Title: Patient Assessment

Subtitle: 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
• **Appropriateness of working environment**	• To determine its ability to provide comfort, privacy and enhance efficiency
• **Equipment required**	• To determine equipment availability and functioning status
• **Client's/Patient's physical and mental status**	• To determine assistance required and if the patient is able to give consent
• **Client's/Patient's understanding of the procedure**	• To determine teaching needs of the client and gain their cooperation, minimize anxiety
• **Site to be used for measurements**	• To determine suitability as some conditions affecting these sites can interfere with accurate readings
• **Foods/drinks taken in the last 15-30 minutes**	• To establish if hot or cold foods/drinks have been taken that would influence accuracy of temperature
• **Activities performed in the last 15-30 minutes**	• Hyperactivity may increase sympathetic nervous system activity and interfere with accuracy of data
• **Presence of skin lesions**	• **To institute correct interventions**

B. Planning

Self

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

Patient

- Explain the procedures to the patient and obtain consent
- Ask the client/patient if he/she has taken hot or very cold drinks/food within the last 30 minutes
- Ask the client/patient to rest for at least 5 minutes before the procedure where applicable
- 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**
• Temperature	
• **Take equipment to the bedside/next to the patient**	• For ease of accessibility
• **Identify the patient**	• To ensure right procedure to the right patient
• **Explain procedure to the patient**	• To allay anxiety and gain co-operation
• **Wash and dry hands**	• **For infection prevention and control**
Axillary and groin	
• **Dry axilla/groin with a clean cotton wool swab**	• **To ensure sweat and moisture do not interfere with the reading of the thermometer**
• **Place thermometer in axilla/groin making sure that the thermometer bulb is fully covered by the skin folds**	• **Allows for close contact of the bulb with the superficial blood vessels for accurate temperature registration**
• **Switch on the thermometer and position it while the arm or thigh is held firmly by patient or nurse**	• **To prevent the thermometer from dislodging from the axilla during the procedure**
• **Gently remove thermometer, when it alarms or after 4-7 minutes (for non-digital thermometers) and read**	• **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**
Rectal	
• **Wash hands and wear gloves**	• **For infection prevention and control.**
• **Explain the procedure**	• **To allay anxiety and gain cooperation**
• **Position child in left lateral position**	• **To promote ease of access and insertion of the thermometer**
• **Lubricate thermometer and insert 1-2 cm depending on age of the child**	• **To prevent injury to the anal and rectal tissues and allow the bulb to be covered by rectal mucosa**
• *Figure 1.1 Taking Temperature by Rectal Method (Adapted from Prakash, 2007)* *Figure 1.1 Taking Temperature by Rectal Method (Adapted from Prakash, 2007)*	• **To prevent dislodging of the thermometer and ensure accuracy of the reading and reduce the child's/mother's anxiety through engagement**
• **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**	• **To reduce transfer of micro-organisms and tampering with the mercury level**
• **Ensure the child's buttocks are cleaned and dry.**	• To promote patient's hygiene and comfort

• NB: **For any other thermometer follow manufacturer's instructions**	• To ensure accuracy of reading
• Pulse	
Radial Pulse	
• **Flex patient's elbow and place lower part of the arm across the chest**	• **Relaxed position of forearm and slight flexion of wrist facilitates accessibility of artery for palpation**
• **Place the tips of the index and middle fingers over the radial artery applying light but firm pressure**	• **To facilitate palpation since fingertips are sensitive and better able to feel the pulse. Light pressure prevents occlusion of blood flow**
• **N/B: do not use your thumb to palpate the pulse**	• **To avoid feeling of the strong pulse of thumb**
• **Palpate for pulsation and count the pulse rate for a full minute. (Note rate, rhythm and volume)**	• **To detect any deviation from normal and plan for appropriate intervention**
• **Record findings on the appropriate chart**	• **To communicate findings**
Apical Pulse (Apex Beat)	
• **Position patient on left side and expose patient's sternum and left side of the chest**	• **To allow access to patient's chest for proper placement of stethoscope and selection auscultatory site**
• **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**	• **To ensure that point of maximum impulse is identified for accurate measurement**
• **Clean the earpiece and diaphragm of stethoscope with antiseptic cotton wool swabs.**	• **For infection prevention and control**
• **Warm the diaphragm of the stethoscope by holding in the palm of own hands for 5 to 10 seconds.**	• **To prevent startling the patient and altering pulse rate**
• *Figure 1.2 Placing Diaphragm of Stethoscope over the Fifth Intercostal Space* *Figure 1.2 Placing Diaphragm of Stethoscope over the Fifth Intercostal Space*	• **Point of maximal impulse is anatomically located at this position, hence promoting accuracy of heart beat measurement**
• **Listen to the beats for rhythm, strength and rate**	• **To detect any irregularities, which may indicate inadequate cardiac perfusion and output**
• **Inform the client/patient when procedure is over, cover the patient and leave him/her comfortable**	• **To ensure comfort and for cooperation**
• Respiration	
• **With the fingers still in the pulse position, observe the patient's chest movements without drawing the patient's attention to the activity**	• **To avoid causing alterations in breathing patterns that occurs when the client is aware respiration is being assessed**
• **Observe one complete cycle of respirations; count the respirations for one full minute**	• **To avoid inaccurate data**
• **Note chest expansion, depth and rate of respiration**	• **Alterations in rate, depth and rhythmic chest movements would be an indication of respiratory, renal and other systems abnormalities**
• **Record findings**	• **To communicate findings and for subsequent comparison of progress**
• Blood Pressure	
• **Assist client/patient to a comfortable position with forearm supported at heart level and arm supinated**	• **To ensure accurate reading. Stress may affect the blood pressure measurement**
• **Expose the upper arm completely and ensure no tight clothing**	• **To allow accurate placement of the cuff and stethoscope and ensure the reading is accurate**
• **Place the sphygmomanometer on the bed or locker at the same level as patient's heart**	• **To ensure accuracy of reading**

• **Deflate the bladder cuff fully and test pump to ensure it moves freely**	• **To confirm the functional status of the machine for effectiveness of the procedure**
• **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**	• **To allow for positive identification of the artery**
• **For mercury sphygmomanometer, ensure it is vertical and at eye level** Figure 1.3 Illustration of Use of Mercury Sphygmomanometer *http://homepage.smc.edu/wissmann_paul/anatomy1/bloodpressuremeasurement.jpg* Figure 1.3 Illustration of Use of Mercury Sphygmomanometer *http://homepage.smc.edu/wissmann_paul/anatomy1/bloodpressuremeasurement.jpg*	• **To prevent distortion and promote accurate reading of mercury level**
• **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**	• **To prevent air leak**
• **Fully deflate cuff and wait for 1-2 minutes**	• **To allow recirculation of blood trapped in the vein**
• **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**	• **For audibility of the heart sounds**
• **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**	• **For accurate reading**
• **Deflate cuff completely and remove from patient's arm and assist patient to a comfortable position as appropriate**	• **To complete the procedure and release patient for other activities**
• **Clean the earpiece, bell and diaphragm with appropriate antiseptic**	• **For infection prevention and control**
• **Store equipment appropriately**	• **For safety and in readiness for next use**
• **Record findings, noting abnormalities**	• **For baseline data, comparison and continuity of care**
• Pain Assessment	
• **Ask the client/patient if they are in pain and if he/she cannot communicate, use the appropriate nonverbal pain assessment tools**	• **To ascertain presence and level of pain**
• **If they are in pain, use a validated pain assessment tool**	• Figure 1.4 Pain Assessment Tool Indicating Severity of Pain on a Scale of 1-10 Figure 1.4 Pain Assessment Tool Indicating Severity of Pain on a Scale of 1-10

• **Document findings and take appropriate action**	• **To communicate data, and use it to evaluate effectiveness, of actions taken relieve pain**

D. Evaluation

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

E. Documentation

Record:

- The date and time procedure were 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

Subtitle: 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
• **Appropriateness of the environment**	• To promote efficiency and effectiveness in history taking
• **Client's general physical and mental state**	• 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
• **Availability of appropriate tools**	• 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

• Introductory Phase	
• **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**	• **To make the client/patient and companion feel accepted and relaxed and encourage free communication and disclosure of the required information**
• **Establish the language of communication**	• **To encourage self-expression and facilitate ability to provide information in the language they understand**
• **Enquire from the companion(s) the relationship with the client/patient**	• **To build confidence with the client and promote disclosure of information**
• **Start with non-threatening, specific questions and proceed to open ended questions**	• **To allow the client/patient to be acquainted with the service provider**
• Working Phase	
• **Observe guidelines on interviewing techniques**	• **For purposes of collecting complete and relevant data.**
• **Observe the client/patient for nonverbal communication and validate them**	• **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**
• **Ask open ended questions and use simple language**	• **To enable the patient to gradually open up and give the relevant information**

• **Obtain, interpret and record information on the following;**
  • **Identifying data/Biodata**
  • **Chief complaint**
  • **History of present illness (onset, location, duration, character, aggravating factors, relieving factors, severity, any treatments received and meaning of symptoms to the patient)**
  • **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**
  • **History of past illness (psychiatric, medical, surgical, obstetrics for women)**
  • **Personal history (prenatal, infancy, childhood, adolescence, adulthood, education, religious, occupation/work record, socio-cultural, sexual and marital relationships)**
  • **Family history**
  • **Social history e.g. alcohol use etc**
 	
NB: **The user of this manual is advised to appropriately refer to the Health Assessment textbooks for additional guidance on History taking and physical assessment**
	• **To determine baseline data; determine actual and potential problems, as well as their causes.; To facilitate focused physical examination, diagnostic investigations and subsequent evaluations**

• **Conduct risk assessment using the tool in appendix 2**	• **To promote vigilance in identifying risks and ways in which risks can be minimized**
• Termination Phase	
• **Explain that the information required for the time being has been obtained, however if more is required then the client/patient may be informed**	• **To communicate to the patient and companion the end of the history taking session**
• **Enquire if the client/patient and companion(s) have questions to ask**	• **To encourage the patient/companion to clarify their issues of concern**

• **Thank the client/patient and companion(s) and release them**	• **To acknowledge cooperation**
• **Keep the patient's notes and files in respective cabinets**	• **For safe custody, confidentiality and easy access of patient's notes**
• **Store unused stationery in the right place**	• **For safety and subsequent use**

D. Evaluation

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

Subtitle: 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
• **Client's/ patient's understanding of the procedure**	• To determine client's readiness and teaching needs to allay anxiety
• **Patient's readiness to undergo physical examination**	• To determine psychological preparedness, and identify needs that require immediate interventions
• **Ability to follow instructions and change positions as required**	• To determine if assistance may be required
• **Equipment required for the examination**	• To determine their availability and functioning state
• **Patient's socio-cultural, religious beliefs regarding physical examination**	• 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 coach 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
• **Assist the patient to change into a gown and position the client/patient appropriately**	• **To facilitate accessibility to parts being examined**
• **Wash and dry hands and put on clean gloves**	• **For infection prevention and control**
• **Cover the client's/patient's body parts not included in the specific examination**	• **To ensure privacy and maintain dignity of the patient**

• **Examine the client's/patient's general appearance to include**
  • **State of health**
  • **Nutritional status**
  • **Behavior**
  • **Mental state – alertness**
  • **Speech**
  • **Gait**
  • **Hygiene**
	• **To provide a general impression about the client/ patient**

• **Take the weight of the client/patient**	• **To obtain baseline data**

• **Carry out head to toe assessment as follows**
 	
NB: **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**
	• **Rationale for examination is**
	  • To obtain baseline data on the surface integumentary system, and underlying organs
	  • To corroborate findings with subjective and diagnostic data
	  • To compare findings against standard anatomical, biochemical and physiological parameters
	  • Determine existence of existing and potential problems
	  • Make diagnosis and plan for interventions

Head and Neck	
• Hair and scalp • **Inspect the hair for color, texture, growth, distribution, scales, lumps, nevi or other lesions**	• **To identify any abnormalities and institute appropriate interventions**

• Skull
  • **Inspect**
  • **For size, shape, and symmetry**
  • **Rash and scars**
  • **Bruises**
  • **nits and other signs of infestations, cleanliness**
  • **For children (below 5 years) measure head circumference and check the state of fontanelles (≤18 months old). Palpate for:**
  • **Any deformities**
  • **depressions**
  • **Mass/lumps**
  • **Tenderness**
	• **To identify any abnormalities, bruises or infestation and take intevention measures**

• Face • **Facial expression, involuntary muscle movements, shape, swellings and symmetry**	• **To establish general physical and mental status**

• Eyes
  • **Inspect for position, alignment and symmetry**
  • **Conjunctiva – colour**
  • **Sclera, cornea**
	• **To detect presence of anomalies like squints, determine underlying condition such as anaemia if palor is present or liver conditions in yellow colouration**

• **Eyebrows:** • **Inspect for noting their quantity, distribution and any scaliness**	• To identify any abnormalities and institute appropriate interventions

• **Eyelids:**
  • **Inspect for position, presence of edema, lesions,**
  • **condition and direction of the eyelashes**
  • **adequacy with eyelids doze**
	• 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.

• **Lacrimal apparatus:**
  • **Inspect the region of the lacrimal gland and lacrimal sac for swelling**
  • **Inspect for excessive tearing or dryness of the eye**
	• Dryness or excessive tearing may lead to eye problems

• **Cornea and lens:** • **inspect for opacities in the lens**	• Opacity of the lens can cause trouble with vision

• **Pupils: Inspect for:**
  • **Pupillary size, shape, and accommodation**
  • **intracranial pressure**
  • **Symmetry**
  • **Reaction to light**
  • **Coordination of eye movements**
  • **Convergence test**
	• Irregular constricted pupils may be due to inflammation of the iris

• **Screen visual acuity**	• To determine visual inabilities

• Nose
  • **Anterior and inferior surface: Use speculum/otoscope appropriately to inspect:**
  • **Nasal septum (position and perforation)**
  • **Symmetry**
  • **Deformity**
  • **Size**
  • **Flaring**
  • **Discharge**
  • **Nasal cavity obstruction**
  • **Mucous membrane for moisture and colour**
  • **Palpate frontal and maxillary sinuses the for tenderness**
	• **To detect any defect, inabilities like anosmia or infections and take appropriate action**

• Ears
  • **Inspect Location and Symmetry**
  • **Inspect shape and size**
  • **Assess for Hearing**
  • **Inspect external meatus for redness, discharge, bleeding, swelling foreign body**
  • **Inspect whether the tympanic membranes are intact**
  • **Palpate for tenderness**
	• **To detect any infections, anomalies or hearing inabilities and take appropriate intervention measures**

• The Mouth
  • **Check colour condition, lesions oduor**
  • **Inspect the lips for colour and moisture**
  • **Inspect for state of the teeth alignment complete dental formula and dental caries**
	• **To detect any abnormalities and determine plan of care**

• Neck - anterior, lateral and posterior aspects
  • **Location**
  • **Thyroid/parathyroid gland**
  • **Cervical lymph nodes**
  • **Nuchal rigidity**
  • **Symmetry, swellings, scars**
  • **Enlargement of glands**
  • **Range of Motion (ROM)**
  • **Trachea**
	• **To establish presence of any masses or scars and determine patient's need for intervention**

Chest	

• Inspect Chest - anterior, lateral and posterior aspects for posture, shape and symmetry of expansion
  • **Inspect and palpate breast**
  • **Auscultate lungs**
  • **Apical pulse with stethoscope –rate rhythm clarity of sound**
  • **No bruits**
	• **To identify any abnormalities that may lead to respiratory comprise**
	  • For early diagnosis of breast problems and taking of appropriate measures
	  • To detect abnormal breath sounds such as rales, tinking or rhonchi and determine interventions

Heart	
• **Auscultate heart**	• **To determine the heart's ability and efficiency to function as a pump**
• **Palpate all peripheral pulses**	• **To establish the functionality of the cardiac activity, determine their presence/absence**
• **With the patient in supine position at 45 degrees or higher, inspect jugular veins bilaterally**	• **To rule out distension and any other abnormalities**
• **Palpate and auscultate the carotid arteries one after another**	• **To rule out carotid bruits**
• **Auscultate the heart sounds. Summation gallop, opening snap, murmur, ventricular arrythmias, ejection click, mid systolic click, mediastinal crunch and pericardial friction rub**	• **To provide useful clues on underlying cardiac and vulvular diseases**
• **Auscultate client's/patient's blood pressure *(Refer to Procedure 1.1-1, Measuring Vital Signs)***	• *Figure 1.5 Sites for Auscultation of Heart Valves (Adapted from Stethographic, 2007)* *Figure 1.5 Sites for Auscultation of Heart Valves (Adapted from Stethographic, 2007)*
Respiratory	
• **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 movement, skin for colour and condition**	• **To identify presence of factors that would alter respirations and ensure correct interpretation of data**
• **Assess if patient is using accessory muscles of breathing**	• **To rule out signs of tissue hypoxia**
• **Perform light and deep palpation of the anterior, lateral and posterior chest: perform tactile palpation**	• **To determine the existence of masses or tenderness or deformities**
• **Assess for anxiety, irritability and restlessness**	• **To establish the patient's pressure, determine baseline data upon which further evaluations shall be compared**
• **Percuss anterior and posterior chest wall**	• **To establish changes in the lung air space structure**
• **Auscultate;** • **Instruct the patient to breathe through the mouth a little deeper than usual as you auscultate**	• **To evaluate the presence and quality of breath sounds**
• **The lung fields over the anterior chest from the apices in the supraclavicular down to the 6th rib**	• To determine whether the underlying tissues are filled with air, fluid or solid material
• **Then the lung fields over the posterior chest from the apices along the 7th cervical bone down to the 6th rib**	• To identify the location of any pathological process
• **Progress from side to side as you move downwards and listen to one full respiration in each location**	•

