods
- Ask the client to empty the bladder and change into an examination gown
- Ask the client to lie on the couch/bed



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- Room with adequate lighting and privacy
- Examination light/flash light
- Examination couch/bed with mackintosh, draw sheet and a blanket
- A trolley with the following equipment/material:

### **Top shelf;**

- Sterile IUCD
- A sterile IUCD set containing:
  - Two Bivalve speculums
  - Two Sponge holding forceps
  - One Tenaculum
  - One pair of curved scissors
  - One sterile Uterine sound (graduated)
  - Two Gallipots
  - One large kidney dish
  - Gauze
  - Cotton wool swabs
  - Three drapes, one should be holed

### **Bottom shelf;**

- Plastic containers with appropriate disinfectant for used instrument processing
- Lubricant
- Examination gown
- Sterile gloves
- One Visual Inspection of the cervix using Acetic Acid (VIA)/ Visual Inspection of the cervix Lugol's Iodine (VILI) tray with instruments and supplies

### **Accessories;**

- Waste bin
- Screen
- Adequate light source

## C. Implementation

Steps	Rationale
1. Greet and welcome the client/couple, offer a seat and introduce self	1. To establish rapport
2. Take brief history	2. To establish baseline data and identify any contraindications to the method

Steps	Rationale
3. Explain the procedure to the client	3. To guarantee cooperation and make the client understand what is going on
4. Ask the client to empty the bladder	4. To ensure comfort and avoid injury to the bladder during the procedure
5. Screen the bed/couch	5. To ensure privacy
6. Assist client to lie in supine position	6. For comfort during physical examination
7. Wash and dry hands	7. For infection prevention and control
8. Carry out head to toe examination	8. To identify any other abnormalities
9. Assist the patient into lithotomy position	9. For easy access to the pelvic cavity
10. Put on sterile gloves	10. To prevent introducing infection to the pelvic cavity
11. Follow steps 1-20 of Pelvic Examination procedure, 3.1-5. If there are any signs of pelvic infection or pregnancy, do not insert IUCD	11. Infection and pregnancy are contraindicated in IUCD insertion
12. Remove gloves and dispose off as per infection prevention and control guidelines	12. To prevent cross infection
13. Arrange instruments for IUCD insertion	13. To make them accessible for use during the procedure
14. Clean the vulva, insert the speculum, and clearly visualize the cervix	14. To prevent infection and facilitates location of the cervix
15. Using antiseptic solution, swab the cervix at least 3 times	15. To decrease the risk of infection being introduced into the uterus
16. Apply the tenaculum to the cervix at 10.00 o'clock or 2.00 o'clock position gently and slowly, closing the tenaculum teeth only once to minimize discomfort	16. To align the uterus, cervical opening, and vaginal canal
17. Gently apply counter traction with tenaculum by holding it downwards and outwards when passing the sound. (If there is resistance at the cervix and client begins to show signs of fainting and pallor, stop the procedure)	17. Prevent discomfort while aiding access of the uterine sound to the uterus
18. Pass the uterine sound only once. Clip the uterine sound at the edge of the cervix with the sponge holding forceps	18. To confirm the position of the uterus, rule out uterine canal obstruction and measure the depth of the uterus

Steps	Rationale
19. Remove the uterine sound and the sponge holding forceps. Read the graduated marks on the uterine sound	19. To measure the depth of the uterine cavity
<p>20. Load the sterile IUCD in line with the manufacturer's instructions but observe the non-touch technique. Do not load IUCD for more than 5 mins before insertion otherwise the IUCD may not return to its original shape after insertion)</p> <ul style="list-style-type: none"> <li>• Place the pack on a flat surface</li> <li>• Partially open the package upto one third and bend back the package flaps</li> <li>• Put the white rod inside the inserter tubes</li> <li>• Slide the white measurement card underneath the arms of the IUCD</li> <li>• Hold the tips of the IUCD arms and push on the inserter tube to assist in bending of the arms</li> <li>• When the arms touch the sides of the inserter tube, pull the inserter tube away from the folded arms of the IUCD</li> <li>• Elevate the inserter tube and push to insert the tips of the arms in the tube</li> <li>• Push the folded arms into the inserter tube to keep them fixed in the tube</li> </ul>	20. To prepare the IUCD for insertion
21. With the loaded IUCD still in the partially opened sterile package, remove the flange (blue-depth gauge) to the corresponding measurements obtained from sounding the uterus	21. To ensure accuracy in the uterine measurements
22. Press down on the flange with one finger to keep it stable and with the other hand slide the loaded inserter so that the tip of the IUCD aligns with the tip in the diagram on the white measurement card. Make sure the white rod is against the tip of the vertical arm of the IUCD	22. For efficiency of the procedure
23. Complete opening the plastic cover in the package in one continuous movement using one hand while holding the tube and load down against the table with the other hand	23. To prevent accidental contaminations and spillage
24. Remove the loaded inserted tube in a sterile manner	24. To prevent contamination

Steps	Rationale
25. Hold the inserter tube with your fingers turned upwards and flange in a horizontal position	25. To ensure the IUCD is well positioned in the uterus
26. Grasp the tenaculum and pull firmly to align the uterine cavity and cervical canal with vaginal canal	26. To stabilize the uterus and minimize the risk of perforation
27. Gently introduce the loaded IUCD through the cervical canal (without touching the vagina and blades of the speculum) until the flange touches the cervix or slight resistance is felt	27. To insert the IUCD in the correct position
28. Hold the tenaculum and the white rod in one hand and withdraw the loader. Pull the inserter tube towards you while holding the white load stable	28. To release and position the IUCD into the uterus
29. Trim the strings of the IUCD if they are long but leave 3-5 cm hanging	29. To reduce the length of strings which can pull the IUCD out easily
30. Remove the tenaculum and observe if there is bleeding in the cervix. If there is bleeding, apply pressure with a sterile gauze	30. To evaluate the procedure and stop bleeding if any
31. Remove the speculum	31. To end the procedure
32. Wipe the perineum and allow the woman to rest	32. For hygiene purposes and make her comfortable
33. Give her perineal pad and let her dress	33. To assess in case there will be bleeding and to prevent soiling of the clothes
34. Chart all the findings including the type of IUCD inserted, whether there were difficulties in insertion, depth of uterine cavity, size and position of the uterus in the client FP file	34. For record keeping, future referencing and to monitor the client's progress
35. Thank the client and advice on return if there are expected complications	35. To ensure compliance and continuity of use of contraceptive
36. Soak all the used instruments in the appropriate disinfectant	36. To decontaminate the instruments and make them ready for the next procedure

**NB:** There are hormonal intrauterine contraceptive devices (IUCD) that are inserted into the uterus for long-term contraception e.g Mirena and Lingus. The device is a T-shaped plastic frame that releases a type of progestin which, thickens the cervical mucus to prevent sperm from reaching or fertilizing an egg, thinning the endometrium and preventing implantation.

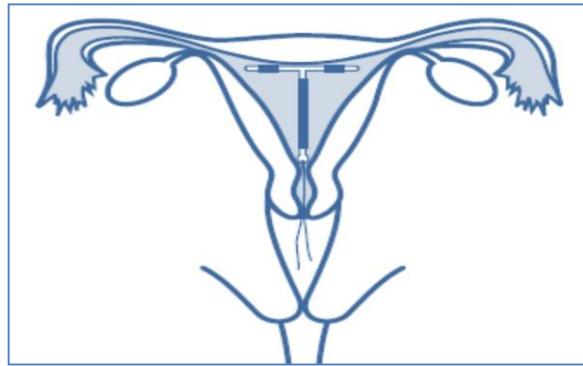


Figure 5.5 Copper T 380A Insitu  
(Adapted from Family Planning Global Handbook for Providers)

## D. Evaluation

Evaluate	Rationale
1. The technique which was used during insertion	1. To determine the quality of care
2. The client understands of the method and side effects	2. To determine the client's ability to cope with mild side effects, decide on when to seek help and promote compliance

## E. Documentation

### Record:

- Record the procedure in the family planning register and the client's file
- Any unexpected reactions
- Findings of evaluation

■ ■ ■

## 5.3-6: Insertion of a Postpartum Intrauterine Contraceptive Device (PPIUCD)

### **Definition:**

This is the process of introducing an Intra-Uterine Contraceptive Device (IUCD) in the immediate Postpartum (within 10 minutes) or up to 48 hours after birth into the uterine cavity for the purpose of preventing contraception.

### **Purpose:**

- To insert PPIUCD using the right technique and to educate the client about the method

### **Indications:**

- Client's choice provided there are no contraindications
- Clients who cannot use other family planning methods

## A. Assessment

Assess	Rationale
1. The client's knowledge of IUCD	1. To determine information to be given to the client
2. Required instruments, and equipment	2. To determine their availability and functional state

## B. Planning



### **Self**

- Review the procedure of PPIUCD insertion
- Reflect on own perception and values on PPIUCD insertion
- Prepare all the stationery: Patient file, mother baby booklet
- Make available the IUCD for use



### **Client**

- Make the client comfortable
- Review the client's record that she has chosen IUCD
- Check that she had been adequately counseled and screened for insertion
- Advice the client on the mode of action, advantages and disadvantages, side effects and danger signs of the methods
- Ask the client to empty bladder and change into an examination gown (if insertion is taking place in the postnatal ward)
- Ask the client to lie on the couch (if insertion is in post-natal ward)



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- Examination light/flash light
- Examination couch/bed with mackintosh, draw sheet and a blanket
- A Trolley with the following equipment/material:

### **Top shelf;**

- Sterile IUCD
- A sterile PPIUCD set containing:
  - One Sims speculums or Retractor
  - One Ringed forceps for grasping the cervix
  - One long curved Kelly's forceps (33cm)
  - One pair of curved scissors
  - Two Gallipots
  - One large kidney dish
  - Gauze
  - Cotton wool swabs
  - Three drapes, one should be holed

### **Bottom shelf;**

- Plastic containers with appropriate disinfectant for used instrument processing
- Antiseptic solution
- Examination gown
- Sterile gloves

### **Accessories;**

- Waste bin
- Screen
- Adequate light source

## C. Implementation

Steps	Rationale
<b>I. INSERTION (COPPER T 380 A)</b>	
<b>Pre insertion tasks</b>	
1. Review the client's records/file that she had chosen IUCD	1. To establish consent for the method
2. Greet the client and introduce self	2. To establish rapport
3. Take brief history to check that she had been adequately counseled	3. To establish if informed consent was obtained

Steps	Rationale
4. Check that there is no delivery condition that preclude insertion: ROM greater than 18 hours; Unresolved PPH; Chorioamnionitis	4. To ensure eligibility of the client for the method
5. Explain the procedure to the client	5. To guarantee cooperation and make the client understand what is going on
<b>Perform the following for a client having a PPIUCD inserted in the postnatal period (omit for the client in the immediate postpartum/within 10minutes after birth)</b>	
6. Ask the client to empty the bladder	6. To ensure comfort
7. Screen the couch	7. To ensure privacy
8. Assist the client to lie in supine position	8. For ease of access in the pelvic region
9. Wash and dry hands	9. For infection prevention and control
10. Assist the patient into lithotomy position	10. For ease of access in the perineum region
11. Put on sterile gloves	11. The procedure is a sterile procedure
<b>For the client in the immediate postpartum (within 10minutes) after birth</b>	
12. Perform AMSTL for the client	12. To prevent PPH
13. Confirm that the woman is ready to have the IUCD inserted	13. To rule out change of mind and withdrawal of consent
14. Screen for delivery related condition that preclude insertion: ROM greater than 18 hours; Unresolved PPH; Chorioamnionitis	14. To ensure eligibility of the client
15. Change the gloves to another sterile pair	15. This is a sterile procedure
<b>Steps for both immediate and postpartum IUCD insertion</b>	
16. Have the pre packed IUCD kit/tray opened	16. To access the sterile equipment required for the procedure
17. Arrange insertion instruments and supplies in the sterile field	17. To prevent cross infection and to make them accessible for use during the procedure
18. Drape the client ensure a sterile drape on the abdomen of the client, ensure that IUCD in sterile package is kept to the side of sterile draped area	18. The drape on the client's abdomen will protect the provider's hands from contamination while "elevating the uterus"
19. Gently insert Sims speculum and visualize the cervix by depressing the posterior wall of the vagina (if the cervix is not easily seen gently apply fundal pressure so the cervix descends and can be seen)	19. To facilitate clear visualization and location of the cervix

Steps	Rationale
20. Using antiseptic solution, clean the vagina and the cervix at least 3 times using separate swabs each time	20. To decrease the risk of infection being introduced into the uterus
21. Gently grasp anterior lip of the cervix with the ring forceps and apply gentle traction. (Speculum may be removed at this time, if necessary).Leave forceps aside, still attached to the cervix	21. To align the uterus, cervical opening, and vaginal canal
22. Opens the sterile package of IUD from the bottom by pulling back plastic cover approximately one third of the way	22. To prevent discomfort while aiding access of the uterine sound to the uterus
23. Remove everything except the IUD from the package: Holding the IUD package at the closed end with non-dominant hand, stabilize the IUD in the package by pressing it between the fingers and thumb of the non-dominant hand through the package	23. To maintain sterility of the IUCD
24. With the other hand remove the plunger rod, inserter tube and card from the package. Using the dominant hand to remove the plunger rod, inserter tube and card from the package	24. The plunger and inserted tube are not needed for the PPIUCD. The card will be needed later
25. With the dominant hand, use Kelly's forceps to grasp IUD inside the sterile package. Hold IUD by the edge, careful not to entangle the strings in the forceps	25. The Kelly's forceps is the recommended instrument for postpartum insertion of IUCD
26. Gently lift anterior lip of the cervix using ring forceps and adjust to one notch	26. To allow ease of access during the insertion
27. While avoiding touching the walls of the vagina, gently insert the Kelly's forceps (which is holding the IUD) through the cervix and into the lower uterine cavity	27. To ensure maintenance of sterility during insertion
28. Gently move the IUD further into uterus towards the point where slight resistance is felt against the back wall of the lower segment of the uterus (Be sure to keep the Kelly's forceps firmly closed)	28. To prevent dropping the IUCD away from the fundus
29. Lower the ringed forceps and gently remove them from the cervix; leave them on sterile field	29. To avoid crowding the vaginal canal with instruments and allow ease of access