• **Auscultate comparing symmetrical points on each side of the anterior and posterior chest** *Figure 1.6 Locations for Auscultation and Percussion (Adapted from Ome, 2014)* *Figure 1.6 Locations for Auscultation and Percussion (Adapted from Ome, 2014)*	• **To establish whether both lungs are functioning normally or identify abnormalities on either sides**
Abdominal Exam	
• **Inspect the abdomen for contour, Symmetry masses, colour, pigmentation, Striae scars, moisture, scaliness, , position and state of umbilicus, pulsation, movements**	• **To determine signs of starvation, ascities, umbilical hernia, abdominal tumours, inflammation, liver diseases, and dehydration**
• **Auscultate the abdomen for Bowel sounds and Vascular sounds** Figure 1.7a **A)** Division of the Abdomen into 4 Quadrants **B)** Auscultating the Abdomen Adapted from Pocket guide for Nursing Health Assessment (2011) Figure 1.7a **A)** Division of the Abdomen into 4 Quadrants **B)** Auscultating the Abdomen Adapted from Pocket guide for Nursing Health Assessment (2011)	• **To determine the presence of hyper or hypo or absence of peristaltic movements** **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**
• **Palpate surface and deep areas(light and deep palpation)**	• **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**

• Figure 1.7b Landmarks Commonly Used to Identify Abdominal Areas Adapted from The Nursing Health Assessment (2016) Figure 1.7b Landmarks Commonly Used to Identify Abdominal Areas Adapted from The Nursing Health Assessment (2016)	• **To determine presence of or rule out Muscle guarding, mass, tenderness, Involuntary rigidity indicates acute peritoneal inflammation** **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**
Female genitalia	
• **Inspect for scars, colour, discharge, abnormal growths, swellings**	• **To determine any irritation, signs of infection cracks, fissure or enlarged vessels**
• **Palpate the inguinal glands for tenderness, swelling and enlargement**	•
Male genitalia	
• **Inspect the scrotum, penis and urethral opening for lesions, discharge, growths, urethral meatus**	• **To determine any irritation, signs of infection cracks, fissure, enlarged vessels, undescended testis**
• **Palpate scrotum and penis for tenderness, lymph node enlargement, status of testes**	•
Lower limbs	
• **Equality, deformities, oedema, varicose veins, reflexes, joint movements, muscle power, tone, function sensation**	• **To determine any signs of asymmetry, muscle wasting, fasciculations, clonus, neuropathies and other abnormalities**
Clearing	
• **Help patient to dress up**	• **To promote comfort**
• **Remove gloves and wash hands**	• **For infection prevention and control**
• **Give a detailed feed back to the patient or child and parent and involve them in the plan of care**	• **To secure the patient's involvement in their care**
• **Thank the client/patient for his/her role in the examination and leave him/her comfortable**	• **To acknowledge cooperation**

D. Evaluation

Evaluate	**Rationale**
• **Quality of baseline data obtained about the health status of the client/patient**	• **To determine appropriate interventions and if further examination is necessary**
• **Whether the physical examination supplements, confirms or contradicts the findings of the nursing history**	• **To confirm success of the physical examination**
• **Planned nursing/clinical interventions based on the information provided**	• **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

Subtitle: 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

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

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
• **Identify the client/patient and explain procedure**	• **To ensure right procedure to the right client/ patient, allay anxiety and promote understanding and cooperation**
• **Take equipment to the bedside/procedure room**	• **For easy accessibility; to facilitate efficiency and effectiveness in performing the procedure**
• **Screen/draw curtains**	• **To provide privacy**
• **Position and reassure the client/patient**	• **To allow easy access /visualization and for co-operation**
• **Wash dry hands and don gloves**	• **For infection prevention and control**
• **Clean the venous/artery puncture site with an antiseptic solution using a circular motion and allow drying**	• **To avoid introducing microorganism into the blood system during venipuncture**
• **Apply the tourniquet firmly, 2-3 inches above the site selected and then locate the vein/artery**	• **For adequate filling and easier visibility of the selected vein/artery**
• **Ask the client/patient to keep the fist clenched**	• **To facilitate distension of the selected blood vessel**
• **Mount the syringe with an appropriately sized needle**	• **To prevent injury, haemolysis and avoid dislodging during the procedure**
• **Access the site with a needle and prick the vein/ artery, then withdraw required amount of blood (if using vacutainer, continue until it fills)**	• **For adequate sample collection**
• **For arterial blood sample; access the artery between 45 to 90 degrees, heparinize the syringe prior to specimen collection**	• **To allow adequate blood flow into the syringe**
• **Release tourniquet**	• **To prevent bleeding and restore tissue perfusion**
• **Remove the needle, then apply pressure on the site using sterile swab for approximately 2-5 minutes**	• **To prevent bleeding after the procedure**
• **Dispose the needle and syringe in the sharp container**	• **To prevent needle prick injuries and promote safety for clients/ patients and staff**
• **Label blood specimen container at collection site**	• **To ensure right identification**
• **Remove gloves and dispose appropriately, wash hands**	• **For infection prevention and control**
• **Position the client/patient comfortably and unscreen the bed**	• **To promote comfort of the client/patient**
• **Send the specimen sample to the laboratory immediately**	• **To ensure timely processing and delivery of results**
• **Inform the client when the result will be ready/is to be collected**	• **To prepare the client/patient on waiting period and allow for planning to collect results**

D. Evaluation

Evaluate	Rationale
• **Client's cooperation during the procedure**	• **To determine effectiveness of procedure**

• **For any bleeding**	• **To identify injury /blood disorders and intervene appropriately**
• **Characteristics of the blood sample**	• **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

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 analyze 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
• **General condition of the client/patient**	• **To establish suitability for the procedure and any assistance needed**
• **Client's understanding of the need for urine collection**	• **To determine education needs, allay anxiety and promote cooperation**
• **Client's/patient's possible risk associated with urine collection/catheterization**	• **To plan for anticipated untoward reactions and identify contraindications to the procedure**
• **Equipment required**	• **To ascertain availability and promote efficiency and effectiveness in specimen collection**
• **Appropriateness of the working environment**	• **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
• Routine Urine Collection	
• **If the client is able to give the specimen independently, then instruct him/her to:**	• **To ensure right procedure to the right client/ patient, allay anxiety and promote understanding and cooperation**
• **Pass approximately 30mls of urine directly into the specimen container provided**	• **To obtain adequate sample**
• **Pass the remaining into the toilet or bedpan**	• **For comfort of client and to promote personal hygiene**
• **Wipe vulva/ penis with toilet paper then wash and dry hands**	• **For infection prevention and control**
• **If the client/patient requires assistance:**	
• **Wash, dry hands and don gloves.**	• **For infection prevention and control**
• **Hold bottle/urine bag for the client/ patient to pass urine directly into it**	• **To allow flow of urine into the container and facilitate collection of specimens**
• **Allow the rest of the urine to go into a bedpan**	• **To empty the bladder and for client's/patient's comfort**
• **Dry the vulva/penis with toilet paper**	• **For comfort of the client/patient and to promote personal hygiene**
• **Properly dispose urine from the bedpan**	• **To prevent environmental contamination**
• **If the client/patient has indwelling catheter:**	
• **Wash, dry hands and don gloves**	• **For infection prevention and control**
• **Mount needle to syringe**	• **To prepare for the procedure**
• **Clamp drainage tube**	• **To stop urine flow**
• **Using antiseptic swab, clean the entire port**	• **For infection prevention and control**
• **Insert the needle at about 45 degrees just above where catheter is attached to drainage port. (Open method may also be used)**	• **To prevent accidental balloon puncture and reduce contamination**
• **Draw urine 3mls for culture or 20mls for routine urinalysis**	• **To obtain adequate and required sample**
• **Transfer urine into the appropriate container and close lid**	• **To prevent sample contamination and spillage**
• **Discard needle and syringe into sharp container**	• **To minimize needle prick injury and for environmental safety**
• **Unclamp the catheter**	• **To facilitate urine drainage**
• **Remove and discard gloves carefully and wash hands**	• **For infection prevention and control**
• Mid-stream Specimen	
• **If the client/patient is able to give specimen independently, instruct the patient to:**	• **To facilitate collection of quality specimen**
• **Open specimen bottle without touching inside of lid**	• **To prevent contamination of specimen**

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

D. Evaluation

Evaluate	**Rationale**
• **Client's/patient's compliance with the instructions**	• **To ensure accuracy of specimen collection**
• **Characteristic of specimen**	• **To facilitate interventions before laboratory results are available**
• **Appropriateness of the collecting container and storage temperatures**	• **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

Stool Specimen Collection

Definition:

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

Purpose:

To analyze/test the specimen for diagnostic purposes.

Indications:

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

A. Assessment

Assess	**Rationale**
• **The client's/patient's general condition**	• **To establish suitability for the procedure and any assistance needed**
• **The client's/patient's understanding of the need for stool collection**	• **To determine education needs, allay anxiety and promote cooperation**

• **The client's/patient's possible risk associated with obtaining stool**	• **To plan for anticipated untoward reactions and identify contraindications to the procedure**
• **The equipment required/if any assistance is needed**	• **To ascertain availability and promote efficiency and effectiveness in specimen collection**
• **Appropriateness of the working environment**	• **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
• **Explain procedure to the client/patient and obtain consent**	• **To allay anxiety and gain cooperation; prevents medical-legal litigations**
• **For the independent client, give the stool container and the following instructions**	• **To facilitate collection of quality specimen**
• **Pass urine first into the toilet /bedpan**	• **To avoid stool contamination with urine**
• **Place tissue paper on toilet seat /floor and pass stool**	• **For easy collection of samples**
• **Using spatula, scoop stool (approximately 1 teaspoonful or to fill 1/3 of specimen container)**	• **To achieve the adequate amount of specimen required for investigation**
• **Cover the specimen container**	• **To avoid specimen and environmental contamination**
• **For a client requiring assistance, wash dry hands and don gloves. Follow the steps mentioned above**	• **For infection prevention and control**
• **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**	• **For specimen collection; prevent environmental contamination and spillage**
• **Discard the remaining stool into the toilet, spatula into pedal bin then clear the bedpan according to procedure. Remove gloves and wash hands**	• **For proper disposal, prevent environmental contamination and for infection prevention and control**
• **Label and send the specimen to the laboratory immediately**	• **For accurate identification and timely results**

D. Evaluation

Evaluate	Rationale

• **Client's/patient's cooperation with stool collection**	• **To determine effectiveness of the procedure**
• **Characteristics of specimen**	• **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

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

• **Take equipment to the bedside**	• **For easy accessibility to the equipment**
• **Screen the bed /draw curtains**	• **To promote physical privacy**
• **Explain procedure to the client/patient**	• **To allay anxiety and gain co-operation**
• **Wash, dry hands and don gloves and face mask/ shield**	• **For infection prevention and control**
• **Instruct client to:**	• **To help:**
• **Take 3-4 deep breaths**	• **Open airway, loosen secretions and stimulate cough reflexes**
• **Cough and expectorate after full inhalation**	• **Promote coughing up of secretions**
• **Spit directly into the specimen container and cover it**	• **Avoid contamination**
• **If a child, perform gastric lavage early in the morning**	• **To obtain sample because the child may not follow instruction. Overnight allows collection of adequate sputum. (Collected in the stomach)**
• **Give tissue paper for wiping the mouth**	• **To promote hygiene and comfort of the client/ patient**
• **Remove gloves, dispose appropriately and wash and dry hands**	• **For infection prevention and control**
• **Position client/patient and remove screens from the bed**	• **For comfort and to allow free air circulation**
• **Transport/send the specimen sample to the laboratory immediately**	• **To avoid delays and ensure timey reporting of results**

D. Evaluation

Evaluate	Rationale
• **Client's cooperation with sputum collection**	• **To determine effectiveness of the procedure**
• **Characteristics of specimen**	• **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

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
• **General condition of client/patient.**	• **To establish suitability of the procedure**
• **Client's/patient's understanding of the need for swab collection**	• **To allay anxiety and promote cooperation**
• **Client/patient's possible risks associated with obtaining the swab specimen**	• **To identify problems/contraindications to the procedure**
• **Appropriateness of the working environment**	• **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
• **Take equipment to the bedside**	• **For easy accessibility to the equipment**
• **Screen the bed /draw curtains**	• **To promote privacy**
• **Explain procedure to the client/patient**	• **To allay anxiety and gain co-operation**
• **Position the client/patient**	• **For easy access of the patient during the procedure**
• **Wash dry hands and don gloves**	• **For infection prevention and control**
• Wound Swab	
• **Follow procedure for wound dressing till exposure of wound *(Refer to Procedure 2.4-1, Wound Dressing)***	• **To ensure sterility during exposure of the surface for specimen collection**
• **Remove sterile swab and rotate swab on the wound**	• **To obtain sufficient sample**
• **Replace swab into its container and cover**	• **To minimize contamination of the specimen**
• **Continue procedure of wound dressing**	• **For completeness of the aseptic procedure**
• Throat Swab	
• **Ask the client/patient to open mouth wide and put tongue out**	• **To allow visualization of throat**
• **Depress tongue slightly with spatula**	• **To prevent retraction of the tongue during the procedure**
• **Direct light to back of throat and asks the client to say "aaaa"**	• **For visualization and elevation of pharynx**
• **Gently and firmly sweep over the inflamed throat area with swab taking care not to touch tongue with swab**	• **To obtain specimen without contamination.**
• **Replace swab into container and cover**	• **To minimize contamination of specimen and prevent cross infection**

• **Remove gloves, wash and dry hands**	• **For infection prevention and control**
• Ear Swab	
• **Gently pull the pinna upward and backwards (for adults) and for children down wards and backwards**	• **To straighten external auditory meatus for easy access**
• **Insert swab and rotate gently into the extended canal**	• **To obtain adequate sample for analysis**
• **Replace swab into container**	• **To minimize contamination**
• **Clean the ear**	• **To promote hygiene, comfort and minimize cross infection**
• **Remove gloves, dispose appropriately, wash and dry hands**	• **For infection prevention and control**
• **Position the client/patient and unscreen the bed**	• **To enhance the client's comfort after the procedure**
• **Transport/send the specimen sample to the laboratory immediately**	• **For timely reporting of results**
• Nose Swab	
• **Moisten the swab with sterile water before inserting into nose**	• **For prevention of irritation and facilitates comfort**
• **Insert the swab gently into nose and rotate it towards tip of mucosa**	• **For accurate and right sample collection**
• **Replace swab into container and cover**	• **For preservation of specimen for quality analysis**
• **Remove gloves, wash and dry hands**	• **For infection prevention and control**
• **Position and leave the client/patient comfortable**	• **For demonstration of respect and promotion of self-esteem**
• High Vaginal Swab	
• **Position the client/patient in lithotomy position**	• **For easy visualization and accessibility**
• **Direct light source into perineum**	• **For visibility of the fornices**
• **Wash, dry hands and don gloves**	• **For infection prevention and control**
• **Warm speculum in sterile water and lubricate**	• **For the client's comfort and prevention of traumatic insertion**
• **Using non- dominant hand separate labia**	• **To expose the vaginal orifice**
• **Gently introduce speculum into the vagina**	• **For expansion and visualization of the fornix**
• **Take swab as high as possible around the fornices**	• **To obtain correct sample**
• **Replace swab into container and cover**	• **To preserve specimen and prevent contamination**
• **Remove speculum noting characteristic of discharge**	• **To facilitate intervention before laboratory results are available**
• **Decontaminate speculum**	• **For infection prevention and control**
• **Clean the client/patient using the gauze and assist her to a comfortable position**	• **To promote client hygiene and comfort**
• **Remove gloves, wash and dry hands**	• **For infection prevention and control**
• **Label and send specimen to laboratory immediately**	• **To ensure identification and analysis of quality specimen**

D. Evaluation

Evaluate	**Rationale**
• **Proper hand washing before and after procedure**	• **For prevention of cross infection**
• **Client cooperation with high vaginal swab collection**	• **To determine effectiveness of procedure**
• **Characteristic of discharge/swab specimen**	• **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

Subtitle: 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 labor
- During routine antenatal examination

A. Assessment

Assess	Rationale
• **General condition of the client/patient**	• To establish suitability of the procedure and any assistance needed
• **Client's/patient's understanding of the need for performing urinalysis/urine test**	• To determine education needed, allay anxiety and promote cooperation
• **Client's/patient's possible risk associated with urine test**	• 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
• **Explain procedure to the patient**	• **Understanding procedure encourages co-operation**
• **Screen bed**	• **To provide privacy**
• **Wash, dry hands and put on gloves**	• **To facilitate infection prevention and control**
• **Offer the client a urine jug and ask him/her to pass urine into jug**	• **For adequate specimen collection**