Steps	Rationale
30. To "Elevate" the uterus, Place base of the non-dominant hand on the lower part of uterus (midline just above pubic bone with fingers towards fundus) feel the fundal area of the uterine wall	30. Elevation of the uterus is done to negotiate the vagino-uterine angle until the fundus is reached
31. Through the abdominal wall push the entire uterus superiorly (in the direction of the clients' head. Maintain this position to stabilize the uterus during insertion	31. This move allows smooth passage of the Kelly's forceps to the fundal area
32. Keep the Kelly's forceps closed, advance the IUD by: gently moving the IUD upward towards the fundus, in an angle towards umbilicus	32. To ensure the IUD is not dropped before reaching the fundus
33. Lower the dominant hand down (hand holding Kelly's forceps with the IUD. Following the contour of the uterine cavity. Always keep the instrument closed so that the IUD is not dropped mid portion of the uterine cavity	33. This is to allow the Kelly's forceps can pass easily through the vagino-uterine angle
34. Continue gently advancing the forceps until uterine fundus is reached, when you will feel a resistance. Confirm that the end of the forces has reached the fundus	34. To confirm the IUD has reached the fundus
35. While continuing to stabilize the uterus, open the forceps, tilting them slightly towards midline to release the IUD at fundus	35. To continue aligning the vagino-uterine angle
36. Keeping forceps slightly open, slowly remove them from uterine cavity being careful not to dislodge the IUD. Do this by: sweeping the forceps to the sidewall of the uterus and sliding instruments alongside wall of the uterus	36. The forceps is returned to the sterile field in case it is needed again
37. Keep stabilizing the uterus until the forceps are completely withdrawn. Places the forceps aside on sterile field	37. The Kelly's forceps might be required for re-insertion
38. Examine the cervix to see if any portion of IUD or strings are visible or protruding from the cervix	38. IUD strings seen at the cervix is an indication that the procedure was not successful
39. If IUD or strings are seen protruding from cervix, remove IUD using the same forceps used for first insertion:	39. To ensure a successful placement of the IUCD at the fundus

Steps	Rationale
position same IUD in forceps inside the sterile package and reinsert	
40. Remove all instruments used and place them open in 0.5% chlorine solution so they are totally submerged or any other appropriate de-contaminant	40. To initiate the process of decontamination and sterilization in preparation for subsequent procedures
<b>II. POST INSERTION TASKS</b>	
41. Allow the woman to rest a few minutes. Support the initiation of routine postpartum care, including immediate breastfeeding as appropriate	41. To allow for observation of the client after the procedure
42. Dispose of waste materials appropriately and perform hand hygiene	42. Maintain infection prevention
43. Inform the client that IUD has been successfully placed and provide her with post insertion counseling including IUD instructions	43. For the client to confirm the method of the choice has been provided
44. Provide the following instructions to the client and review IUD side effects and normal postpartum symptoms. Emphasize that she should come back any time she has a concern or experience warning signs	44. To ensure compliance and ability to detect danger signs during this period
<b>Review warning signs for IUD (PAINS)</b>	
• Period is late, or you have abnormal spotting or severe bleeding	• To preclude PPH
• Abdominal pain, severe cramping or abdominal pain with sexual intercourse	
• Infection with or exposure to a STI or symptoms of a pelvic infection, such as abnormal vaginal discharge	• To rule out infection in the postnatal period
• Not feeling well or having fever of 100.4°F (38°C) or higher	
• Strings from IUD are missing or are longer or shorter than normal	• This could cause discomfort to the client and the partner
• Review how to check for expulsion and what to do in case of expulsion	• An expelled IUD denotes the client is not protected from unintended pregnancy
45. Ensure that the client understands post insertion instructions	45. To ensure compliance and continuity of use of contraceptive
46. Chart all the findings including the type of IUD inserted, whether there were difficulties in insertion, in the	46. To maintain accurate records

Steps	Rationale
Patient file and the mother baby booklet	
47. Thank the client and advice on when to return for postnatal and newborn checkup	47. To maintain rapport with the clients

## D. Evaluation

Evaluate	Rationale
1. The technique which was used during insertion	1. To determine the quality of care
2. The client understands the method and side effects	2. To determine the client's ability to cope with mild side effects, decide on when to seek help and promote compliance

## E. Documentation

### Record:

- Record the procedure in the postnatal register and the client's file
- Any unexpected reactions
- Findings of the evaluation

■ ■ ■

## 5.3-7: Removal of an Intrauterine Contraceptive Device (IUCD)

### **Definition:**

This is the process of extracting the intra-uterine contraceptive device (IUCD) from the uterine cavity.

### **Purpose:**

- To dislodge the IUCD from the uterine cavity and educate the client on care after the procedure

### **Indications:**

- Client's request
- Clients who cannot tolerate the effects of IUCD
- Complications during contraceptive period e.g. infections
- Upon expiry of prescribed duration

## A. Assessment

Assess	Rationale
1. Readiness of the client for removal of IUCD	1. To assess the suitability of the client for the removal of IUCD
2. Preparedness of the health care provider for the procedure	2. To facilitate adequate preparation

## B. Planning



### **Self**

- Review the procedure of IUCD insertion
- Review the procedure of removal of IUCD
- Reflect on own feelings and attitudes about IUCD and genital exposure
- Prepare all the stationery: Family planning register, client's file, client's card



### **Client**

- Explain the procedure to the client
- Ask the client to empty the bladder and change into an examination gown



### **Environment**

#### Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space

- Privacy
- Availability of standard operating procedures

### Requirements

- Room with adequate lighting and privacy; torch examination lamp
- Examination couch
- A sheet with a mackintosh
- A Sterile pack containing:
  - One large kidney dish
  - One Sponge holding forceps
  - One Alligator forceps
  - One bivalve speculum
  - One gallipot
  - Cotton wool and swabs
- Sterile gloves
- Antiseptic lotion
- Receiver for used swabs
- Plastic container with decontaminant for receiving used instruments
- Appropriate disinfectant

## C. Implementation

Steps	Rationale
1. Greet and welcome the client/couple, offer a seat and introduce self	1. To establish rapport
2. Explain the procedure to the client	2. To guarantee cooperation
3. Ask the client to empty the bladder	3. To ease removal, promote the client's comfort and avoid trauma during the procedure
4. Screen the examination couch	4. For the client's comfort and privacy
5. Assist the client to lithotomy position	5. To ease access to the pelvic cavity
6. Wash and dry hands and put on sterile gloves	6. For infection prevention and control
7. Swab the vulva ( <b>Refer to procedure 3.2-2, Vaginal Examination</b> )	7. To prevent introducing infection to the internal organs
8. Insert the lubricated speculum horizontally	8. To visualize the IUD threads
	