• **Take the freshly passed specimen to the sluice room**	• **To avoid spilling the urine on the floor**
• **Reconfirm expiry date of the reagent and follow the manufacturer's instruction**	• **To ensure validity and reliability of the results**
• **Open the container, remove one strip and immediately close**	• **To prevent accidental contaminations of the rest of the strips**
• **Note the color and amount of urine**	• **To detect any abnormality**
• **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**	• **To allow time for chemical reaction so as to obtain correct readings**
• **Compare the strip against the container reference color codes for the reading. (Fig. 1.8)**	• **To interpret the readings**
Figure 1.8 Testing Urine using Reagent Test Strips (Dipstick) *Figure 1.8 Testing Urine using Reagent Test Strips (Dipstick)*	
• **Discard the strip into clinical waste bin, urine into the sluice basin and decontaminate the jug and clean the surface**	• **To promote ward hygiene, minimize cross infection and ensure the patient's safety**
• **Remove gloves, wash and dry hands**	• **For infection prevention and control**

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
• **If the client was able to produce sufficient urine**	• To determine effectiveness of procedure
• **The characteristics of the urine**	• To facilitate clinical judgement and planning for interventions

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

Title: Safety and Infection Prevention and Control

Subtitle: 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
• **Hands for breaks in the skin or cuticles**	• To prevent harboring of microorganisms
• **Appropriate time for washing hands**	• To ensure sufficient time to wash hands and reduce microorganisms
• **The amount of soiling on the hands**	• 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

C. Implementation

Steps	Rationale
• **Turn on the tap with running water**	• *Figure 1.9 Requirements for Hand Hygiene* *Figure 1.9 Requirements for Hand Hygiene*
• **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**	• **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**
• *Figure 1.10 Lather Thoroughly and Rub Hands* *Figure 1.10 Lather Thoroughly and Rub Hands*	• **To facilitate removal of microorganisms. Liquid soap harbors fewer bacteria than bar soap** *Figure 1.11 Give Special Attention to Fingernails and Knuckles* *Figure 1.11 Give Special Attention to Fingernails and Knuckles*

• **Wet hands, apply soap and thoroughly rub hands together for about 20-30 seconds.**
  • **Rub palm to palm**
  • **Rub back of both hands**
  • **Rub palm to palm with fingers interlaced**
  • **Interlace fingers and thumbs and move the hands back and forth**
  • **Rub all parts of both hands**
  • **Rub both palms with finger tips**
	• **To enhance mechanical friction that removes microorganisms from the skin surface**

• **Rinse hands under running water**	• **To remove excess soap as well as the loosened dirt and microorganisms**
• **Dry the hands thoroughly by blotting with paper towels starting with the hand going up to the arms**	• **To reduce chapping of the skin. Drying from cleanest (hand) to least clean area (arms) prevents transfer of microorganisms to the cleanest area**
NB: **Use hand sanitizer if hands are not visibly soiled and observe the above steps. Continuous use of hand sanitizer is limited to three times**	**To remove microorganisms if hands are not visibly soiled. If used for more than three times the hands become greasy**

D. Evaluation

Evaluate	Rationale
• **Inspect hand surfaces for signs of soiling or other contamination**	• 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

Subtitle: 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
• **Scrub environment**	• To ensure cleanliness and minimize microorganisms • Ensure suitability for performing aseptic procedure
• **Requirements needed to carry out the procedure**	• To ensure their availability and functioning state
• **Procedures that will require scrubbing, gowning and gloving**	• To facilitate planning and minimize cost
• **Level of preparation, length of nails and hands for jewelry that need to be removed**	• To reduce the risk of recontamination after the scrub. Long nails, polish and jewelry harbor microorganisms

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
• Scrubbing	
• **Put on a disposable plastic apron over the clothes**	• **To prevent wetting clothes as this attracts and retains microorganisms**
• **Adjust water to a warm temperature**	• **Hot water causes chapping of the skin**
• **Moisten hands and arms and do a social wash**	• **To facilitate removal of microorganisms. Liquid soap harbors fewer bacteria than bar soap**
• **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** NB: **Repeat these three times** *Figure 1.12 Hands Held Higher than Elbows During a Hand Wash Before Aseptic Technique* *Figure 1.12 Hands Held Higher than Elbows During a Hand Wash Before Aseptic Technique*	• **To facilitate thorough removal of oils from hands and arms hence reduce microorganisms**
• **Take 5mls of scrub solution and scrub the hands between the fingers only, rinse arms and hands and repeat it twice**	• **To facilitate and ensure maximum removal of microorganisms**
• **Close the taps using elbow/foot pedal faucet control (Figs. 1.13 & 1.14)** *Figure 1.13 Closing Tap using Elbow* *Figure 1.13 Closing Tap using Elbow*	• **To remove microorganisms if hands are not visibly soiled. If used for more than three times the hands become greasy** *Figure 1.14 Foot Pedal Faucet Control* *Figure 1.14 Foot Pedal Faucet Control*

• **Ask the circulating nurse to remove the plastic apron if not required during surgery**
  • **Move to wiping hands and arms, gowning and gloving**
  • **After scrubbing, pick one folded towel, open half-way and drop on the palm of one hand leaning forward**
	• **To maintain sterility**

• **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** *Figure 1.15 Drying up to Elbow* *Figure 1.15 Drying up to Elbow*	• **To prevent dampness and ease gloving**
• **Drop towel for circulating nurse to dry the apron**	• **To ensure own hands remain uncontaminated**
• Gowning	
• **Ensure all gowns are packed and dry**	• **Dry gowns affirm sterility**

• **The first covering of the sterile gown pack is opened by the circulating nurse**	• **To prevent contaminating the hands**
• **Pick the gown, move backward and open gown holding the neckline, drop the rest of the gown** NB: **Gowns are folded inside out**	• **To expose the gown in readiness for wearing with minimal risk of contamination**
• **Holding the arm holes at the shoulder level slip both hands into the gowns simultaneously**	• **To facilitate wearing of gown without contaminating the outer part**
• **Stretch hands but leave the fingers covered inside the gown**	• **To shield the hands from getting contaminated**
• **Pick gloves with fingers inside the gown and use the closed method for gloving**	• **To maintain sterility during gloving**
• Gloving	
• **Pinch above thumb with first hand, supporting gloves with second hand**	• **To pick the glove from inside and not touch the outside**
• **Flip glove over the first hand**	• **To facilitate wearing of gloves with ease**
• **Use second hand to stretch glove and flip in the fingers of the first hand**	• **To align/fit the glove properly in the hand**
• **Repeat same process for the second hand**	• **To wear the glove on the other hand in a sterile manner**
• **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**	• **To avoid contaminating the sterile gloved hands**
• **Tie both straps in front**	• **To ensure the gown is secured and cannot loosen during the surgical procedure**
• **Once gloves have been put on, put hands together in front and above the waist**	• **To ensure own hands remain sterile in preparation for the procedure**
• Clearing	
Circulating nurse should leave the scrub area tidy	**To prepare for subsequent procedures**

D. Evaluation

Evaluate	Rationale
• **If scrubbing, gowning and gloving were done effectively**	• **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

Subtitle: Observing Standard Precautions

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
• **Possible sources of infections**	• **For infection prevention and control**
• **Requirements and equipment to be used**	• **To confirm availability and functional status**

• **Knowledge of the health care workers on standard precautions.**	• **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
- Color 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**
Hand Hygiene	
(Refer to procedure 1.2-1, Hand Hygiene)	
Disposable Gloves	
• **Must be worn for direct contact with blood or body fluids on intact skin and mucous membrane**	• **To protect self and patient from contaminated agents**
• **Gloves should be disposable and discarded between patients or contaminated body sites**	• **To prevent cross infection to the other people**
• **Hands can become contaminated while wearing gloves hence hand hygiene is recommended after removal of gloves**	• **For infection prevention and control**
Plastic Aprons	

• **Should be changed between clean and dirty tasks and should be worn for:**
  • **All patient care**
  • **Aseptic techniques**
  • **Serving meals and bed making**
  • **Performing dirty tasks**
	• **For creation of barrier between the nurse's uniform and contaminated materials and thus help prevent transfer of micro-organisms**

Facial Protection (masks, goggles)	
• **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**	• **To protect the mucous membranes of the eyes, nose and mouth from accidental splashes from contaminated secretions and contact with microorganisms transmitted by inoculation**
Protective gowns (Head wear, Fluid Resistant Material)	
• **Should be available in operating theatre, intensive care and accident and emergency units**	• **To protect the health worker from splash or sprays with body fluids**
Foot Protection	
• **Wear boots or shoe covers when contamination on the floor is anticipated**	• **To minimize contamination of feet with blood and body fluids in high risk areas i.e. operating theatre, intensive care and accident and emergency**
Waste Disposal	
• **All contaminated wastes must be placed in yellow clinical plastic bags**	• **To ensure adherence to set universal standard precautions on waste segregation for identification of this type of waste**
• **Must be secured and source area identified**	• **To promote safety for patients, nurse and other staff**
• **Sharps (needles and blades) and other sharp instruments must be placed in a rigid puncture proof sharps container immediately after use**	• **For infection prevention and control and avoidance of accidental needle prick injury**
• **Discard needles and syringes as one unit into the sharps box; Do not re-sheath/re-cap contaminated needles**	• **To promote safety for the nurse, patient and other staff**
• **Never fill the container more than ⅔ and ensure it is securely closed and labelled before disposal and incineration**	• **To minimize chances of injuries thus promoting safety**
• **Uncontaminated paper and other household wastes should be placed in a black bag and secured in readiness for collection and disposal**	• **To ensure proper segregation and disposal of waste at source**
Waste Disposal	
• **Foul and infected linen must be segregated and placed in a red water-soluble bag and contained in an outer bag labeled** Danger of infection	• **For adherence to universal standards for highly infected materials**
• **Place soiled linen in a separate laundry container**	• **Soiled linen may also be contaminated with pathogenic micro-organism and must be placed directly into appropriate laundry containers**
• **Baby clothes, blankets etc. should be washed separately from others**	• **To prevent contamination from other infectious materials**
• **Blood, suctioned fluids may be safely poured down a drain that is connected to a sanitary sewer**	• **To promote flow of the excess blood from the materials**
• **Blood spills – Use institutional recommended decontaminant before cleaning**	• **To promote safety of patients and staff**
• **All instruments must be decontaminated and cleaned before sterilization**	• **To ensure that instruments are safe for handling by staff**
• **In case of accidental sharp injuries, wash site with soap and running water**	• **To facilitate removal of microorganisms**
• <u>Do Not Squeeze!!!!!!</u>	• **To avoid sucking the microorganisms into the system and prevent further injury of tissues**
• **Report incident to infection control department**	• **For appropriate action and follow up**

D. Evaluation

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

E. Documentation

Record:

- Document the level of achievement of universal standard precautions

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
Subtitle: 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
• **Suspected diagnosis**	• **For infection prevention and control pending confirmation of diagnosis**
• **Confirmed diagnosis**	• **To avoid unnecessary isolation of the patient**
• **Patient's knowledge on isolation**	• **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
• **Assemble all equipment needed before entering the room**	• **For infection prevention and control**
• **Put on a disposable plastic apron**	• **To protect self from the contaminants**
• **Keep the door closed when attending to the patient**	• **To reduce exposure of microorganisms to outside environment**
• **Observe standard precautions while handling the patients and various wastes**	• **For infection prevention and control**
• **Remove all protective wear and observe standard precautions before leaving the room**	• **To remove pathogenic organisms acquired during contact with the patient**
• **Supportive staff and relatives/visitors must understand and observe the standard precautions**	• **To prevent them from acquiring infectious disease**
• **Inform microbiologist/public health officer when the patient is due for discharge**	• **For microbiologist/public health officer to advice on any special precautions**

D. Evaluation

Evaluate	Rationale
• **The level of adherence to isolation nursing precaution measures**	• **To confirm effectiveness of isolation procedure**

E. Documentation

Record:

Document the level of adherence to isolation measures

Subtitle: 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
• **Suspected diagnosis**	• **To determine if the diagnosis is one of the communicable and infectious diseases**

• **The confirmed diagnosis**	• **To prevent unnecessary isolation of the patients**
• **Patient's understanding of the need for isolation**	• **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**
Environment	
• **Select suitable area preferably a separate room or a corner bed nearest to the sink, toilet or sluice room**	• **To minimize movements in the ward and therefore prevent spread of infection**
• **Ensure adequate ventilation and space**	• **To prevent progressive spread of infection**
Equipment	
• **Screen the bed/area**	• **To avoid contact of the patient with other patients, relatives and other health care providers**
• **Assemble all equipment to be used by the patient, nurses and label them with the patient's name**	• **To protect self from contamination with infective material from the patient**
• **Place a notice strict isolation outside the screened area**	• **To minimize unnecessary movement into the room which may promote cross infection**
Method	
• **Before entering the area, wash hands, wear disposable protective gear**	• **For infection prevention and control**
• **Attend to the patient's needs**	• **To ensure that the patient receives required nursing care**
• **Handle used items appropriately**	• **To minimize contamination and cross infection**
• **Remove the gown using the correct procedure**	• **To minimize contamination**

• **For children, play toys should be decontaminated and disinfected appropriately and not shared**	• **For infection prevention and control**
• **For adults, provide radios, TV and reading materials**	• **For recreational purposes**

D. Evaluation

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

E. Documentation

Record:

Document the level of adherence to the procedure

Subtitle: 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
• **The confirmed diagnosis**	• **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
• **Select suitable area. Ensure adequate ventilation and space**	• **To minimize movements in the ward and therefore prevent spread of infection**
• **Assemble all equipment to be used by the patient or the nurses and label them with the patient’s name**	• **To ensure readiness to undertake protective nursing**
• **Place a notice protective isolation outside the screened area**	• **To protect the patient from infection**

• **Before entering and leaving the area, wash hands, wear disposable plastic gown, masks**	• **To avoid contaminating the patient**
• **Attend to the patient's needs**	• **To ensure the patient's needs are addressed holistically**
• **Handle used items appropriately**	• **To ensure the patient and staff safety and for infection prevention and control**
• **Remove the gown using the correct procedure**	• **To prevent self-contamination**
• **For children, play toys should be decontaminated, disinfected appropriately and should not be shared**	• **For infection prevention and control**
• **For adults provide recreational materials**	• **For occupational therapy**

D. Evaluation

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

E. Documentation

Record:

Document the level of adherence to the procedure

Subtitle: 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
• **The pathogenicity and infectivity of the organisms**	• **To determine the mode of decontamination to be used**
• **Nurses' and other health care workers' knowledge on terminal disinfection procedure**	• **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
• **Ensure all personnel involved have protective gear**	• **To protect them from acquiring infections**
• **Divide roles and supervise the decontamination and cleaning process**	• **To avoid duplication of duties and ensure effectiveness of the process**
• **Keep windows and doors closed**	• **To contain the pathogens within the room**
• **Remove all linen including window curtains, carpets, utensils and other equipment and soak them in decontaminant**	• **To facilitate removal of microorganisms from the surface of all contaminated materials**
• **Open windows and doors when the procedure is finished for 24 hours or as appropriate**	• **To allow adequate ventilation**
Clearing	
• **Process used equipment in accordance with waste disposal guidelines**	• **For infection prevention and control and staff and patient safety**
• **Ensure the linen is taken to laundry**	• **For cleaning and sterilization in readiness for subsequent use**

D. Evaluation

Evaluate	Rationale
• **The level of adherence to decontamination procedure**	• **To ascertain the effectiveness of the procedure**

E. Documentation

Record:

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

Title: Patient's Hygiene and Comfort

Subtitle: 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
• **Patient's condition and need for special bed appliances**	• To confirm availability and functional state
• **Whether the patient has had a bath and the linen is soiled**	• For planning for additional requirements and if a bath will be needed
• **The physiological and mental state of the patient**	• 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
• **Wash, dry hands and wear clean gloves**	• **For infection prevention and control**
• **Take requirements to the bed side**	• **To facilitate organization and promote efficiency**
• **Screen bed**	• **To provide privacy**
• **Remove all equipment attached to bed linen**	• **To ensure safety**
• **Loosen the linen from the head to the foot of the bed**	• **To promote efficiency**
• **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**	• **For privacy, patient comfort and prevention of infection**
• **Place bed in flat position if not contraindicated**	• **To allow efficiency in bed making without strain for both the patient and the nurse**
• **Raise the side rail nearest to the patient**	• **To promote the patient's safety**
• **Assist the patient to turn on the side facing away from the side where the clean linen is while ensuring proper body alignment**	• **To allow placement of clean linen for changing while maintaining the patient's comfort**
• **Loosen the foundation of the linen on the side of the bed near the linen supply**	• **To allow easy removal of the soiled linen**
• **Fan fold the draw sheet and the bottom sheet at the center of the bed as close to the patient as possible**	• **To facilitate changing of linen**
• **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**	• **To facilitate changing of bed linen without contamination of the clean ones**
• **Tuck the sheet under the near half of the bed and miter the corner if a contour sheet is not being used**	• **To ensure that the sheet is secured and wrinkles don't occur thus promoting the patient's safety and comfort**
• **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**	• **To allow the nurse to completely replace the bottom sheet and draw sheet with minimal discomfort to the patient**
• **Raise the patient's head and remove the pillow. Replace the pillow case**	• **To ease removal of the pillow**
• **Assist the patient to the center of the bed, determine which position the patient prefers and assist him / her to that position if not contraindicated**	• **To promote comfort and safety**
• **Cover the patient and complete the rest of the top bed**	• **For privacy, protects the patient from chills and promotes the patient's hygiene, safety and comfort**
• **Raise all side rails and place the bed to low position**	• **To prevent the patient from falling and injuries**
• **Put items used by the patient within easy reach, inform him/her of completion of the procedure and leave him/her comfortable**	• **For promotion of the patient's comfort and self esteem**