<b>Figure 5.6 Insertion of Speculum</b>	

Steps	Rationale
9. Using a long sponge holding forceps grasp the IUCD threads and ask the client to breathe deeply in and out. Then apply up-down traction and pull out the device gently	9. For ease of removal of the IUCD
10. Show the device to the client	10. To confirm to the client that the device has been removed
11. Remove the speculum	11. To terminate the procedure
12. Wipe the vulva and leave the client clean and dry. Give her a sanitary pad	12. To maintain hygiene after the procedure
13. Offer alternative method (if necessary)	13. To avoid unplanned pregnancies and for continuity of family planning
14. Thank the client for her cooperation and give a return date	14. To appreciate and promote the client's cooperation
15. Soak all the used instruments in the appropriate disinfectant and follow guidelines on instrument processing	15. To decontaminate the instruments and prepare for sterilization

## D. Evaluation

Evaluate	Rationale
1. The technique used during the procedure	1. To determine quality of care
2. The client's understanding of current and future needs of family planning	2. To determine the client's ability to decide on when to seek help and promote compliance

## E. Documentation

### Record:

- The procedure in the family planning register and the clients file
- Any unexpected reactions and the client's experience during the procedure
- Findings of the evaluation

■ ■ ■

## 5.3-8: Barrier Methods

### **Definition:**

These are methods that provide a mechanical barrier and prevent sperms from gaining access to the female upper reproductive tract thus preventing conception.

### 5.3-8.1: Demonstrating Application of Male Condom

### **Definition:**

This is the process of rolling the male condom over an erect penis to offer a physical barrier between the penis and the vagina.

### **Purpose:**

- To demonstrate application of the condom and educate the client about the method

### **Indications:**

- Clients' choice as per the indications on the Medical eligibility criteria (MEC)
- Temporary measures while waiting for more effective method
- Back up method
- Protection against STIs/HIV

## A. Assessment

Assess	Rationale
1. The client's willingness to use the method	1. To ensure compliance
2. Availability of the condoms	2. For demonstration and issuance
3. The client's knowledge on the use of condoms	3. To determine the clients ability to make an informed decision

## B. Planning



### **Self**

- Review the procedure of application of a male condom
- Reflect on own feelings and attitudes about the condom and genital exposure
- Prepare all the stationery: Family planning register, client's file and client's card



### Patient

- Explain the procedure to the client



### Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



### Requirements

- Penile model
- Condoms
- Clean gloves
- Stationery (Family planning register, client file, client's card)

## C. Implementation

Steps	Rationale
1. Greet and welcome the client/couple, offer a seat and introduce self	1. To establish rapport
2. Check the expiry date (Expired condoms can be defective, tears easily and can burst) and the package for any defects and explain its importance to the client	2. To ensure effectiveness of the method
3. Provide health education as per the Medical eligibility criteria ( <b>Refer to WHO MEC</b> ). Teach the client that the condom is put on an erect penis before the penis enters the vagina	3-4. For proper utilization of the method and compliance  
4. Hold the tip of the condom, place on the penile model and unroll carefully down the base of the scrotum	
5. Explain to the client to hold the condom in place and withdraw the penis while it is still erect after ejaculation	5. To prevent spilling the semen in the vagina

Figure 5.7 Penile Model

<b>Steps</b>	<b>Rationale</b>
6. Wrap the used condom in a tissue paper	6. To facilitate safe disposal and avoid spillage of semen
7. Dispose the used condom appropriately	7. To avoid environmental hazard
8. Ask the client to perform a return demonstration	8. To confirm that the client has understood the information
9. Thank the client and explain that he/she can come any time he/she has any problems, questions or wants another method	9. To ensure compliance and give assurance

## D. Evaluation

<b>Evaluate</b>	<b>Rationale</b>
1. Application has been done appropriately using the standard guidelines	1. To ensure effectiveness of the method and enhance the client's comfort
2. The client is able to do a return demonstration	2. To ensure she/he understood the procedure

## E. Documentation

### Record:

- Record the procedure in the family planning register and the client's file

■ ■ ■

### 5.3-8.2: Demonstrating Insertion of Female Condom

**Definition:**

This is the process of introducing the female condom into the vagina before sexual intercourse to prevent unplanned pregnancy and STIs/HIV.

**Purpose:**

- To demonstrate insertion of the female condom and educate the client on how to use the method correctly

**Indications:**

- Clients' choice as per the indications on the Medical eligibility criteria (MEC)
- Temporary measures while waiting for more effective method
- Back up method
- Protection against STIs/HIV



Figure 5.8 Female Condom

## A. Assessment

Assess	Rationale
1. The client's willingness to use the method	1. To ensure compliance
2. Availability of the condoms	2. For demonstration and issuance

## B. Planning



**Self**

- Review the procedure of insertion of a female condom
- Reflect on own feelings and attitudes about the condom and genital exposure
- Prepare all the stationery: Family planning register, client's file and client's card



## Patient

- Explain the procedure to the client



## Environment

- Privacy of the room
- Cleanliness of the room
- Adequacy of lighting and ventilation
- Availability of standard operating procedures
- Adequate working space



## Requirements

- A private room with adequate ventilation and lighting
- Condoms
- Female genitalia dummy
- Stationery (Family planning register, client's file, client's card)

## C. Implementation

Steps	Rationale
1. Greet and welcome the client/couple, offer a seat and introduce self	1. To establish rapport
2. Check expiry date (Expired condoms can be defective, tear easily and can burst) and the package for any defects and explain its importance to the client	2. To enhance effective utilization
3. Explain to the client how to insert the condom using the female genitalia dummy	3. To ensure the client understands and applies the method effectively
4. Explain the position for inserting the condom: squat, raise one leg, or lie down	4. Achieves the right position to introduce the condom into the vagina
5. Grasp the ring at the closed end and twist it to make a figure of 8	5. To make it easy to insert the condom into the vagina
6. With the other hand, separate the labia minora and locate the vaginal introitus	6. For ease of access into the vagina
7. Gently insert the twisted ring into the vagina. Feel the ring go up and position it in the posterior fornix of the vagina to cover the cervix. Place the index finger on the inside of the condom, and push the inner ring up as far as it will go. Ensure the sheath is	7. To position the condom properly

Steps	Rationale
not twisted. The outer ring should remain on the outside of the vagina	
8. Explain to the client to gently guide the partner's penis into the sheath's opening with her hand when ready, to make sure that it enters into the condom. The client should ensure that the penis is not entering on the side (between the sheath and the vaginal wall)	8. To ensure that the condom remains in the right position and avoid spilling of semen into the vagina
9. Ask the client to support the condom by holding on the outer ring during coitus	9. To ensure the condom remains in place
10. If the condom is accidentally pulled out of the vagina or pushed into it during sex, put the condom back in place	10. To ensure maximum protection
11. Remove the condom before standing up by twisting the outer ring. If the couple has sex again they should use a new condom	11. To avoid spilling of the semen and ensure maximum protection.
12. Wrap the condom in its package and put it in a disposable bag and dispose appropriately	12. For environmental safety and proper disposal
13. Request the client to perform a return demonstration	13. To confirm that the client has understood the information
14. Thank the client and explain that she can come any time she has any problems, questions or wants another method	14. To ensure compliance and give assurance

## D. Evaluation

Evaluate	Rationale
1. Insertion has been done properly using the standard guidelines	1. To ensure the client understands how to use the method
2. The client has knowledge and skills by performing a return demonstration	2. To confirm the client's understanding and skills on the procedure

## E. Documentation

**Record:**

- Record the procedure in the family planning register and the client's file

■ ■ ■

## 5.4: Cervical Cancer Screening Methods

### 5.4-1: Taking a Papanicolaou Smear (Pap smear)

**Definition:**

This is the process of obtaining a specimen from the cervical os using a spatula to rule out cervical carcinoma.