D. Evaluation

Evaluate	Rationale
• **Level of adherence to the procedure**	• 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

Subtitle: 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
• **The client's understanding of the need for position change**	• To determine concerns, education needs and acceptance of further instructions
• **Condition of the skin**	• To identify precautions that may need to be considered
• **The client/patient's general physical condition**	• To determine assistance required and any contraindicated positions
• **Neuromuscular and musculoskeletal status**	• For muscle powers warranting positioning
• **Equipment required/assistance needed**	• To promote efficiency during positioning
• **Appropriateness of the working environment**	• 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
  - Trochantar 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
• **Wheel trolley to bedside**	• **For efficiency of the procedure**
• **Explain procedure to the patient and instruct him/her on position to be achieved**	• **To allay anxiety and promote co-operation**
Supine Position	
• **Assist the client/patient to lie on the back facing up**	• **To position the patient in supine**
• **Place pillow under the patient's neck**	• **To prevent hyperextension of the neck**
• **Position the patient's arms on the side with hands pronated**	• **For comfort**
• **Use extra pillows at pelvis**	• **To align the body and maintain the position**
Left / Right Lateral	
• **Assist the client/patient to lie on the side (left or right) with the head supported with a low pillow**	• **To maintain the position**
• **Bring the underlying arm forward and flex it; use a pillow to support the body posteriorly**	• **To provide support and balance**
• **Flex top leg forwards and a place pillow in between the legs**	• **For comfort and to prevent friction between the thighs**
Prone Position	
• **The client/patient lies on the abdomen with the head turned to either side.**	• **To allow drainage of oral secretions if any**
• **Pillow is placed under the chest, pelvis and ankles**	• **To prevent pressure and provide comfort for the structures of the chest, pelvis and ankles**
• **Arms may be on the side or flexed near the head**	• **To promote comfort**
Sims Position	
• **The client/patient is assisted to lie in extreme lateral position**	• **To maintain position**
• **Extend forward hand and leg to lie flat on the bed. Lower foot extends behind at the back.**	• **To allow the client to lie on the abdomen**
• **Flex both knees**	• **For comfort**
Knee chest Position	
• **The client's/patient's chest and elbows rests on the bed**	• **To maintain position**
• **The client then kneels, the thighs are straight and the lower limbs are flat on the bed**	• **To ensure the pelvic region is raised**
• **Place a pillow under the client'/patient's head and turn the head to either left or right side**	• **To promote comfort and lessen fatigue**
Trendelenburg Position	
• **Position the client/patient in supine position on an adjustable bed or operating table**	• **To promote comfort**
• **Use straps to secure and support the client on the bed/table before adjusting the bed/table**	• **To ensure the patient's safety**
• **Tilt the bed/ table to position the head so that it is lower than the feet/ legs**	• **To maintain position**
Cardiac Position	
• **Position client/patient in sitting up position in bed supported by a back rest**	• **To reduce venous return to the heart**
• **Adjust the bed or arrange pillows to achieve cradle at the back rest**	• **To promote the client's/patient's comfort and ease breathing**
• **Use of a bedside table with a pillow to allow the client/patient to lean over**	• **To allow the client/patient to lean over while in sitting position**
Lithotomy Position	

• **Assist the client/patient to lie in supine position on an adjustable bed/ examination table / operating table**	• **To maintain position**
• **Move the client/patient so that buttocks are placed as close as possible to the edge of the bed/ table**	• **For easy accessibility and visibility of perineum**
• **Flex both knees and support on stirrups**	• **For ease of access to external genitalia and pelvis**
Fowlers Position	
Position the client/patient in supine position • **Adjust head of bed to an angle of 45 degrees and support the client/patient with pillows or bed rest**	• **To promote the client's/patient's comfort**
Semi Fowlers Position	
• **As for fowlers but bed is tilted at 15 to 30 degrees**	• **For the client's/patient's comfort and safety**

D. Evaluation

Evaluate	**Rationale**
• **If the body is well aligned and in a comfortable position**	• **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

Subtitle: Bed Bath

Definition:

A bath given to a patient who is in the bed and unable to bath 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**
• **Condition of the patient**	• To determine assistance required and any contraindicated positions
• **The patient's understanding on the need for hygiene**	• 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
• **Gather all required equipment and wheel to the bedside**	• **To facilitate performance of the procedure**
• **Wash, dry your hands and don gloves**	• **For infection prevention and control**
• **Screen the patient**	• **To maintain the patient's privacy**
• **Place dirty linen bag at the foot of the bed**	• **To collect the used linen and maintain infection prevention and control**
• **Strip and cover the patient with one sheet or blanket**	• **To maintain the patient's privacy**
• **Remove pillows and leave only one**	• **To make the patient comfortable**
• **Put a big towel under the patient's body from the head to shoulders**	• **For easy accessibility**
• **Mix the warm and cold water ensuring it is lukewarm**	• **To avoid scalding the patient and ensure comfort**
• **Wash the patient's eyes and face with plain water**	• **To avoid irritating the eyes**
• **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**	• **Prevents sweeping debris into the patient's eyes. Using a separate portion of the flannel for each eye prevents the spread of infection**
• **Wash the patient's neck and ears. Use soap on these areas. Rinse and dry carefully**	• **To remove dirt and for comfort**
• **Expose only the area that is being cleaned at a time**	• **To avoid chilling the patient and for privacy**
• **Move the big towel and place it under the patient's far arm**	• **To avoid the bed linen getting wet**
• **Uncover the far arm**	• **For easy accessibility**
• **Fold the sponge cloth and moisten. Wash the far arm with soap, rinse with water**	• **To remove dirt**
• **Dry by use of a bath towel**	• **For comfort**
• **Move the big towel under the near arm and uncover it**	• **To avoid bed linen getting wet**
• **Wash, rinse and dry the near arm as same as for the far arm**	• **To remove dirt and for comfort**
• **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**	• **To prevent microorganisms and dirt lodging in such areas**
• **Wash the further away leg, rinse and dry and then do the same to the other leg**	• **To remove dirt and for comfort**
• **Soak feet in wash basin, scrub gently if necessary and cut toe nails if necessary**	• **To remove hard and scaly skin from the feet**
• **Change water as necessary**	• **For infection prevention and control**

• **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**	• **To provide easy access to the back area**
• **Change water and then wash the flannel**	• **To prepare for cleaning of the next part of the body**
• **Lastly wash, rinse and dry the genitalia**	• **To remove dirt and enhance infection prevention and control**
• **Apply lotion or Vaseline on the patient's skin and dress him/her in clean clothes**	• **To enhance the skin's softness and for comfort**
• **Change linen if necessary and make the bed. Cut finger nails if long**	• **To keep the patient clean and comfortable**
• **Perform oral care to the patient**	• **To maintain oral hygiene and prevent halitosis**
• **Comb hair if necessary**	• **To ensure good grooming**
• **Position the patient in the most suitable position**	• **For comfort**
• **Thank the patient for cooperation during the procedure**	• **To make the patient feel appreciated and enhance cooperation**
• **Open the windows and remove the screen**	• **To allow air circulation in the room**
• **Clear the equipment**	• **To prepare equipment for subsequent use**
• **Remove gloves and wash hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Cleanliness and comfort of the patient**	• To ensure the procedure was successful
• **Condition of the skin**	• 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

Subtitle: 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
• **The patient's possible risk of impaired skin integrity associated with their condition**	• To get baseline data to plan for intervention
• **The client's understanding of the need for pressure area care**	• To Identify education needs, allay anxiety and promote cooperation
• **Determine equipment required**	• 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
• **Wheel trolley to bedside**	• **For efficiency during the procedure**
• **Identify the patient**	• **To ensure correct procedure is performed on the right patient**
• **Screen the patient's bed**	• **To protect the patient's rights to privacy and maintain dignity**
• **Explain the procedure to the patient again**	• **To allay anxiety and promote cooperation**
• **Wash, dry hands and don gloves**	• **For infection prevention and control**
• **Fold back the bed linen, leaving the patient covered with a bed sheet**	• **For easy access/visualization while maintaining privacy and avoiding chilling of the patient**
• **Use warm water**	• **To prevent injury from hot or very cold water and enhance the patient's comfort**
• **Protect the bed linen with a bath towel**	• **To avoid wetting the bed linen**
• **Expose the client on the most accessible side**	• **For ease of performing the procedure**
• **Apply mild Soap generously on hands and massage over the pressure points (using firm circular movement)**	• **To prevent friction and stimulate circulation**
• **Rinse and pat dry the patient**	• **To remove soap and leave the skin dry**
• **Repeat the process for all pressure points on exposed side before turning the patient**	• **To relieve the points of pressure, stimulate circulation, improve skin integrity and for comfort**
• **Apply water repellent cream over treated area as appropriate**	• **To sooth the patient and act as a barrier against destruction of skin by moisture and microorganisms and promote skin integrity**
• **Turn the client and repeat steps 8-11**	• **To ensure that all pressure points are treated and the patient is turned and left comfortable**
• **Put in place pressure relieving devices if needed**	• **To relieve any possible pressure**
• **Reposition the patient appropriately and cover him, and turn him/her every two hours**	• **To ensure comfort and help relieve pressure from pressure areas thus improving circulation**

• **Clear equipment**	• **To prepare for next use**
• **Wash hands**	• **For infection prevention and control**

D. Evaluation

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

Subtitle: 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
• **General condition of the patient**	• To determine assistance required
• **The patient's understanding of the need for oral hygiene**	• To determine concerns, education needs and acceptance of further instructions
• **Determine equipment required**	• To ensure availability of equipment
• **Determine allergy to solutions/equipment to be used**	• 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
• **Check the patient's identification and condition**	• **To provide nursing care to the right patient**
• **Explain the procedure to the patient**	• **To gain cooperation and understanding**
• **Screen the bed**	• **To provide privacy**
• **Wash hands and wear disposable gloves**	• **For infection prevention and control**
• **Collect all required equipment and bring to the bedside**	• **For ease of access**
• **Pour appropriate solution into gallipot**	• **For ease of access**
• **Soak the cotton wool ball in betadine mouth wash solution, sodium bicarbonate or warm normal saline using artery forceps**	• **For use during the cleaning process**
• **Squeeze excess solution from all cotton wool balls using artery and dissecting forceps and put into another gallipot**	• **To avoid spillage**
• **Position the patient in an appropriate position**	• **To gain cooperation during the procedure and for comfort**
• **Place the drape around the patient's neck**	• **To absorb any spillage of the solution**
• **Inspect oral cavity with the aid of gauze-padded tongue depressor and torch**	• **To establish any abnormalities e.g. bleeding, swelling, ulcers**
• **Insert the padded tongue depressor gently from the angle of the mouth toward the back of the mouth** NB**: Never use your fingers to open the patient's mouth.**	• **To prevent injury**
• **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**	• **To aid in friction for effective cleaning of the teeth**
• **Clean the tongue from inner to outer aspect**	• **To prevent introduction of microorganisms to the inner cavity**
• **Rinse oral cavity using moistened cotton wool balls**	• **To enhance the cleaning process**
• **Wipe the outer aspect of the oral cavity**	• **To dry off any excess solution**
• **Apply lubricant to lips using a piece of gauze with the aid of an artery forceps**	• **To prevent drying and cracking of the lips**
• **Position the patient appropriately**	• **To enhance comfort**
• **Clear equipment**	• **For next use**
• **Remove gloves and perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Cleanness of the mouth**	• **To determine effectiveness of the procedure**
• **Condition of the oral cavity**	• **To plan for any required intervention**

E. Documentation

Record:

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

Title: Administration of Medicine

Subtitle: 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
• **The client's/patient's medication prescription**	• To ensure accuracy and completeness
• **The cient's /patient's history of allergies**	• To prevent risk of anaphylactic shock and other immune reactions associated with some medications
• **Medication literature for its pharmacokinetic and pharmacodynamic properties**	• To facilitate monitoring of the client's/patient's response
• **The client's/patient's and family's knowledge on medication action, expected results and possible side effects**	• To identify teaching needs for improved compliance
• **The client's/patient's ability to take oral medications**	• To rule out any contraindication and special precautions to oral route
• **The client's/patient's premedication vital signs if indicated**	• 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
• **Wash and dry hands**	• **For infection prevention and control**
• **Wheel trolley to begin at one end of the ward**	• **To promote efficiency and ease of access**
• **Confirm with the assistant the rights of medication administration and counter check the medication container**	• **To prevent medication error and enhance the patient's safety**
• **Dispense medications on to a saucer or medicine measure appropriately**	• **To ease the process of dispensing**
• **For liquids shake gently to mix**	• **To ensure even distribution of active ingredients**
• **Place medicine measure on flat surface and pour liquid with label uppermost**	• **To ensure accurate measurement of the dose, avoid spillage and preserve the label**
• **Measure correct dose at eye level or meniscus**	• **To avoid medication error and enhance the patient's safety**
• **Wipe the tip of the bottle, replace cork/cap and store in its unit after dispensing**	• **To prevent soiling of the bottle and ensure safe custody of medications**
• **For patients getting more than one medication, use a separate container for each mixture**	• **To prevent medication interactions**
• **Confirm the patient's identity before giving medicine**	• **To prevent medication error**
• **Give one tablet at a time, give water as appropriate and ensure the patient has swallowed**	• **To enhance the patient's ease in swallowing the medication**
• **For sublingual medications, instruct the patient to place the medication under the tongue and allow it to dissolve completely**	• **To prevent gastric destruction of medication and first pass effect**
• **For buccal medications, instruct the patient to place medication in the lower or upper buccal pouch against the cheek until it dissolves completely**	• **To promote local activity on the mucous membranes**
• **Leave the patient in an appropriate position**	• **To enhance comfort**
• **Wash and dry or sanitize hands before moving to the next patient**	• **For infection prevention and control**
• **When all patients have been given due medication, take the equipment to the treatment room and store medications appropriately**	• **For safe custody of medicines and equipment**
• **Process instruments/equipment and store in accordance with hospital disposal guidelines**	• **For infection prevention and control**
• **Wash and dry hands**	• **For infection prevention and control**
• **Record in the medication register and balance the medication books appropriately**	• **For accountability and control of medications**

D. Evaluation

Evaluate	Rationale
• **The patient's response to the medication**	• 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

Subtitle: Administration of Parenteral Medications

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
• **The medication orders and possible medication interactions**	• **To ensure accuracy and completeness, guide signs and symptoms to observe for early detection of adverse effects**
• **The client's/patient's history of allergies**	• **To prevent anaphylactic shock and other immune reactions associated with the specific medications**
• **The client's/patient's and family's knowledge on medication action, expected results and possible side effects**	• **To identify teaching needs for improved compliance**
• **Any factors that may contraindicate the route of administration**	• **To rule out any contraindications and for special precautions to the intramuscular route**
• **Anxiety related to anticipatory pain**	• **To identify education needs, that promote relaxation and reduce pain**
• **Adipose tissue and muscle mass**	• **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
• **Wash and dry hands**	• **For infection prevention and control**
• **Assemble and arrange the equipment and take to the ward/bedside/ treatment room**	• **To enhance efficiency and ease of access**
• **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**	• **To prevent medication errors**
• **Remove the metal cap from the vial using a file**	• **To access the rubber stopper**
• **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**	• **To disinfect the rubber site for puncture**
• **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**	• **To reduce the chance of introducing microorganisms into the sterile container**
• **If the medication is to be diluted, reconstitute it with the correct amount of sterile water for injection and mix well**	• **To prevent tissue irritation that occurs from inadequately diluted medication and ensure even distribution of active ingredients**
• **To withdraw the medication from a vial draw up the syringe and inject amount of air equivalent to medication required**	• **To facilitate withdrawal of medication from the vial**
• **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**	• **To facilitate withdrawal of the medication from the ampoule**
• **Counter check with the assistant**	• **To minimize medication errors and promote medication safety**
• **Remove used needle and discard in sharp container and replace with new needle, place the medication in the syringe in the kidney dish**	• **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**
• **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**	• **To prevent medication errors and promote safety**
• **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**	• **To promote cooperation and safe medication administration**

• **Locate the injection site on the upper outer quadrant and wipe with spirit swab (Fig 1.16)** *Figure 1.16 Locating the Ventrogluteal Site in Upper Outer Quadrant for Injection (Adapted from Craven & Hirnle, 2000)* *Figure 1.16 Locating the Ventrogluteal Site in Upper Outer Quadrant for Injection (Adapted from Craven & Hirnle, 2000)*	• **To reduce transmission of micro-organisms and ensure medication is safely administered**
• **Hold the skin between the fore fingers and thumb and insert the needle at 90 degrees (Fig 1.17)**	• *Figure 1.17 Depositing Medicine at 90^0 in to the Muscle (Adapted from Craven & Hirnle, 2000)* *Figure 1.17 Depositing Medicine at 90^0 in to the Muscle (Adapted from Craven & Hirnle, 2000)*
• **Withdraw the piston slightly**	• **To ensure that the point of the needle has not punctured a blood vessel**
• **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**	• **To ensure the patient safety and accuracy in administration of the medication**
• **Quickly withdraw the needle while applying firm pressure and support on the needle site**	• **To prevent backflow of the medication and bleeding**
• **Immediately discard needle and syringe into sharps container**	• **For safety of self, staff and patient**
• **Indicate time and sign on the prescription sheet**	• **For accountability**
• **Record in the medication register**	• **For accountability and balancing medication records**

D. Evaluation

Evaluate	**Rationale**
• **The client's/patient's response to the medication**	• **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

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

Steps	Rationale
• **Wash and dry hands**	• **For infection prevention and control**
• **Assemble and arrange equipment and take to the bedside or the ward procedure room**	• **To promote access and efficiency**
• **Take treatment sheet and ampoule or vial of the prescribed medication from the tray and with the assistant check the rights of medication administration**	• **To prevent medication error**
• **Remove the metal cap from the vial using a file**	• **To access the rubber stopper**
• **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**	• **To minimize microorganisms at the rubber site for puncture**
• **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**	• **To ensure safe access to the medication and prevent contamination of the medication**
• **If the medication is to be diluted, reconstitute it with the correct amount of sterile water for injection and mix well**	• **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**
• **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**	• **To facilitate withdrawal of medication from the vial**
• **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**	• **To ensure accurate measurement of the dose**
• **Remove used needle and discard in sharp container and replace with new needle, place the medication in the syringe in the kidney dish**	• **To prevent tissue injury associated with blunt needle, minimize pain to the client and facilitate administration of the medication**
• **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**	• **To minimize medication error, promote efficiency and ensure medication safety**
• **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**	• **To promote cooperation and safe administration and for comfort**

• **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)** Figure 1.18 Subcutaneous Injection Deposits Medications at 45^0-90^0 into the Subcutaneous Tissue (Adapted from Craven & Hirnle, 2000) Figure 1.18 Subcutaneous Injection Deposits Medications at 45^0-90^0 into the Subcutaneous Tissue (Adapted from Craven & Hirnle, 2000)	• **To ensure blood vessels and other structures are not damaged during medication administration and to reduce transmission of micro-organisms**
• **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**	• **To ensure medication is delivered into the subcutaneous tissues**
• **If no blood is seen, push the medication in slowly but steadily until the piston reaches the end of the barrel**	• **To ensure accuracy in administration and the patient's safety**
• **Quickly withdraw the needle while applying firm pressure and support on the needle site**	• **To prevent backflow and bleeding**
• **Immediately discard the needle and the syringe into sharps container**	• **To promote safety of both the patient and the nurse**
• **Indicate time and sign on the prescription sheet**	• **To communicate to other staff and reduce double dosing**
• **Record in the medication register**	• **For accountability and balancing medication records**

D. Evaluation

Evaluate	Rationale
• **The client's/patient's response**	• **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

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

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

• **Assemble and arrange the equipment and take to the bedside or the ward procedure room**	• **For efficiency and easy access**
• **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**	• **To prevent medication error**
• **Remove the metal cap from the vial using a file**	• **To access the rubber stopper**
• **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)**	• **To avoid contamination while ensuring safe access to the medication**
• **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.**	• **To ensure safe access to the medication and prevent contamination**
• **If the medication is to be diluted/reconstituted, dilute the medication with the correct amount of sterile water for injection and mix well**	• **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**
• **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**	• **To ensure accurate measurement of dose**
• **Place the medication in the syringe in the kidney dish**	• **To facilitate administration of the medication**
• **Explain the procedure to the client/patient a second time and ask him/her not to move while the injection is being given**	• **To promote cooperation and safe administration**
• **Help the client/patient to choose the site to be injected. (For BCG, the site is prescribed in the immunization policy. 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)**	• **To promote cooperation and safe administration**
• **Inspect the site for lesions, inflammation, oedema, tenderness and scars from previous injections**	• **To ensure absorption and expected effects of the medication. For rotation of repeated injections**
• **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 ≤1/8 inch below the skin (FIG 1. 19)** *Figure 1.19 Gently Insert Needle with Bevel up at an Angle of 5^0-15^0 Until Dermis Barely covers the Bevel (Adapted from Craven & Hirnle, 2000)* *Figure 1.19 Gently Insert Needle with Bevel up at an Angle of 5^0-15^0 Until Dermis Barely covers the Bevel (Adapted from Craven & Hirnle, 2000)*	• **To facilitate administration of medication with minimal pain**
• **Observe for wheal formation**	• **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**

• **Withdraw the needle while applying firm pressure and support using a swab on the needle site**	• **To prevent backflow and bleeding**
• **Do not massage the site**	• **To ensure medication is not quickly dispersed into tissues altering the therapeutic effect**
• **Immediately discard the needle and the syringe into sharps container**	• **To promote safety for both the client/patient, the nurse and staff**
• **Indicate the time and sign on the prescription sheet**	• **To communicate to other staffs and prevent double dosing of medication**
• **Record in the medication register**	• **For accountability and balancing of medication records**
• **Appreciate client for cooperation**	• **To enhance the patient's positive experience of the procedure**

D. Evaluation

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

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

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

• **Anxiety related to anticipatory pain**	• **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
• **Wash and dry hands**	• **For infection prevention and control**
• **Assemble and arrange the equipment and take them to the bedside or the ward procedure room**	• **To promote efficiency**
• **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**	• **To prevent medication errors**
• **Take ampoule or vial of the prescribed medication from the tray and check the rights of medication with assistant**	• **To ensure that the medication is being administered to the right person as prescribed**

• **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.**	• **To prevent contamination and ensure safe access to the medication**
• **If the medication is to be diluted, dilute the medication with the correct amount of diluent.**	• **To ensure even distribution of active ingredients**
• **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.**	• **To facilitate withdrawal of medication from the vial**
• **Withdraw the required amount of medication and counter check with the assistant**	• **To ensure accurate measurement of the dose**
• **Remove used needle and discard in sharp container and replace with new needle. Place the medication in the syringe in the kidney dish.**	• **To prevent use of blunt needle, minimize pain and facilitate administration of the medication**
• **Check the rights of medication administration again with an assistant and take the kidney dish containing the medication to the bed side while the assistant takes care of the medication trolley.**	• **To minimize medication errors**
• **Explain the procedure to the patient for the second time and ask the patient not to move while the injection is being administered**	• **To promote cooperation, efficiency and safe administration**
• **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.**	• **To prevent air entry and confirm the patency of the vein**
• **Carefully and slowly over the prescribed duration, inject the medication while observing the patient's reaction**	• **To prevent adverse reaction from uncontrolled plasma levels concentration of medication**
• **Clear cannula by infusing 1-2mls of sterile water for injection**	• **To ensure that the entire dose is infused into the circulatory system and to prevent phlebitis**
• **Remove the syringe while applying pressure on the intravenous line**	• **To prevent back flow of the medication and blood**
• **Immediately discard needles and syringe into sharps container**	• **For infection prevention and control**
• **Indicate the time and append signature on the prescription sheet**	• **For accountability and continuity of care**
• **Record in the medication register**	• **For accountability and balancing medication records**

D. Evaluation

Evaluate	**Rationale**
• **The client's/patient's response to the medication**	• **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

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

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
Handheld Nebulizer	
• **Perform hand hygiene**	• **For infection prevention and control**
• **Assemble the equipment and take to the bed side**	• **To promote organization and efficiency**
• **Take the medication and check the rights of medication administration with an assistant**	• **For accuracy and prevention of medication errors**
• **Set up the medication(s). Look at the medication at eye level if using droppers to dispense the solution into the nebulizer**	• **For accuracy and prevention of medication errors**
• **Pour the entire amount of the medication(s) into the nebulizer cup taking care not to touch the medication**	• **To determine the correct amount and accurate dosage of the medication and prevent contamination**
• **Cover the cup with the cap and fasten**	• **To avoid spillage and reduce the transmission of microorganisms**
• **Fasten the T-piece to the top of the cap**	• **To prevent spillage of the medication**
• **Fasten a short length of tubing to one end of the T-piece**	• **To provide a connector for the mouthpiece**
• **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**	• **To provide dead space to prevent room air from entering the system and medicated aerosol from escaping**
• **Assist the client/patient to fowler's position**	• **To promote better expansion of the lungs**
• **Attach tubing to the bottom of the nebulizer cup and attach the other end to the air compressor or wall oxygen**	• **To provide a channel for the compressed air**
• **Before turning it on, adjust the wall oxygen valve to 6 liters/min**	• **To drive the medication into a mist or wet aerosol form**
• **Leave the air on for about 6 to 7 minutes until the medications get used up**	• **To allow the client to receive the entire dose of medication**
• **Instruct the client/patient to breathe in and out slowly and deeply through the mouthpiece/mask with lips tightly sealed around the mouthpiece**	• **To promote efficacy of the medication in the airways**
• **Remain with the client/patient until effective inhalation-exhalation technique is observed**	• **To ensure the correct use of the nebulizer**
• **When the nebulizer cup is empty, turn off the compressor or wall air and detach the tubing from the compressor and the nebulizer cup**	• **To ensure correct dosage has been administered**
• **Wash and dry hands**	• **For infection prevention and control**
Metered-Dose Nebulizer	
• **Assess the client for ability to use the metered-dose nebulizer**	• **To ensures accuracy in the administration of medication**
• **Wash and dry hands before administering medication and don clean gloves**	• **For infection prevention and control**
• **Shake the prepackaged nebulizer**	• **To allow even distribution of medication particles**
• **Place the nebulizer into the applicator**	• **To allow proper administration of the medication**
• **Place the aero chamber onto the nebulizer if needed**	• **To provide dead space for the medicated mist while the client/patient inhales**
• **Have the client place the mouthpiece in his mouth**	• **To deliver medication to the lungs through the proper route**

• **Have the client press down on the pre-packaged dispenser as she/he simultaneously inhales**	• **To allow delivery of the medication to the lungs**
• **If there is an aero chamber attached to the nebulizer, have the client inhale slowly and deeply**	• **To allow proper delivery of the medication**
• **Observe the client for several minutes to assess for possible adverse effects from the medication**	• **To aid in planning for necessary intervention**
• **Clear and dispose equipment according to institution policy**	• **To aid in preparation for the next use**
• **Wash and dry hands**	• **For infection prevention and control**
• **Record the medication administration and observations**	• **For communication to other health providers and to ensure a record of care and continuity of care**

D. Evaluation

Evaluate	**Rationale**
• **The client's/patient's condition immediately and at 5 -10 minutes following the treatment**	• To determine the effectiveness of or the reaction to medication
• **Vital signs and, oxygen saturation**	• 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

Subtitle: 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**
• **The equipment required**	• To confirm availability of requirements
• **The client's/patient's readiness for the procedure**	• To plan with the client/patient on the procedure
• **The suitability of the site**	• 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
• **Take the equipment to the bedside, screen the bed**	• **For ease of access and privacy**
• **Follow the rights of medication**	• **To prevent medication error**
• **Wash, dry hands and put on gloves**	• **For infection prevention and control**
• **Request the patient to position him/herself appropriately**	• **To access the site easily**
• **Expose only the part to be treated**	• **To ensure privacy and respect to the patient**
• **Prepare the area of medication appropriately**	• **To ensure effectiveness of the medication**
• **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**	• **To ensure an even distribution of the medication on the site**
• **Bandage the site if indicated**	• **To keep the medication on site**
• **For patches prepare the site by shaving if it is hairy**	• **To ensure the patch sticks to the skin appropriately**
• **Take the tray and trolley to the procedure room**	• **To clear equipment and prepare for next use**
• **Clear the equipment, clean them with soap and water, rinse, dry and store/dispose the disposable items**	• **To prepare for next use**

D. Evaluation

Evaluate	Rationale
• **The comfort of the patient**	• To determine if the expected outcome was achieved
• **Whether the right medication was applied at the affected site**	• 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

Subtitle: 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
• **Condition of the external structures and canal of the ear**	• To provide baseline data for further planning of the management
• **Whether the patient has symptoms of discomfort or hearing loss**	• To detect hearing impairment due to occlusion which may change after medication instillation
• **The client's/patient's ability to grasp and manipulate the dropper**	• 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
• **Explain the procedure to the client/patient**	• **To ensure understanding, reduce anxiety, gain cooperation and obtain informed consent**
• **Wash hands and assemble requirements**	• **For infection prevention and control**
• **Position the patient in upright position with the affected ear facing upward**	• **To ensure the best position for instillation of the ear drops**
• **Observe rights of medication administration**	• **To prevent medication errors**
• **Wash hands and wear clean gloves**	• **For infection prevention and control**
• **Pull the pinna of the ear upward and the auditory meatus backward for adults or downwards and backwards for children**	• **For clear visibility and ease of medication administration**
• **Instill prescribed drops holding the dropper 1/2inch above the opening of the ear canal**	• **For accuracy of administration**
• **Position a piece of cotton wool ball at the opening if medication is running out**	• **To prevent spillage of medicine**
• **Ask the patient to remain in the same position for 2-3 minutes**	• **To ensure maximum absorption of the medication**
• **Decontaminate equipment and discard other wastes appropriately, remove gloves and wash hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Signs of discomfort**	• To determine response to medication
• **Condition of external ear for ability to hear**	• 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

Subtitle: 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
• **The client's/patient's history of allergies**	• To prevent allergic reactions
• **Condition of the eyes**	• To provide baseline data for further planning of the management
• **Whether the client/patient has symptoms of discomfort**	• To guide on further plan of action
• **The client's/patient's ability to grasp and manipulate the dropper**	• 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
• **Explain the procedure to the client/patient**	• **To ensure understanding, reduce anxiety, gain cooperation and obtain informed consent**
• **Assemble requirements**	• **For efficiency during the procedure**
• **Position the patient in supine position**	• **For clear visibility and ease of drug administration**
• **Follow the rights of medication**	• **To prevent medication error**
• **Wash hands and wear clean gloves**	• **For infection prevention and control**
• **Clean the affected eye(s) with a cotton wool swab moistened with normal saline**	• **To remove dirt**
• **Use each cotton wool ball for only one stroke, moving from the inner to the outer canthus of the eye**	• **To prevent solution or tear from flowing towards the other eye**

• **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**	• **For accuracy of administration**
• **Instill prescribed drops holding the dropper 1/2inch above the opening of the eye**	• **To prevent possible contact and traumatization of the eye**
• **Position a piece of cotton at the opening if medication is running out**	• **To ensure maximum absorption of the medication**
• **Ask the patient to remain in the same position for 2-3 minutes**	• **For absorption of the medication**
• **Wipe off excess solution with gauze or cotton wool balls**	• **For comfort and the patient's hygiene**
• **Decontaminate equipment and dispose other waste appropriately, remove gloves and wash hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **Signs of discomfort**	• To determine response to medication
• **Condition of the eyes**	• 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

Subtitle: 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**
• **The patient for any contraindications for the procedure e.g. paralytic ileus**	• For baseline data to guide on management
• **The patient for post gastro-intestinal and gynecological surgery**	• 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 1.22 Tray for Rectal Washout

Figure 1.22 Tray for Rectal Washout
Figure 1.21 Tray for Administration of Enema

Figure 1.21 Tray for Administration of Enema

Bottom shelf;

- Toilet paper
- Air freshener
- Receiver for soiled linen

C. Implementation

Steps	Rationale
• **Screen the patient's bed**	• **To ensure privacy**
• **Wheel the trolley to the bedside**	• **For efficiency during the procedure**
• **Wash hands, dry and put on glove**	• **For infection prevention and control**
• **Ask the assistant to position the patient in the left lateral position with knees flexed and buttocks moved to the side of the bed**	• **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**
• **Drape the patient**	• **To maintain dignity of the patient**
• **Lubricate the rectal tube/catheter**	• **To prevent trauma to the anal and rectal mucosa by reducing surface friction**
• **Expel any air in the tubing then clamp**	• **To minimize chances of distension which will cause unnecessary discomfort to the patient**

• **Insert the tube, in an upward and forward motion**
  • **Adults (7cm – 12cm)**
  • **Child 5 – 7cm**
  • **Infant 2.5 – 3.375 cm**
 	
NB: **Note any resistance during the passage of the tube**
	• **For ease of passage and prevent injury to the rectal mucosa**
	