**Purpose:**

- To ensure the correct technique is used to obtain the specimen for cervical cancer screening

**Indications:**

- Routine for all women in their reproductive age and post reproductive age who have ever had sexual intercourse
- Any woman with suspicious signs and symptoms of cervical cancer

## A. Assessment

Assess	Rationale
1. Required equipment for the collection of the specimen	1. To determine availability and functioning state
2. Emotional state of the client	2. Identifies the client's readiness for the procedure
3. Appropriateness of the environment	3. Establishes its suitability

## B. Planning



**Self**

- Review the procedure and cervical cancer screening guidelines
- Assemble the equipment and supplies
- Prepare all the necessary stationery



**Client**

- Explain the procedure to the client



**Environment**

Ensure:

- A safe, well ventilated room with adequate light

- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



### Requirements

- Examination couch/bed
- Examination gown
- Adjustable examination light
- A screen
- Draw sheet and mackintosh
- A sterile pack with:
  - Cotton wool swabs
  - Kidney dish
  - Cusco's Speculum
  - Sponge Holding forceps
- Cytobrush/ Spatula
- Sterile surgical gloves
- Glass slide
- Fixation solution (equal parts of ethylic ether and 99% ethyl alcohol)
- Diamond pencil
- Three drapes (one should have a hole)
- Appropriate stationery, registers and case files, pathological request forms
- Receiver for dirty swabs
- Waste bin
- Plastic container with appropriate disinfectant

## C. Implementation

Steps	Rationale
1. Greet and welcome the client/couple, offer a seat and introduce self	1. To establish rapport
2. Explain the procedure to the client	2. To gain the patient's cooperation and make her relax for the procedure
3. Ask the client to empty the bladder	3. To reduce discomfort and avoid trauma to the bladder
4. Screen the bed/couch	4. To provide privacy
5. Label the plain glass slide using the diamond pencil	5. To ensure correct specimen identification
6. Wash and dry hands then put on sterile gloves	6. For infection prevention and control
7. Constantly reassure the client throughout the procedure	7. To ensure that she relaxes and cooperates
8. Assist the client to lie in a lithotomy position	8. To allow ease of access to the pelvic cavity
9. Drape the client on both thighs and the perineal area	9. To prevent cross infection

Steps	Rationale
10. Introduce the speculum to the vagina and expose the cervix	10. To expose the cervix in readiness of the procedure
11. Inspect the cervix	11. To detect any obvious abnormalities on the cervix
12. Use a spatula/cytobrush to obtain cells from the squamo – columnar junction of the cervical os. Rotate the end of the spatula a full 360 degrees in the os or three times ( $180^{\circ}$ ) if using the cytobrush	12. To scoop the cervical cells
13. Smear the scrapings evenly on the glass slide and add a drop of fixative solution evenly and allow it to dry. <b>(Speed is essential to prevent drying of cells)</b>	13. To prevent morphological changes to the cells as well as cell death
14. Discard the spatula/brush in a waste bin	14. To prevent cross-infection
15. Remove the speculum and put in a disinfectant	15. To decontaminate the speculum
16. Give a return date to the client	16. To check for results and any other follow-up care
17. Make the client comfortable and thank her for her cooperation	17. To ensure continuity of cooperation and give assurance
18. Ensure the specimen is taken to the laboratory immediately	18. For examination and reporting

## D. Evaluation

Evaluate	Rationale
1. Pap smear has been taken in accordance with cervical cancer screening guidelines	1. To ensure that the procedure was done as per the set standards
2. Dates for receiving results of the Pap smear have been communicated to the client	2. To keep the client informed
3. Specimen has been obtained, labeled and taken to the laboratory	3. To facilitate getting results which will assist in further management of the client
4. Response of the client to the procedure	4. For appropriate interventions

## E. Documentation

### Record:

- Date and time of collection of the specimen
- Findings of the cervix on physical examination
- Pap smear has been taken in accordance with cervical cancer screening guidelines
- Dates for receiving of results of the Pap smear
- Specimen has been obtained and taken to the laboratory

■ ■ ■

## 5.4-2: Visual Inspection of Cervix Using Acetic Acid (VIA) and/or Lugol's Iodine (VILI)

### Definition:

- **Visual Inspection of Cervix using Acetic Acid (VIA):** This is the process of examining the cervix using acetic acid to detect any pathological changes.
- **Visual Inspection of Cervix using Lugol's Iodine (VILI):** This is the process of examining the cervix using Lugol's iodine to detect any pathological changes.

### Purpose:

- To detect abnormal changes on the cervical os for early management using the right techniques

### Indications:

- Routine when performing a speculum examination for FP client
- Routine for all women in their reproductive and post reproductive age who have ever had sexual intercourse
- Clients complaining of unexplained vaginal bleeding or discharge
- For HIV positive women (yearly)

## A. Assessment

Assess	Rationale
1. Required equipment for the procedure	1. To ascertain availability and functional state
2. Emotional state of the client	2. To determine the client's readiness for the procedure
3. Appropriateness of the environment	3. For safety and comfort

## B. Planning



### Self

- Review the knowledge on the procedure of VIA/VILI
- Reflect on and manage own anxiety associated with the procedure
- Prepare the required stationery
- Prepare the environment, couch/bed
- Prepare the equipment for examination



### Client

- Explain the procedure to the client



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate working space
- Privacy
- Availability of standard operating procedures



## Requirements

- Sterile pack with:
  - One kidney dish
  - Two gallipot
  - Cusco speculum
  - Sponge holding artery forceps
  - Orange sticks
  - Cotton wool swabs
- Examination gown
- Examination couch/bed
- A pair of gloves
- A screen
- Draw sheet and mackintosh.
- Waste bin
- Plastic container with appropriate disinfectant
- Examination light
- Acetic acid 3 – 5%
- Lugol's iodine
- Cervical cancer screening register and referral forms



Figure 5.9 Requirements for VIA/VILI  
(Adapted from Ministry of Health – Kenya)

## C. Implementation

Steps	Rationale
<b>VIA</b>	
1. Greet and welcome the client/couple, offer a seat and introduce self	1. To establish rapport
2. Explain the procedure to the client and seek consent	2. To allay anxiety and gain cooperation
3. Ask the client to empty bladder and change into examination gown	3. To avoid injury and discomfort
4. Assist the client to lie in lithotomy position on the couch	4. For ease of access of the cervix
5. Inspect the vulva for any abnormalities <b>NB:</b> Do not swab the vulva with an antiseptic solution	5. To rule out any abnormalities
6. Insert the speculum	6. To visualize the cervix and the vaginal walls
7. Direct the light towards the perineum	7. Light will assist in visualizing the cervix clearly
8. Visualize the cervix for evidence of infection, discharge tumours or lesions	8. To detect any deviation from normal
9. If there is a lot of discharge, swab the cervix with a dry swab	9. To allow for clear vision
10. Identify the cervical os and the squamo-columnar junction and the area surrounding it (transformation zone)	10. To ensure the procedure is carried out at the right anatomical site
11. Soak a clean swab in acetic acid and apply it to the transformation zone of the cervix using the orange stick	11. To observe for any changes in the transformation zone
12. Wait for at least one minute after the acetic acid application then observe for any changes	12. To allow for changes in the cervical appearance
13. Observe the changes on the SCJ: <ul style="list-style-type: none"> <li>• A raised and thickened white plaques or aceto-white epithelium near the squamo-columnar junction (SCJ) is a positive test as shown in figure 5.11.</li> <li>• A smooth, pink, uniform and featureless epithelium the test is negative.</li> <li>• A clinically visible ulcerative-proliferative growth or oozing and/ bleeding on touch is suspicious for cancer as shown in figure 5.12.</li> </ul>	13. To detect abnormalities



Figure 5.10 Normal Cervix  
(Adapted from Ministry of Health - Kenya)



Figure 5.11 VIA Positive Cervix  
(Adapted from Ministry of Health – Kenya)

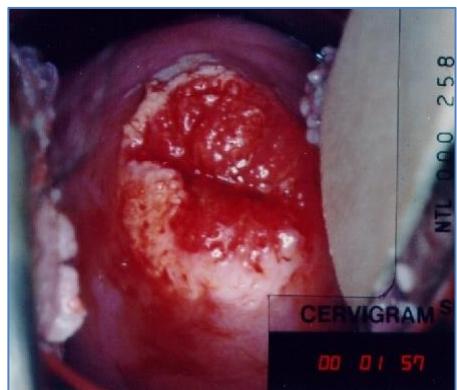


Figure 5.12 Cervix Suspicious of Cancer  
(Adapted from Ministry of Health – Kenya)

Steps	Rationale
14. When the visual inspection of the cervix is over, wipe the excess acetic acid	14. To cleanse the cervix
15. Thank the client and give the findings for VIA then continue with VILI	15. To enhance cooperation
<b>VILI</b>	
<p>The above stated procedure for carrying out VIA applies to VILI except that instead of using acetic acid, Lugol's iodine is used.</p> <ul style="list-style-type: none"> <li><b>VILI Negative</b></li> <li>The squamous epithelium is black or mahogany brown due to uptake of iodine and the columnar epithelium is slightly discolored and does not take up iodine.</li> <li><b>VILI Positive</b></li> <li>Yellow lesions appear on the area next to the squamo-columnar junction and within the transformation zone as shown in Fig 5.13.</li> </ul> <p><b>NB:</b> Areas of invasive cancer do not take up iodine but appear as thick mustard or saffron-yellow areas</p>	
16. Assist the client to dress up	16. To make the client comfortable
17. Give the findings, thank her and advise the client according to the results	17. To interpret the findings and guide appropriately
18. Soak the used instruments in the appropriate disinfectant	18. To decontaminate the instruments

## D. Evaluation

Evaluate	Rationale
1. Visual inspection of the cervix has been done in accordance with the standard guidelines	1. To confirm accuracy and reliability of the results
2. Results have been communicated to the client	2. To Keep the client informed
3. Results were interpreted correctly	3. For appropriate interventions

## E. Documentation

**Record:**

- Findings of examination and the recommended interventions

■ ■ ■

## 5.5: Community Nursing Activities

### 5.5-1: Conducting a Community Diagnosis

#### Definition:

This is the process of identification and quantification of health problems in a community for the purpose of defining individuals or groups at risk or in need of health care.

#### Purpose:

- To identify health needs, determine available resources and set priorities for planning, implementing and evaluating health interventions, by and for the community based on existing policies, standards and guidelines

#### Indications:

- Routine needs assessment
- Before commencing a health project
- Specific projects/ programmes
- When evaluation for study is required
- When there is a health problem in the community

## A. Assessment

Assess	Rationale
1. The community's infrastructure	1. To facilitate understanding of the community during the community diagnosis exercise
2. Existing community linkages	2. To identify existing community support
3. The role of opinion leaders	3. To facilitate community entry and cooperation by community members

## B. Planning



#### Self

- Review the procedure of community diagnosis
- Reflect on the time available and the schedule for the activity
- Prepare manpower and materials
- Ability to perform community social mobilization
- Prepare on how to access the community



#### Client

- Explain the purpose, dates and activities to the community administration and opinion leaders



## Requirements

- Data collection tools
- Adequately briefed personnel to include the community leaders
- Financial resources
- Current data of the study location
- Completed clinical records of disease pattern
- Specified community
- Demography of the community

## C. Implementation

Steps	Rationale
1. Establish the what, where, and who in the community	1. To help in planning for the community diagnosis
2. Learn more about the what, where, and who in the community	2. To aid in defining the scope for community diagnosis activities
3. Identify resources in the community	3. To assist the investigators identify the requirements for conducting a successful community diagnosis
4. Brief the personnel adequately on their roles	4. For each personnel to know what is expected of them
5. Develop the required tools	5. To collect the required information from the Community
6. Obtain permission from the relevant authorities	6. For acceptance and access to the community and for ethical purposes
7. Carry out a pre-test in a population with similar data	7. To ensure reliability and validity of the data
8. Sample the population of study	8. To obtain a representative sample of the Community
9. Obtain all the required data as per the planned methods	9. To get information necessary to make the diagnosis
10. Analyze/synthesize and interpret the information thereof	10. To quantify the needs of the community in order of priority
11. Complete a written report of the survey	11. For documentation of the community needs in order of priority
12. Give feedback to the relevant authorities, community leaders and local health management team	12. To engage the community leaders and relevant authorities to get involved in solution finding
13. Develop an action plan	13. For intervention purposes

Steps	Rationale
14. Thank the participants and relevant authorities	14. For appreciation and cooperation for any further engagements

## D. Evaluation

Evaluate	Rationale
1. The community diagnosis has been done according to laid down procedure	1. To obtain reliable information within legally acceptable standards
2. The community is aware of their health needs and are ready to participate in the interventions	2. To empower the community to participate in their health needs
3. If resources were adequate	3. For future planning

## E. Documentation

### Record:

- Write a report on the process taken and identified felt needs of the community in order of priority
- Dissemination strategies put in place to inform the various stakeholders
- Stake holders' views on the findings
- Planned intervention strategies to address the needs



## 5.5-2: Conducting a School Health Program

### **Definition:**

This is the process of carrying out health services aimed at promoting the well-being of the pupils/students with an intention to minimize health barriers to learning.