	NB: Any resistance may indicate, impacted stool, growth or tumor

• **Release the clip slowly to allow the prescribed solution to run in by gravity and then clip the tube (Fig.1.23)** Figure 1.23 Raising Enema Solution to above Rectum and Instilling Slowly Aided by Gravity (Adapted from Craven & Hirnle, 2000) Figure 1.23 Raising Enema Solution to above Rectum and Instilling Slowly Aided by Gravity (Adapted from Craven & Hirnle, 2000)	• **To bypass the anal canal and ensure that the nozzle is in the rectum. This is to avoid increasing peristalsis.**
• **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**	• **To promote comfort and prevent expulsion of the solution**
• **Gently withdraw the catheter and urge the patient to retain the fluid as long as possible**	• **To maximize the effect of the enema**
• **Place the rectal tube in a receiver as you withdraw it**	• **To minimize contamination and prevent infection**
• **Assist the patient to a sitting position on the bedpan commode or toilet**	• **To facilitate the act of defecation**
• **Ask the patient not to flush the toilet**	• **To allow the nurse to examine /observe the stool**
• **If specimen is required use a bed pan or commode**	• **To facilitate specimen collection**
Clearing	
• **Clear equipment and decontaminate as necessary, wash and dry hands**	• **For infection prevention and control**
• **Leave the patient comfortable**	• **To promote recovery from the procedure**
Suppository	
• **Place the patient in left lateral position**	• **For ease of the procedure**
• **Put on gloves**	• **For infection prevention and control**
• **Lubricate the tip of the suppository tube**	• **To minimize the discomfort associated with the process of suppository insertion**
• **Pass the suppository into the anal canal advancing upwards to the length of the index finger**	• **To help in directing the suppository into the anal**
• **Ask the patient to hold suppository as long as possible then go to the toilet or use bed pan**	• **To allow the suppository to melt and release the active ingredients**
Clearing	
Same as for enema procedure	
For Rectal Washout	
• **In rectal washout, prepare irrigation solution and repeat procedure until returns are clear**	• **Clear returns from the rectum indicate the success of the procedure**
• **All other aspects of the procedure as in enema**	• **For effectiveness of the procedure**

D. Evaluation

Evaluate	**Rationale**
• **Whether the patient tolerated the procedure or not**	• To determine the patient's physiologic and psychological status during and after the procedure
• **Whether the desired effects for the procedure were achieved**	• 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

Subtitle: 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
• **Availability of lockable cupboards**	• To ensure safe custody of the drugs
• **Staff knowledge on the use of drug registers**	• To enhance competence in the use of the register
• **Staff knowledge on law governing dangerous drugs**	• 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
• **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.**	• **To ensure that the nurse conforms with the DDA regulations**
• **Open medicine cupboard and then DDA cupboard and remove the DDA register. Open the page with the record of drugs to be given.**	• **To allow the nurse to confirm the accuracy of the balance before administration is done**
• **Remove all the stock of the drugs to be given, count and then countercheck with the stock.**	• **To promote accuracy in counting so that no drugs are missed out**
• **Remove the dose to be given, check with assistant and place on the tray, return the remaining stock in the DDA cupboard.**	• **To prevent medication error, ensure that only the required dose is removed and promote safe custody of the drug**
• **Enter all the details of the patient, time, date, drug dose and stock at hand. Both nurses must sign.**	• **For accountability, follow up and facilitation of balancing and maintenance of the drug register**
• **Return the DDA register back into the DDA cupboard. Lock the cupboard and then lock the general cupboard.**	• **To ensure DDA regulations for safe custody of DDA drugs and the register are observed**
• **The two nurses should give the drug to the patient and record in the patient's treatment sheet.**	• **To minimize chances of drugs being given to the wrong patient or taken away by unauthorized persons, and accountability purposes**

Antibiotics	
• **Enter the details of the patient in the antibiotic register**	• **To ensure accountability and follow up**
• **Bring forward the stock of the drugs remaining after subtracting the medications given**	• **To confirm the accuracy of the balance before administration is done**
• **Enter all antibiotics given during drug administration session as appropriate**	• **To facilitate balancing and accurate maintenance of the antibiotics register**
• **Record drugs at every shift and both nurses who checked should sign in the antibiotic register**	• **To facilitate close control and accountability**
• **Enter all antibiotics ordered and received in the antibiotic register**	• **For accountability, follow up and facilitation of balancing and maintenance of the drug register**
• **Balancing of all the antibiotics should be done every 24hrs, preferably in the morning and the balance brought forward to the next page**	• **To facilitate control, early identification of errors and allow appropriate corrective measures**
• **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**	• **To ensure that only potent drugs are kept in the ward, prevent expired agents into the ward**

D. Evaluation

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

Title: Admission, Transfer and Discharge of a Patient

Subtitle: 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**
• **The physiological state of the patient**	• To determine if the patient can tolerate the admission procedure or if there are emergency interventions required before completing the admission process
• **The provisional diagnosis**	• 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 coach

C. Implementation

Steps	Rationale
• **Welcome the patient and his/her companion (s) and offer them a seat**	• **To enhance comfort and relaxation**
• **Receive the report of the patient from the accompanying nurse**	• **For continuity of care and planning for appropriate interventions**
• **Verify the admission documents**	• **To confirm that all relevant documents are available**
• **Identify the patient and apply identification band**	• **To ensure right interventions are done to the right patient**
• **Explain the procedure to the patient and companions**	• **To promote cooperation and enhance the patient's understanding of the process**
• **Take history from the patient and/or companion they are comfortable with.** ***(Refer to procedure 1.1-2, History Taking)***	• **To establish baseline data and formulate nursing diagnosis**
• **Provide the examination gown to the patient**	• **To ease the process of physical examination**
• **Assist the patient to the examination coach**	• **To facilitate the physical examination**
• **Perform physical examination *(Refer to procedure 1.1-3)***	• **To establish baseline data, validate subjective data and facilitate clinical judgment on the patient's diagnosis**
• **Thank the patient and companion and give feedback on the assessment findings**	• **To gain cooperation and involve them in the care**
• **Take the patient to the allocated bed**	• **To settle the patient and make him/her comfortable**
• **Inspect all valuables and identify items to be taken home by the companion**	• **To ensure safety of the patient's property**
• **Give the necessary instructions and release the companions**	• **To gain their cooperation and involve them in the patient's care**
• **Label, make a list and appropriately store items that must be left in the ward**	• **To ease identification of the patient's property and avoid loss**
• **Orient the patient to the ward**	• **To promote quick adjustment to hospital environment, relieve anxiety**
• **Ensure the patient takes a bath (if necessary) and changes into hospital gown**	• **To improve the patient's image and hygiene status**
• **Administer due treatment**	• **For continuity of care**
• **Inform the ward clinician to review the patient**	• **To ensure prompt clinical judgment**

• **Develop a nursing care plan**	• **For systematic, organized and quality care**
• **Keep the patient's file in the file cabinet**	• **To ensure safe custody of legal documents for reference**
• **Clear the examination room**	• **For safe custody of equipment and in readiness for subsequent use**

D. Evaluation

Evaluate	Rationale
• **If the patient is well settled**	• To identify areas where more information is required
• **If the patient is well informed of the disease process and treatment regimen**	• To allow participation in own management
• **Adequacy of interventions provided**	• 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

Subtitle: 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
• **The reason for transferring/ referring the patient**	• To determine relevance of the activity
• **Patient's current physical condition**	• To determine the appropriate timing and means of transfer/ referral
• **Protocol of transferring/referring the patient**	• 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
- Dully filled referral forms

C. Implementation

Steps	Rationale
• **Explain to the patient and family the procedure, the process and available alternatives**	• **To inform, alleviate anxiety and fear related to transfer/referral and allow questions and clarifications**
• **Notify the nurse on the receiving ward/hospital and transport team**	• **To ensure adequate preparedness**

• **Gather and label the patient's personal belongings**	• **To ensure the patient's belongings are safely transferred**
• **Update all medical records on the patient's care during their stay** NB: **For transfer, carry all the medical records and for referral carry the referral letter**	• **To ensure effective continuity of care**
• **Assist the patient to wheel chair or stretcher where applicable**	• **To ensure the patient is transferred safely**
• **Accompany the patient to their designated location**	• **To intervene in case of the patient's change of condition**
• **Alert the receiving nurse of the arrival of the patient**	• **To start the process of admission and ease handing over**
• **Hand over to the nurse in the receiving unit a verbal and written report of the patient**	• **For continuity of care**
• **Document the outcome of referral/transfer**	• **To provide evidence of nursing care and management**

D. Evaluation

Evaluate	**Rationale**
• **If the referral/ transfer process was successful**	• To ensure effectiveness in subsequent referrals/ transfers
• **The patient's reaction during transfer/ referral**	• 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

Subtitle: 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**
• **The level of readiness of the patient for discharge**	• To determine and plan for appropriate interventions for health promotion and optimal functioning
• **The level of preparedness of the patient's/ companion for discharge**	• To determine teaching needs for the companion and plan for the patient's follow up care
• **The home environment**	• To identify any assistance required and intervene as necessary
• **The mode of travel**	• 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
• **Explain the procedure to the patient and companion and expectations after discharge**	• **To promote cooperation**
• **Wash and dry hands**	• **For infection prevention and control**
• **Perform a complete physical assessment**	• **To confirm suitability for discharge**
• **Clear all hospital equipment**	• **To make the room tidy and prepare for subsequent examination**
• **Provide health education on disease process, drug regimen and follow-up**	• **To ensure compliance, avoid relapse of the disease and facilitate understanding of the patient's/companion's role in follow up care**
• **Assemble the patient's personal belongings and hand over to them**	• **To ensure safe and organized handling of patient's belongings**
• **Update all the documentation and medical records**	• **To provide evidence of care during hospital stay**
• **Thank the patient/ companions and remind them of the follow up care**	• **For appreciation and ensure compliance**
• **Assist the patient to wheel chair or stretcher where applicable**	• **To ensure safe movement of patient**
• **Accompany the patient with their belongings, discharge documents, and discharge medication to the transport area**	• **To ensure the patient leaves the hospital safely**

D. Evaluation

Evaluate	Rationale
• **The patient's understanding of his/her role in the treatment at home**	• To determine if the patient requires further clarification concerning his/her treatment
• **The success of the discharge process**	• To plan for necessary intervention
• **Contents of discharge notes, medication and follow up schedules**	• 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

Title: 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
• **The patient's condition and working diagnosis**	• To anticipate the type of patients being managed
• **The number and type of patients to be reviewed**	• To allow for adequate time allocation and equipment needed
• **Preparedness of the patient for the procedure**	• To encourage the patient's cooperation and contribution to his/her care
• **The patient's understanding of his/her condition**	• To determine teaching needs of the patient during the ward round
• **The state and the quality of the environment**	• To avoid distraction during the ward round
• **Required equipment and supplies**	• 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
• **Wash and dry hands**	• **For infection- prevention and control**
• **Wheel trolley to the bedside where the round begins and move from one patient to another as required**	• **To ensure order during the ward round**
• **Provide an update on the patient's current health status and advocate for their care needs**	• **To update the ward round team on the current health status of the patient**
• **Discuss and evaluate the patient's condition**	• **To identify any emerging issues and health education gaps of the patient**
• **Allow the patient to join in the discussion, ask questions and clarify any information**	• **To promote the patient's participation in own plan of care and alleviate their anxiety and fear**
• **Document any new plan of care and interventions during the ward round**	• **To ensure interventions are not missed out and additional care is implemented**

• **Emphasize on the priority intervention(s) of the identified patient**	• **To help the health care team to implement the patient's immediate needs**
• **Thank the patient and leave him/her comfortable**	• **To show appreciation and ensure the patient is satisfied**
• **Sanitize/ wash hands and move to the next patient**	• **For infection prevention and control**
• **Clear the trolley after the ward round is complete**	• **For preparation for the next procedure**

D. Evaluation

Evaluate	Rationale
• **If all patients have been reviewed**	• To ensure no omission
• **Whether all orders for investigations and prescriptions have been written**	• For continuity and follow up of care
• **The patient's understanding of subsequent management**	• 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

Title: 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
• **Own knowledge of the client's/patient's diagnosis and the current management**	• To know what to include in the report
• **The progress of the patient**	• To determine the patient's response to the management
• **Readiness of authorized staff to receive report**	• 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
Verbal Report	
• **Get a private room to discuss about the patient's progress throughout the shift**	• **To ensure shared confidentially of the patient's information**
• **The voice should be audible and the staff receiving the report should have notebooks to record the report**	• **To ensure that they capture the content of the report**
• **Capture and maintain the attention of all staff members as one staff attends to patients while you give the report**	• **To ensure continuity of the patient's care during the hand over session**
• **Allow the staff receiving the report to ask for clarification of reports and any other relevant questions**	• **To verify information given**
• **Carry out a nurse's round for all patients**	• **To be able to relate the information given and the patient**
General Reports	
Examples; • **Number of patients in the ward** • **New admissions** • **Transfers in and out** • **Discharges** • **Deaths (if any)**	**To give a general overview of expected workload for the purpose of planning ward activities**
Special Reports	
• **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**	• **To enhance wholistic quality care to the patient and continuity of care**
• **Carry out a nurses' round for all patients**	• **To provide a detailed report about a patient. For adequate planning and administrative facilitation of continuity of care**

D. Evaluation

Evaluate	Rationale
• **Completeness of information given**	• To determine quality of the report and identify gaps for inclusion
• **Area of concern during the report giving**	• For correction and improvement in subsequent reports
• **Reliability of information gathered**	• To validate the information gathered

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

Title: Nutrition and Elimination

Subtitle: 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: Orogastrictube preferred

A. Assessment

Assess	Rationale
• **The patient's suitability for naso-gastric tube (NGT) insertion**	• To rule out any contraindications
• **The equipment to be used in the procedure**	• To ensure availability
• **The patient's readiness for the procedure**	• 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
• **Take the equipment to the bedside and screen the bed**	• **To enhance accessibility**
• **Put on the plastic apron**	• **To protect the nurses' uniform from splashes**
• **Perform hand hygiene and put on gloves**	• **For infection prevention and control**
• **Ask the assistant to position the patient appropriately- fowler's position for conscious, semi-fowlers position for unconscious and lateral or prone for neonates**	• **To prevent aspiration and enhance ease of procedure**
• **Using wet gauze, clean mucus from the nares**	• **To clear the nasal passage for the tube**

• **Approximate the length of the tubing needed by measuring the distance from the tip of the nose to ear lobe, then to ximphisternum and mark with a marker pen (Fig 2.1)** *Figure 2.1 Measuring Length of Nasogastric Tube (Adult) (Adapted from Remote PHC Manuals, 2017)* *Figure 2.1 Measuring Length of Nasogastric Tube (Adult) (Adapted from Remote PHC Manuals, 2017)*	• *Figure 2.2 Measuring Length of Nasogastric Tube (Infant & Child)* *(Adapted from About Kids Health, 2017)* *Figure 2.2 Measuring Length of Nasogastric Tube (Infant & Child)* *(Adapted from About Kids Health, 2017)*
• **Drape the patient's neck and chest appropriately**	• **To prevent the patient from getting soiled**
• **Tilt the head, lift the chin and hyperextend the patient's neck**	• **To facilitate smooth entry of the tube into the nasal passage**
• **Using a pen torch, assess the patency of the nares**	• **To prevent trauma to the mucus membrane**
• **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** NB: **for unconscious patients swallowing saliva does not apply**	• **To enhance easy entry of tube to the stomach**
• **If the patient shows signs of distress e.g. gasping or cyanosis, remove the tube immediately**	• **This shows that the nasogastric tube has entered the trachea**
• **Aspirate 2mls of the stomach contents and test with litmus paper** OR • **Introduce 5-20mls of air into the stomach via a syringe and check for bubbling sounds using a stethoscope placed over the epigastrium** • **Place the proximal end of the tube just above the surface of the water in the medicine cup and observe for presence of bubbles**	• **To confirm the location of the tube is in the stomach**
• **Spigot and secure the tube to the tip of the nostril using an adhesive tape**	• **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**
• **The general condition of the patient before, during and after the procedure**	• 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

Subtitle: 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
• **Explain the need and benefits of the procedure and obtain informed consent**	• To allay anxiety and enhance the patient's cooperation
• **Type, amount and frequency of feed**	• To ensures right feeds
• **The patient's readiness for the procedure**	• 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

C. Implementation

Steps	Rationale
• **Check the expiry date of the feed if commercial preparations**	• **To enhance accessibility**
• **Warm the feed to room temperature**	• **To prevent esophageal spasms**

• **When an open system is used, clean the top of the feeding container with disinfectant before opening it**	• **For infection prevention and control**
• **Test if tube is in the stomach (refer to step 12 of Nasogastric tube insertion)**	• **To prevent aspiration and enhance ease of procedure**
• **Aspirate gastric residual volume and measure the amount prior to administering the feed** NB: **If ≥100mls 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**	• Figure 2.3 Items for Nasogastric Tube Feeding *(Adapted from Kozier et. al., 2000)* Figure 2.3 Items for Nasogastric Tube Feeding *(Adapted from Kozier et. al., 2000)*
Feeding bag/ Continuous feeds	
• **Hang the bag from the infusion pole about 30cm (12in) above the feeding tube's connection to the Nasogastric tube**	• **To allow gravitational flow**
• **Clamp the tubing and add the feed to the bag. Open the clamp, run the feed through the tubing and re-clamp the tube**	• **To allow displacement of air from the tubing**
• **Commence the feed and regulate flow to the drop factor**	• **To avoid irritation of the Gastrointestinal tract**
Syringe/ Bolus feeds	
• **Remove the plunger from the syringe and connect the syringe to the clamped nasogastric tube**	• **To prevent air entry into the stomach**
• **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)** *Figure 2.4 Bolus Feeding* *Figure 2.4 Bolus Feeding*	• **To avoid irritation of the gastrointestinal tract**
• **Flush the Nasogastric tube with lukewarm water as prescribed**	• **To maintain patency of the tube**
Prefilled bottle with drip chamber (closed system)	
• **Remove the screw from the cap of the container and attach the administering set to the drip chamber and tubing**	• **To discontinue the flow and allow for reassessment**
• **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**	• **To ease of the flow of feed**
• **Open the clamp and run the formula through the tubing**	• **To dispel air from the tubing**
• **Regulate the drip rate to deliver feeds over the desired length of time**	• **To ensure the prescribed amount of feed is delivered at the required time**
• **Using a syringe with prescribed amount of warm water rinse the feeding tube immediately after all the formula runs through**	• **To maintain patency of the tube**