### **Purpose:**

- To promote the health of pupils/students and enable them learn in a healthy environment in order to achieve optimum growth and development free from health problem

### **Indications:**

- Pupils/ students

## A. Assessment

Assess	Rationale
1. School administration's readiness for school health services	1. For planning and cooperation during the activities
2. The resources needed for school health	2. To cater for identified needs according to priority

## B. Planning



### **Self**

- Prepare all the requirements
- Identify the venue
- Prepare a lesson plan and teaching aids
- Plan for transport
- Link with the multidisciplinary team



### **Client**

- Explain the objective of the program to the relevant authority e.g. head teachers, education officers, parents' association etc.
- Make appointment with the relevant authority



### **Environment**

- A safe, spacious and well ventilated room with adequate light



### Requirements

- Appropriate drugs, vaccines and Vitamin A
- Non pharmaceutical supplies: syringes, needles and dressing
- Stationery i.e. cards, registers, morbidity tally sheets
- Immunization tally sheets
- Otoscope
- Stethoscope
- Snellen's chart
- Teaching aids
- Lesson plan
- Personnel i.e. Nurses, Public Health Officers, Clinical Officer, nutritionist

## C. Implementation

Steps	Rationale
1. Assemble the Health Team at the venue	1. For organization purposes
2. Introduce yourself/team to the teachers and pupils/students	2. To create rapport
3. Explain the schedule of activities and services available	3. To get co-operation from the school administration and children/students
4. Group pupils/ students according to developmental stages and health needs	4. To give appropriate service
5. Give a health talk on an issue of interest to the school administration and children/students	5. To create awareness
6. Take history and perform physical examination and make diagnosis if need be	6. To detect any abnormality for treatment and referral purposes
7. Confirm immunization status of the pupils/ students	7. To detect vaccination missed opportunity
8. Administer relevant vaccine if need be	8. To ensure that all children are on immunization schedule as per EPI guidelines
9. Counsel appropriately	9. To meet the individuals' bio psycho social needs
10. Carry out supportive supervision on school environment: <ul style="list-style-type: none"> <li>• Location</li> <li>• Classroom</li> <li>• Play ground</li> <li>• Furniture</li> <li>• Sanitation and Waste disposal</li> <li>• Water</li> <li>• Kitchen and dining hall hygiene</li> </ul>	10. To ensure that there are no health hazards in the school environment
11. Provide feedback to the school authority and plan the next visit	11. For continuity of service

<b>Steps</b>	<b>Rationale</b>
12. Discard all used material in line with infection prevention control and injection safety guidelines	12. To prevent environmental hazards
13. Thank all the participants	13. For co-operation and motivation

## D. Evaluation

<b>Evaluate</b>	<b>Rationale</b>
1. The school health program was done as per the standard guidelines	1. To ensure adherence to set standards
2. Health education was given as planned	2. To impart knowledge on healthy living
3. Interventions were implemented	3. To ensure all interventions were instituted accordingly
4. Feedback on the program was given to the school management	4. To ensure adherence to the requirements for school health and also for continuity

## E. Documentation

### Record:

- A report of the school health visit and give copies to the relevant stakeholders for action
- Planned interventions and monitoring and evaluation tools
- Findings in the relevant registers and indicate the date for the next visit

■ ■ ■

## 5.5-3: Conducting a Home Visit

### **Definition:**

It is the process of assessing and providing care to patients/clients at their homes.

### **Purpose:**

- To assess health needs
- To provide care to individuals and their families
- To provide health education

### **Indications:**

- Individuals/families who require home care and follow- up e.g.
  - Malnourished/ chronically ill children
  - Chronically ill patients
  - Special needs
- Homes with environment that predispose individuals and families to health hazards e.g
  - Poor waste disposal
  - Unsafe water
  - Poor housing
- Antenatal/ postnatal clients
- Family planning clients
- Families with social needs

## A. Assessment

Assess	Rationale
1. Families with special needs	1. To identify the relevant families to be provided with appropriate interventions
2. The requirements for home visit	2. In readiness for the home visit

## B. Planning



### **Self**

- Review the lesson plan
- Prepare all the requirements



### **Client**

- Explain to the client/ patient the need and purpose for the home visit
- Make an appointment to suit the family schedule (to ensure that most of the family members are present during the visit)



### Requirements

- Transport
- Home visiting bag with:
  - Home visiting card
  - Home visiting register
  - Prepared lesson plan
  - Teaching aids
  - Drugs (if necessary)

## C. Implementation

Steps	Rationale
1. Meet the family member(s) and wait to be received	1. To avoid intruding in the activities in the family
2. Introduce yourself to the family member(s) and explain your objective	2. To facilitate building up of good relationship with the family
3. Interview the member(s) using a non-directive technique	3. To obtain information without the family members feeling interrogated
4. Observe reactions of members as they interact and avoid writing as you interact except when filling personal data in the card	4. The client may withdraw information if they notice that you are recording the discussion
5. Identify the need of the family and how they relate with each other	5. To help in planning intervention
6. If it is a revisit, review the previous topic taught then deliver the planned health message/intervention	6. To assess the impact of the previous visit
7. Carry out the planned intervention	7. To fulfill the objectives of the visit
8. Appraise the family on the areas they have done well	8. To encourage and create room for motivation
9. Give them time to ask questions. Do not be in a hurry to answer them	9. To encourage active participation and compliance
10. Plan with the family the next visit (if necessary)	10. To involve them in the follow up visits
11. Leave them satisfied with the session	11. To maintain cooperation
12. Make consultation if there is a plan of action that need other expertise	12. So that the patients/ clients' needs are taken care of effectively
13. Thank the family for their welcome	13. To appreciate them, promote compliance and continuity of care

## D. Evaluation

Evaluate	Rationale
1. The needs of the client/family identified	1. To assist in the plan of care
2. Health talk has been shared to the client/ family	2. To check the client's understanding of the problem at hand
3. Care has been provided according to the plan of the home visit	3. To meet the objective of the home visit

## E. Documentation

**Record:**

- Findings of the visit in the relevant registers (client's card, file, home visit register) after the visit
- The date for the next visit
- Recommendation for further interventions from the multidisciplinary team

■ ■ ■

## 5.5-4: Conducting Health Education

### Definition:

This is the process of creating awareness through health education to help individuals and communities improve their health.

### Purpose:

- To impart knowledge to individuals and communities about their health

### Indications:

- Inpatients and outpatients
- Patients on discharge from health facility
- Community groups
- Home visiting activity
- Maternal child health services
- Family planning services
- School health program

## A. Assessment

Assess	Rationale
1. The need to share specific health information	1. To create awareness regarding the identified need
2. The method of sharing the health message	2. For effective communication
3. The clients receiving the health message	3. To ensure the message is understood

## B. Planning



### Self

- Prepare the teaching aids
- Prepare the lesson plan
- Identify an appropriate venue
- Engage the relevant authorities and confirm their availability of the audience



### Audience

- Share the program and the concepts



## Environment

Ensure:

- A safe, well ventilated room with adequate light
- Cleanliness
- Adequate space
- Privacy



## Requirements

- Appropriate venue with adequate sitting arrangement
- Relevant audio/ visual aids
- Audience
- Lesson plan
- Stationery e.g. Flip charts, note books, marker pens

# C. Implementation

Steps	Rationale
1. Greet the audience, introduce yourself and allow them to introduce themselves (if not a large group)	1. To create rapport
2. Set the climate for the health education	2. To create interest in the audience
3. Present the information: Introduce the topic, discuss the content	3. To deliver the intended message
4. Use visual aids or demonstrate if necessary	4. To enhance efficiency in delivery of the message
5. Stimulate the audience to participate by asking questions / sharing experiences	5. To encourage active participation in the discussions
6. Give time for asking questions and answer them	6. To clarify the information given
7. Ask the audience questions and also for a return demonstration where applicable	7. To ensure that the audience have captured the information given
8. Comment on their responses using positive language	8. To motivate the audience to participate in the discussion
9. Summarize the topic by recapping the main points and conclude the discussion	9. To emphasize on important issues/aspects of the topic
10. Thank the audience and schedule time and place for follow up	10. To encourage cooperation and motivation in subsequent forums

## D. Evaluation

Evaluate	Rationale
1. Health education has been given according to the laid down guidelines	1. To determine if health education was shared as intended
2. Knowledge was imparted	2. To promote behavior change

## E. Documentation

**Record:**

- Topic
- Teaching strategies used
- Audience's response to the health talk

■ ■ ■

## 5.5-5: Conducting a Mobile Clinic Service

### Definition:

This is the process of providing health care services to communities within the health facility catchment area.

### Purpose:

- To provide health services to communities who cannot easily access a health facility

### Indications:

- Families residing far away from the health facility
- Families who may not afford the cost of care
- The elderly in the community
- The nomadic communities
- The refugees/ internally displaced persons

## A. Assessment

Assess	Rationale
1. The health needs of the community	1. To assist in planning for the activities
2. Availability of resources required for the mobile clinic	2. To cater for identified needs according to priority
3. Whether adequate social mobilization was done	3. To ensure community attendance

## B. Planning



### Self

- Prepare necessary equipment and supplies
- Have a work plan
- Ensure adequate staffing
- Allocate tasks to staff so that they know what they will be expected to do



### Patients/Clients

- Make appointment with the relevant authority
- Explain the objective of the program to relevant authority
- Enlist community participation



## Environment

- Safe for both clients and staff
- Spacious with adequate ventilation and lighting



## Requirements

- Transport
- Personnel
- Examination equipment and instruments
- Other supplies:
  - Appropriate drugs, vaccines and Vitamin A
  - Non pharmaceuticals such as syringes, needles and dressing material
  - Stationery i.e. cards, registers, disease tally sheets, Immunization tally sheets
  - Teaching aids and advocacy tools
  - Waste disposal bins

# C. Implementation

Steps	Rationale
1. Before going for a mobile clinic, develop a work plan and a list of intervention to be carried out	1. To guide execution of activities and promote efficiency
2. Assemble the health team	2. For organization purposes
3. Ensure availability of transport	3. To facilitate movement to the venue
4. Introduce yourself/team to the clients/patients	4. To create rapport
5. Explain schedule of activities and services available	5. To get cooperation from community members
6. Offer relevant health services	6. To meet the health needs of the community
7. Provide referrals (if necessary)	7. For continuity of care
8. Discard all used material in line with infection prevention control and injection safety guidelines	8. To prevent environmental hazards
9. Give immediate feedback to the community and their leaders	9. To help the community to adopt healthy lifestyles and behavior change
10. Thank the community and their leaders	10. To motivate and ensure their cooperation in subsequent mobile visits

## D. Evaluation

Evaluate	Rationale
1. The community's response on the services offered	1. For better planning in the subsequent visits
2. Mobile clinic done and documentation available on activities undertaken	2. For purpose of follow-up and verification
3. Safety procedures followed	3. To ensure adherence to standards
4. Referrals' records available	4. For follow up of cases

## E. Documentation

**Record:**

- A report of the mobile clinic visits and give copies to the relevant stakeholders for action
- The date for the next visit

■ ■ ■

## References

Ministry of Health (2016), *Long acting reversible contraception methods (larc) slides*

Ministry of Public Health and Sanitation and Ministry of Medical Services (2010), *Long acting methods contraception training manual, participants' handbook*

Ministry of Health, (2016), *Immunization Handbook 2014* (3<sup>rd</sup>ed) New Zealand, retrieved from:  
<http://www.health.govt.nz/publication/immunisation-handbook-2014-3rd-edn>

Ministry of Public Health and Sanitation (2010), *National Family Planning Guidelines for Service Providers*, retrieved from <https://www.k4health.org>

Ministry of Health, (2013), *National guidelines for cancer management Kenya*, retrieved from  
<http://apps.who.int/medicinedocs/documents>

Ministry of Health, (2013), *National policy guidelines on immunization*, retrieved from  
<https://cdn.mg.co.za/content/documents/2017/05/02/immunizationpolicyguideline.pdf>

Wagoro, M.C.A. & Rakuom, C.P. (2015). Mainstreaming Kenya-Nursing Process in clinical settings: The case of Kenya. *International Journal of Africa Nursing Sciences* 3:31-39  
[doi:10.1016/j.ijans.2015.07.002](https://doi.org/10.1016/j.ijans.2015.07.002): ISSN: 2214-1391

World health Organization, (2011), *Family planning: A global handbook for Health Providers*, retrieved from [http://apps.who.int/iris/bitstream/10665/44028/1/9780978856373\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/44028/1/9780978856373_eng.pdf)

World Health Organization, (2015), *Medical eligibility criteria for contraceptive use 5<sup>th</sup> Ed* retrieved at [http://apps.who.int/iris/bitstream/10665/181468/1/9789241549158\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/181468/1/9789241549158_eng.pdf)

Rivas, F. J. P., García, S. J. M., Arenas, M. C., Lagos, B. M., & López, G. M. (2012). Implementation and evaluation of the nursing process in primary health care. *International Journal of Nursing Knowledge*, 23(1), 18–28. <http://dx.doi.org/10.1111/j.2047-3095.2011.01199.x>

## Chapter 5: Evaluation Checklist

Please fill this evaluation checklist to help the Nursing Council of Kenya improve the quality of subsequent procedure manuals.

COMMUNITY HEALTH NURSING	YES	NO	COMMENTS
1. Critical procedures in Community Health Nursing are included in the chapter			
2. Procedures are placed under their relevant functional patterns/systems			
3. Procedures are arranged from simple to complex within the respective functional patterns/systems			
4. Procedures are correctly defined			
5. Purpose of the procedures is stipulated clearly			
6. Indications for the procedures are correct			
7. Steps in procedures are accurate			
8. Nursing process is correctly applied:			
➤ Assessment			
➤ Planning			
➤ Implementation			
➤ Evaluation			
➤ Documentation			
9. Scientific rationales are given in assessment, implementation and evaluation			
10. Approach of nursing process is useful in these procedures			
11. Diagrams are:			
➤ Relevant			
➤ Appropriate			
➤ Arrangement			
12. How would you rate this chapter on a scale of 1 to 10 (where 1 is the lowest & 10 is the highest score)?			
13. Overall comments for this chapter			