• **Clamp and cover the feeding tube with spigot**	• **To prevent entry of air into the stomach**
• **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**	• **To prevent aspiration**
• **Clear equipment and dispose waste according to the institution's waste management policy**	• **To promote safety for self, patient and staff**

D. Evaluation

Evaluate	Rationale
• **Tolerance to feeds**	• To determine the need for an alternative method of feeding
• **Nutritional status of the patient**	• 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 color of residual feeds
- Subsequent plan of care

Subtitle: 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
• **The need for suctioning**	• To determine the patient's suitability for the procedure
• **The patient's understanding of the procedure**	• 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
• **Assist the client to a semi-fowler's position if not contraindicated**	• **To promote efficient suction and prevents reflux of gastric contents**
• **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**	• **To confirm that the tube is in the stomach**
• **Observe the amount, color, odor and consistency of the drainage**	• **To determine the characteristics of the content**
• **Inspect the suction system for patency e.g. kinks or blockages of the tubing and tightness of the connections**	• **To prevent air entry**
• **Clean the client's nostrils as needed, using the cotton tipped applicators and water and Apply a water-soluble lubricant or ointment**	• **To maintain skin integrity and promotes the patient's comfort**

D. Evaluation

Evaluate	Rationale
• **Relief of abdominal distension or discomfort**	• To determine success of the procedure
• **Presence/absence of bowel sounds**	• To determine if there is intestinal obstruction
• **Character and amount of gastric drainage, integrity of nares and hydration level of oral mucous membranes**	• To determine appropriate interventions
• **Patency of the tube**	• 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, color and consistency of the drainage
- Nursing interventions during the procedure

Subtitle: 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
• **The need for removal**	• 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
• **Prepare the equipment required screen the bed and place the client in fowlers position**	• **To facilitate efficiency and effectiveness of the procedure while providing privacy**
• **Put on appropriate Personal Protective Equipment**	• **For infection prevention and control**
• **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**	• **To prevent soiling of the patient and linen for infection prevention and control**
• **Have the client hold emesis basin and disposable waterproof pad while the tube is removed** NB: **In case of feeding pump disconnect the pump prior to removal of nasogastric tube**	• **To prevent accidental spilage**

D. Evaluation

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

Subtitle: 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
• **The need for gastrotomy tube feeding**	• To determine the patient's suitability for the procedure
• **Tube placement**	• To enhance safety and good outcome
• **The abdomen for distension and tenderness**	• 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
• **Explain the procedure to the patient**	• **To address any concerns and allay anxiety**
• **Elevate the head of the bed to 30 degrees**	• **To allow gravitational flow of the feed and prevent reflux**
• **Perform hand hygiene**	• **For infection prevention and control**
• **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**	• **To check the patency and position of the tube and check whether the previous feed has been digested**
• **Attach funnel/syringe and flush tubing with 15 – 20mls of water**	• **To preserve patency of the tube**
• **Before all water has run through, pinch off tubing and add feed till funnel/syringe is half full.**	• **To prevent introduction of air**
• **Release tubing to allow feed to run slowly, adding the remaining feed before it empties**	• **To prevent gastrointestinal irritation**
• **After administering the appropriate amount of feed flush the tubing with prescribed amount of warm water**	• **To prevent accumulation of foods in the tubings, promote patency and minimize colonization of the tube with microorganisms**

• **Disconnect the funnel/syringe from tubing and replace the spigot and clean any spillage with gauze swab**	• **To prevent backflow, air entry and contamination**
• **Maintain the elevated position for 30 – 60 minutes after feeding**	• **To prevent reflux**
• **Check the dressing around the gastrostomy tube and change if necessary**	• **For infection prevention and control around the site**
• **Clear equipment and dispose waste according to the institution's waste management policy**	• **To promote safety for self, patient and staff and terminate the procedure**

D. Evaluation

Evaluate	Rationale
• **The patient's outcome**	• To determine the patient's tolerance to the feeds and whether the nutritional needs have been met
• **If the client's nutritional needs have been met**	• 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

Subtitle: 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
• **The client's/patient's condition**	• To establish suitability of the procedure
• **The client's understanding of the need for gastric washout**	• Allay anxiety, establish the patient's cooperation and determine education needs
• **The appropriateness of the working environment**	• 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
• **Wheel the trolley to the client's/patient's bed side**	• **To enhance efficiency of the procedure**
• **Explain the procedure to the client and state what is required of him/her**	• **To allay anxiety and gain cooperation**
• **Position the client appropriately (high fowler or lateral position)**	• **For the client's comfort and ease of the procedure**
• **Cover the patient with a bath towel / protective mackintosh**	• **To protect the client/patient from soiling and avoid wetting of linen**
• **Place the bucket on the floor then connect the tube to the funnel and clamp**	• **To direct to where the stomach contents would be emptied**
• **Perform hand hygiene and don gloves**	• **For infection prevention and control**
• **Lubricate the end of the stomach tubing and instruct the patient to swallow as you insert the tube through the mouth into the stomach**	• **To minimize trauma**
• **Hold the funnel above the client and fill it ¾ way with the irrigating fluid**	• **To facilitate flow by gravitational force**
• **Unclamp and add more fluid**	• **To prevent air entry and allow siphoning of the fluid**
• **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**	• **To allow the fluid to pour out (for effectiveness of the washout)**
• **Repeat the process until only clean fluid comes out**	• **To ensure total washout from the stomach**
• **Position the client and remove the bed screens**	• **To aid the client's comfort**
• **Clear used equipment according to institutional policy guidelines**	• **For infection prevention and control**
• **Take a sample in a specimen container if indicated from the specimen jug**	• **For diagnostic purposes**
• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **The client's outcome**	• To determine efficiency and effectiveness of the procedure and need for further interventions
• **Characteristics of aspirated fluids**	• 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

Subtitle: 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 labor
- 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
• **The need for catheterization**	• To determine suitability for the procedure
• **History of allergies to antiseptics or rubber**	• To determine decision on the type of antiseptics, catheter and gloves to use
• **The patient's understanding of catheterization procedure**	• 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**
• **Perform hand hygiene**	• **For infection prevention and control**
• **Adjust the bed to a suitable height and position the patient in a dorso– recumbent position**	• **To prevent strain and ensure efficiency of the procedure**
• **Perform surgical scrub**	• **For infection prevention and control**
• **Ask the assistant to open the sterile pack and use the sterile hand towel to dry hands**	• **To prevent contamination of the sterile pack**
• **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**	• **To maintain a sterile field and minimize contamination**
• Female	
• **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**	• **To locate the urethra; and infection prevention**
• *Figure 2.5 Spreading The Labia to Expose Urinary Meatus* *(Adapted from Craven & Hirnle, 2000)* *Figure 2.5 Spreading The Labia to Expose Urinary Meatus (Adapted from Craven & Hirnle, 2000)*	• **To prevent introduction of external microorganisms into the urethra during the procedure** *Figure 2.6 Cleansing Urinary Meatus with a Down Ward Stroke. (Adapted from Craven & Hirnle, 2000)* *Figure 2.6 Cleansing Urinary Meatus with a Down Ward Stroke. (Adapted from Craven & Hirnle, 2000)*
• **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) in an upward and backward direction**	• **To facilitate smooth entry of the catheter and prevent trauma to the urethra**
• **Place a kidney dish against the perineum to receive urine**	• **To prevent soiling of the bed and allow for urine collection**

• **When urine is obtained, withdraw catheter if intermittent. If indwelling, fill the balloon with sterile water or air (Fig 2.7)** *Figure 2.7 Inflating Balloon with Prefilled Syringe (Adapted from Craven & Hirnle, 2000)**Figure 2.7 Inflating Balloon with Prefilled Syringe (Adapted from Craven & Hirnle, 2000)*	• **To prevent catheter from dislodging**
• **Insert spigot or connect urine bag as indicated, secure the catheter to the thigh with strapping**	• **To allow for continuous urine flow and prevent catheter from dislodging**
• **Dress/cover the patient**	• **To promote privacy and comfort**
• **Perform hand hygiene**	• **For infection prevention and control**
• Male	
• **Position the patient in supine with only genitalia exposed**	• **To ensure maintenance of the client's dignity and privacy**
• **Cover the patient's legs to mid-thigh**	• **To provide comfort and privacy**
• **The assistant to open catheterization tray**	• **To prevent contamination**
• **Perform surgical scrub, dry hands using sterile towel and put on sterile gloves**	• **For infection prevention and control**
• **The assistant opens sterile lubricant and pours it into the gallipot with care not to contaminate the sterile field**	• **The gel will lubricate the catheter**
• **Lubricate catheter**	• **To prevent trauma to urethra**
• **The assistant puts antiseptic lotion in the gallipot**	• **To prevent self - contamination**
• **Dip cotton wool swabs in the antiseptic for cleaning the glans penis**	• **For disinfecting the urethra**
• **Inflate catheter balloon to check for any defects**	• **To check for catheter defects prior to insertion**
• **Place fenestrated drape over the patient's genitalia**	• **To expose the genitalia and create a sterile field**
• **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 un sterile)**	• **To straighten the urethra, preventing contamination of the sterile field**
• **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**	• **For infection prevention and control and eliminate external microorganisms**
• **Use forceps to pick gauze and dry the meatus**	• **To prevent introduction of cleansing solution into the urethra**
• **With the sterile hand, pick the catheter and lubricate it generously**	• **To facilitate easy passage and reduces chances of urethral trauma**

• **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**	• **To allow sufficient space to inflate the retention balloon inside the bladder and not inside the urethra where it would cause trauma**
• **Gently pull slightly on the catheter to check placement**	• **To prevent resistance for a successful inflation of the catheter**
• **Connect distal end of the catheter to a drainage bag**	• **To enable flow of urine and continuous drainage of the urinary bladder**
• **Secure catheter with tape**	• **To stabilize catheter preventing accidental dislodgement and irritation of the urethra from catheter movement**
• **For non-circumcised patient, gently replace the foreskin over the gland's penis**	• **If left retracted, foreskin can cause constricting oedema and impaired circulation to the penis**
• **Attach drainage bag to bed frame carefully ensuring the loops don't fall into dependant loops**	• **To ensure patency and effective urine flow**
• **Dress/cover the patient**	• **To promote privacy and comfort**
• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **Whether the urine is draining and the distension has been relieved**	• To determine whether the catheter system is patent
• **For any discomfort and abnormalities in urine**	• 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, color and characteristics of urine.
- Any unusual discomfort during insertion and difficulties encountered in passing the catheter smoothly.
- If specimen was taken to the laboratory

Subtitle: 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**
• **The need for the procedure**	• To determine suitability of the patient for the procedure
• **The patient's understanding of the procedure**	• To allay anxiety and enhance cooperation
• **If the patient is allergic to antiseptics, rubber or the irrigation fluid**	• 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
• **Perform hand hygiene and don gloves**	• **For infection prevention and control**
• **Ask the assistant to open the sterile pack**	• **To expose the sterile items without contamination**
• **Assist the patient to assume dorsal recumbent position, if male supine position. Fold the linen to expose the catheter without exposing the patient**	• **To expose the work area and maintains the patient's dignity**
• **Place mackintosh and towel under the patient's buttocks, if female cover the thighs, if male cover the upper abdomen with a blanket**	• **To prevent soiling of bed linen, provides privacy and warmth to the patient**
• **Cleanse and dry perineal area and discard gloves. Wash hands and don gloves**	• **To eliminate and minimize normal flora**
• **Cleanse irrigation port of catheter with the recommended antiseptic solution**	• **For infection prevention and control**
• **Connect tubing or irrigation fluid to irrigation port of the catheter**	• **To enhance readiness for the procedure**
• **Slowly open roller clamp on irrigation tubing and adjust drip rate**	• **To provide continuous flushing of clots and debris from bladder**
• **For intermittent irrigation, clamp and release catheter and adjust flow of irrigation fluid as per instructions**	• **To allow proper exchange of fluids, electrolytes and uptake of medication**
• **Clear the working area and leave the patient comfortable**	• **To maintain a hygienic environment and promote the patient's comfort**
• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **The patient's response during the procedure**	• To determine appropriate subsequent interventions
• **The characteristics of the urine and presence of clots**	• 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

Subtitle: 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
• **The need for the procedure**	• To determine suitability of the patient for the procedure
• **The patient's understanding of the procedure**	• 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
• **Perform hand hygiene**	• **For infection prevention and control**
• **Place mackintosh and towel under the buttocks if female or place mackintosh and towel over the thighs if male**	• **To keep the patient and beddings dry**
• **Remove adhesive securing the catheter. Using the syringe withdraw all the water from the balloon, perform hand hygiene and don sterile gloves**	• **To ease removal and minimize risks for urethral trauma**
• **Gently pull out the catheter and place it in a receiver. If unable to remove catheter easily proceed stop and consult**	• **To withdraw the catheter without causing trauma to the urethra leading to post catheterization strictures**
• **Inspect the catheter for completeness**	• **To ensure that no piece is left inside the patient**
• **Dry perineal area with towel or clean with warm soapy water if required**	• **To promote the patient's hygiene and comfort**
• **Clear the equipment appropriately**	• **To prepare for subsequent use**
• **Make bed and leave the patient comfortable**	• **To promote comfort**

• **Decontaminate instruments in accordance with institutional guidelines then perform hand hygiene**	• **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
• **Presence of any trauma that may have occurred during the procedure**	• For appropriate interventions
• **Patient's discomfort**	• To rule out infection or injury

E. Documentation

Record:

- Date and time of catheter removal
- Amount, color, 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

Title: Oxygenation

Subtitle: 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
• **The client's status by carrying out a physical examination**	• For baseline data for comparison during and at the end of the procedure
• **Airway patence**	• To determine the need for oxygen supplementation
• **The patient's understanding of condition and the ability to follow instructions**	• 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

C. Implementation

Steps	**Rationale**
• **Perform hand hygiene**	• **For infection prevention and control**
• **Explain the procedure to the patient and reassure him/her**	• **To allay anxiety and promote co-operation**
• **Assemble the equipment and connect the various gadgets**	• **To enhance readiness for the procedure**
• **Connect the patient to the pulse oximeter and monitor the work of breathing**	• **To record oxygen saturation and monitor the patient's condition**
• **Correctly position the oxygen delivery device and secure it in place (Fig 2.10)** *Figure 2.8 Humidifier, Reservouir Bag Tracheostomy Mask,* *T-Tube and a Simple Face Mask* *(Adapted from Altman, 2004)* *Figure 2.8 Humidifier, Reservouir Bag Tracheostomy Mask,* *T-Tube and a Simple Face Mask* *(Adapted from Altman, 2004)* *Figure 2.10 Correct Position of a Simple Face Mask* *Figure 2.10 Correct Position of a Simple Face Mask*	• *Figure 2.9 Piped System Oxygen Apparatus* *Figure 2.9 Piped System Oxygen Apparatus*
• **Open the cylinder, start oxygen flow and close the flow meter**	• **To allow for smooth outflow of oxygen and prevents wastage**
• **Regulate the oxygen flow as required**	• **To deliver the right amount**
• **Encourage the patient to breath normally (where possible)**	• **To ensure efficiency of the system and allay anxiety of the client/patient**
• **Clear the environment after the procedure**	• **To ensure clean and tidy environment**
• **Perform hand hygiene**	• **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_2 of between 94% - 98% (PaO_2 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 colors (black and white)

D. Evaluation

Evaluate	Rationale
• **The patient's breathing pattern and oxygen saturation levels and vital signs**	• To determine effectiveness of O2 administration
• **The patient's tolerance to the selected method of delivery**	• 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

Subtitle: 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
• **For anxiety and restlessness**	• To determine need for extra interventions
• **Respiration rate, rhythm and depth**	• To evaluate airway status and determine need for suctioning
• **The client's understanding of the suctioning procedure**	• To fill in any knowledge gaps and enhance co-operation
• **Lung fields by auscultation**	• To determine air exchange and obstruction of the tube
• **Arterial blood gas and/or pulse oximetry value**	• To determine oxygen levels and adequate air exchange
• **Passage of air through the tracheostomy tube**	• 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
• **Assess the depth, rhythm and rate of respirations and auscultate breath sounds**	• **To determine need for suctioning**
• **Assemble supplies on the bedside table**	• **For easy accessibility during the procedure**
• **Perform hand hygiene, don personal protective equipment**	• **For infection prevention and control**
• **Position the patient on side or back with the head of bed elevated**	• **To facilitate maximal breathing during the procedure**
• **Turn suction machine on and place a finger over the end of tubing attached to suction machine**	• **To test suction pressure (should range from 50mmHg in infants to 80-120 mmHg in adults)**
• **Administer oxygen directly or by use of Bag Valve Mask before beginning procedure**	• **To increase the level of oxygen in the blood and prevent hypoxia during the procedure**
• **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**	• **To allow easier passage of the suction catheter and maintain cleanliness of the inner cannula**
• **Place towel under the client's chin and don sterile gloves**	• **For infection prevention and control**
• **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**	• **To maintain catheter sterility and ensures correct attachment of catheter**
• **Insert the suction catheter into the trachea without suction**	• **To prevent trauma to the tracheal mucosa**
• **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**	• **To increase removal of mucus secretions while minimizing irritation to tracheal mucosa**
• **Connect oxygen to the patient or bag using non-rebreather mask depending on the patient's condition**	• **To re-oxygenate the client and prevents hypoxia**
• **Suction for not more than 10 seconds**	• **To prevent alveoli collapse and hypoxia**
• **Assess airway and repeat suctioning as necessary**	• **To ensure that airways are patent for adequate oxygenation**

• **Clean inner cannula using tracheostomy brush and rinse well in sterile water or sterile saline. Reinsert inner cannula and lock into place**	• **To prevent secretions from obstructing outer cannula**
• **Dry or open new disposable inner cannula**	• **For infection prevention and control**
• **Administer humidified oxygen or compressed air**	• **To prevent dryness of mucous membrane and formation of crust in the airway**
• **Clear the environment, remove gloves and discard as per the institutional policy then perform hand hygiene**	• **For hygienic and infection prevention and control purposes**

D. Evaluation

Evaluate	Rationale
• **Patency of airway by auscultating for breath sounds**	• To assess if breath sounds are clear and confirm ventilation for adequacy
• **Arterial blood gas and/or pulse oximetry results**	• To determine level of oxygen saturation (SaO_2) and take necessary action
• **The client for signs of dyspnoea**	• To rule out any other cause of airway obstruction
• **Consistency, color, amount and odor of secretions**	• 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, color and odor of secretions
- Arterial blood gas and/or pulse oximetry reading

Subtitle: 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
• **Condition of client/patient (level of consciousness, excess peristomal secretions, excess intratracheal secretions)**	• To establish need for the procedure
• **The patient and family's understanding of the tracheostomy tube care**	• To identify the patient's educational needs and promote participation of the client self-care
• **The patient's ability to ventilate the lungs effectively through the tube**	• To ensure adequate oxygenation to the lungs
• **The need for cleaning or changing the dressing**	• For improved hygienic status
• **Respiratory status (breath sounds, breathing pattern, depth and rhythm of respiration)**	• To ensure normal pulmonary respiration process and proper ventilation
• **Skin around the tracheal site**	• 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
• **Perform hand hygiene and don gloves**	• **For infection prevention and control**
• **Stabilize the neck plate with the non-sterile hand (or have the assistant do so)**	• **To ease removal of the tube and minimize movement to avoid trauma of the trachea**
• **Pick the sterile gauze with fingers of the sterile hand and use this to unlock the inner cannula**	• **To minimize infection**
• **Gently slide out the cannula and place it in a bowl of normal saline solution**	• **To prevent discomfort and trauma to the trachea and enable cleaning**
• **Unwrap catheter, suction outer cannula and have the client take deep breaths or use BVM to deliver 100% Oxygen**	• **To remove residual secretions while providing oxygenation to the patient**
• **Disconnect suction catheter and discard as per institutional guidelines**	• **For infection prevention and control**
• **Remove soiled dressing and discard**	• **To keep the skin clean and minimize risk of infection**
• **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**
• **Clean the skin under the neck plate of tube with cotton applicators moistened with normal saline**	
• **Dry the skin with sterile gauze. Use dry pipe cleaner to dry the lumen of the tracheostomy tube**	• **To prevent dampness which can lead to excoriation of the skin**
• **Slide inner cannula into outer cannula, hold the neck plate stable with one hand and turn inner cannula clockwise to lock it** NB: **If not doing tie change discard gloves and clear the working area**	• **To secure the tracheostomy tube prevent blockage**

One-person Technique of Changing Tracheostomy Ties	

• **Prepare the clean tracheostomy ties**
  • **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**
  • **Opens Velcro ties on continuous neck band**
	• **In preparation for securing the tracheostomy tube**

• **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**
• **Insert one end of the tape through the opening on the other side of the tracheostomy tube neck plate from back to front**	
• **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**	• **To secure the tube and prevent dislodgement**
• **Untie and remove old tracheostomy tapes and discard. Hold the neck plate firmly with one hand while untying the old tapes**	• **To minimize risk of infection and to support the secured tube in the correct position**
• **Place one finger under tracheostomy ties**	• **To minimize the risk of reduced cerebral flow due to external pressure**
Two-person Technique of Changing Tracheostomy Ties	
• **Cut two pieces of twill tape about 12 to 14 inches in length**	• **In preparation for securing the tracheostomy tube**
• **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**	• **To prepare tape for insertion and ease of tying**
• **Have an assistant gently hold the tracheostomy tube in place with fingers on both sides of the neck plate**	• **To prevent accidental decannulation**
• **Untie old tracheostomy ties and discard**	• **To replace with new ones**
• **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**	• **To secure tracheostomy tube in the correct position**
• **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**	• **To prevent tightness and interference with circulation**
• **Insert one finger under tracheostomy tapes and insert tracheostomy gauze under the neck plate of the tube**	• **Prevent irritation of skin from secretions and friction from tracheostomy tube**
• **Remove gloves and clear environment then perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **If tracheostomy site has healed with minimal drainage and erythema**	• To determine effectiveness of interventions
• **For any evidence of infection**	• To enable early intervention
• **If the patient maintains a patent airway**	• To ensure effective oxygenation and maintenance of normal respiratory process

• **If the inner and outer cannulae are free of secretions and ties are clean and secured**	• 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

Subtitle: 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
• **The client's respiratory status by auscultating both lungs**	• To assess status of the lung
• **If the chest tube is set to the appropriate amount of suction as prescribed**	• Suction draws the air or fluid from the pleural space and it is essential that the appropriate amount is applied
• **Whether the water level in the water seal chamber is maintained at the marked line**	• To facilitate clinical decision on replacing the water
• **For an air leak in the water seal chamber**	• To prevent atelectasis
• **If the chest tube connections and dressings are secure (change dressing every 24 to 48 hours)**	• To determine need for change
• **The drainage system and note the amount and color of the drainage**	• To determine need for change and necessary interventions
• **The tubing for kinks and dependent loops and ensures that it is not pinned to the bed**	• To enhance adequate drainage of the chest tube and prevent accidental dislodgement of the tube
• **The drainage system for tipping over, dropping or crashing**	• To prevent trauma to the collection system and destruction to the pleural cavity
• **Risk factors for a tension pneumothorax in the client with a chest tube**	• 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
• **Perform hand hygiene and don gloves**	• **For infection prevention and control**
• **Assemble equipment at the bedside and screen the bed**	• **To ensure efficiency and maintain privacy of the patient**
• **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**	• **To facilitate drainage of fluid from the pleural cavity**
• **Set the suction pressure to 20cm of water**	• **To provide ideal negative pressure**
• **Connect the tubings tightly to the chamber and to the patient**	• **To be ready for the procedure**
• **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**	• **To facilitate clinical judgment on the need to change the tube**
• **Assess that all connections at the site are spiral wrapped with silk tape**	• **To prevent the tube from pulling apart and the silk tape is a strong adhesive**
• **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 color and amount**	• **To prevent air from being drawn in**
• **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)** *Figure 2.11 Drainage System lower than Client and Tubings Have No Kink* *Figure 2.11 Drainage System lower than Client and Tubings Have No Kink*	• **To prevent backflow of drainage fluids**
• **Monitor the tubing for kinks, and dependent loops**	• **To prevent kinks that interfere with the drainage of the chest tube**

• **Ensure that a bottle of sterile water or saline is at the client's bedside**	• **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.**
• **Ensure that an occlusive dressing is applied on the chest tube**	• **To secure the system and decrease the risk of pneumothorax**
• **Ensure that the chest tube is never milked or stripped to maintain patency**	• **To prevent an increase of pressures up to 400cm of water, which can cause damage to lung tissue and vasculature**

D. Evaluation

Evaluate	**Rationale**
• **If drainage system was maintained**	• To confirm effectiveness of interventions
• **The patient's tolerance to the procedure**	• To confirm effectiveness of interventions
• **Prevention of cross infection to the patient**	• To confirm adherence to infection prevention and control guidelines
• **Chest tube and drainage system are maintained in a safe manner**	• 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 color

Subtitle: 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**
• **The patient's condition**	• To determine need for the procedure
• **The patient's airway for predictors of difficult intubation e.g. short neck, mallampati classification**	• To prepare for appropriate interventions
• **The patient's understanding of the need for intubation**	• To allay anxiety and ensure effectiveness of the procedure
• **The integrity of the cuff, pilot balloon and valve by confirming appropriate inflation/deflation prior to use**	• 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

• **Move the bed away from the wall to allow access for two health care providers and assembled equipment**
  • **Remove the headboard from the bed or position the patient's head for ease of accessibility**
  • **The assistant should be on the right side of the person inserting the ETT and have ready access to the required equipment**
  • **Place the patient supine unless otherwise directed. This is dependent on the patient's tolerance and the nurse's preference**
	• **To ensure effectiveness and efficiency in performance of the procedure**

• **Remove any false teeth, bridges or foreign objects, such as body piercings, from the mouth**	• **To prevent airway obstruction from the objects**
• **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**	• **To align the oral, pharyngeal and laryngeal axes allowing visualization of the trachea and efficiency and effectiveness of the procedure**
• **Monitor capnography ($ETCO_2$ or color metric device) if available**	• **To determine the patient's oxygenation status**
• **Administer Sedation/Local or general anaesthetic agents as per institutional guidelines**	• **To prevent teeth clenching, relaxation of the muscles, maintenance of a patent airway and effective procedure**

• **Open the patient's mouth and place an oropharyngeal airway**	• **To avoid rolling back of the tongue and blocking the airway**
• **Hyper-oxygenate the patient using a Bag Valve Mask**	• **To displace nitrogen from the alveoli and ensure oxygen reservoir in the alveoli (maintain PEEP)**
• **Remove oropharyngeal airway**	• **To facilitate start of the procedure**
• **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**	• **To enable visualization and locating the orolarynx**
• **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**	• **To establish airway patency and to facilitate for ventilation and oxygenation**
• **Auscultate for peripheral breath sounds at the mid-axillary point/region using a stethoscope, over the epigastrium, then the upper and lower lung fields**	• **To confirm the tube placement position**
• **Inflate the ETT where applicable and secure the ETT using ties or tapes**	• **To prevent dislodgment of the tube and air leakage**
• **Monitor vital signs and hemodynamic status of the patient hourly pre and post intubation and daily or as required**	• **To establish baseline parameter**
• **Perform hand hygiene**	• **For infection prevention and control**
• **Request for chest x-ray**	• **To confirm the tube location**

D. Evaluation

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

Subtitle: 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
• **The need for mechanical ventilation, support for the patient as well as the ordered settings for the ventilation**	• To provide information for clinical judgement
• **The patient's vital signs, arterial blood gas (ABG) results, airway patency and chest expansion, SPO_2**	• To obtain information on oxygenation state of the patient for planning and appropriate interventions
• **The patient's level of comfort and consciousness**	• 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
• **Perform hand hygiene and don gloves**	• **For infection prevention and control**
• **Confirm and test the ventilator with the biomedical staff and ensure appropriate setting is done according to the client/patient's needs**	• **To ensure respiration functions are maintained to as near normal as possible**
• **Attach mechanical ventilator to endotracheal tube/ tracheostomy tube once the tube is secured**	• **To aid the patient for effective ventilation**
• **Compare the ventilator settings with ordered settings and observe the ventilator as it functions**	• **To ensure adequate oxygenation and prevent ventilator related injuries**
• **Ensure availability of functional suction equipment, resuscitation equipment, cardiac monitoring equipment, respiratory monitoring unit, neurological monitoring equipment at the bedside**	• **To ensure emergency preparedness in case of resuscitation need arises**
• **Monitor vital signs; observe the client for distress and discomfort**	• **Altered vital signs may indicate that mechanical ventilator settings need to be adjusted and the client may need medication for pain or anxiety**

• **Monitor Arterial blood gases (ABGs) four hourly initially or as situation dictates**	• **To ensure that adequate oxygenation is being supplied to the client**
• **Remove gloves and perform hand hygiene**	• **For infection prevention and control**
• **Periodically empty accumulated water from tubing. Ensure there is no water in the tubing prior to changing the patient's position**	• **To prevent a reduction of airflow and resistance during the process and prevent water from moving from the tubing into the lungs**
• **Ensure that the Bag valve Mask is at hand on the resuscitation trolley/tray**	• **To save time should the ventilator fail or an emergency arises**
• **Perform oral hygiene to the client**	• **To maintain oral hygiene and minimize infection related to the procedure**
• **Continuous documentation of interventions and changes in the ventilator settings**	• **To provide information on continuity of care and a record of actions**

D. Evaluation

Evaluate	Rationale
• **The patient and family's understanding of the need for mechanical ventilation**	• To determine education need
• **If pain and anxiety are controlled to ensure ventilation is successful**	• Facilitates recovery
• **The patient's response/tolerance to the procedure**	• To provide additional information necessary for nursing care
• **If the patient's Arterial Blood Gas Analysis and oxygen saturation levels are within normal limits, showing adequate oxygen delivery**	• 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

Subtitle: 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_2, and/or end-tidal CO_2 while on minimal ventilatory support, ventilation with FiO_2 less than / equal to 40 and CPAP less than / equal to 8 cm H^20

A. Assessment

Assess	Rationale
• **The patient's readiness for extubation as per indication**	• To determine the patient's ability to support their own ventilation and oxygenation
• **Time the patient last fed. Need for the patient to remain nil orally four hours prior to extubation or empty gastric contents**	• To prevent aspiration during the procedure
• **The patient's understanding of the procedure**	• 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_2 source
- O_2 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
• **Explain the procedure to the patient**	• **To allay anxiety and ensure ease of procedure**
• **Ensure the patient is connected to a cardiac monitor**	• **Provides baseline data and alerts the nurse to changes in vital signs**
• **Position the patient in semi or high fowler's position (paediatrics: 45 degrees unless contraindicated)**	• **To maintain a patent airway and allow for easy flow of secretions**
• **Perform hand hygiene and don PPE (face shield, clean gloves)**	• **For infection prevention and control**
• **Pre-oxygenate the patient with 100% O_2 using the Bag Valve Mask. N/B Hyper oxygenation not recommended for children with certain congenital heart defects**	• **To maximize oxygen reservoir in the alveoli and the rest of the body (To maintain Positive End Expiratory Pressure- PEEP)**
• **Suction the mouth and the pharynx**	• **To clear secretions and ensure a patent airway**
• **Give a large breath and withhold as the cuff is being deflated (repeat until clear)**	• **To force secretions above the cuff**
• **Unfasten or cut the tape or ETT securing device while maintaining a firm grip on ETT**	• **In readiness for removal of the endotracheal tube**
• **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,** DO NOT PROCEED**.**	• **To ease removal of the ETT and determine the patient's ability to sustain spontaneous breathing; prevents trauma to tracheal lining**
• **If patient can cooperate, ask patient to take in a deep breath then quickly and gently remove ETT at peak inspiration. In pediatric patients apply positive pressure with Bag Valve Mask and remove tube during peak inspiration** NB: **If the ETT does not come out easily, do not attempt to force the removal**	• **To maximize oxygen reservoir in the alveoli and the rest of the body (To maintain Positive End Expiratory Pressure)**

• **Instruct the patient to cough immediately after removal of the ETT and suction secretions**	• **To clear the airway and improve oxygenation**
• **Administer the same or slightly higher Fraction of inspired oxygen (FiO_2) as prior to extubation**	• **To maintain same level of oxygenation**
• **Monitor the patient closely and obtain Arterial Blood Gas Analysis (ABGAs), SPO_2 after one (1) hour**	• **To establish the patient's acid base balance in comparison with the baseline data before extubation by sustaining adequate oxygenation**

D. Evaluation

Evaluate	Rationale
• **The patient's respiratory patterns i.e. respiratory rate, rhythm, depth, pre and post extubation**	To determine the patient's ability to maintain ventilation and oxygenation on their own
• **The patient's hemodynamic status pre and post extubation e.g. oxygen saturation, arterial blood gas analysis**	•

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

Title: Circulatory System

Subtitle: 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
• **The patient's condition and baseline observations**	• To determine assistance required and identify conditions that may contraindicate use of a specific site
• **Type of laboratory test required**	• To plan for the requirements for collecting the sample
• **Prospective sites and integrity of the veins to be punctured. Appropriateness and frequency of the test required**	• To avoid multiple venepuncture and the patient's discomfort
• **The patient's readiness for the procedure**	• 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
• **Explain the procedure to the patient**	• **To allay anxiety and promote cooperation**
• **Perform hand hygiene**	• **For infection prevention and control**
• **Identify the patient and wheel equipment trolley to the bedside**	• **To provide an organized approach to the procedure and ensure safety for the client and the nurse**
• **Screen the patient if in the ward, otherwise venepuncture should be done in the procedure room especially for children**	• **To provide privacy**
• **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**	• **For ease of the procedure**
• **Place the mackintosh under the site for venepuncture**	• **To avoid soiling linen**
• **Perform hand hygiene and don clean gloves**	• **To reduce the risk of infection to both the client and the nurse**
• **Apply tourniquet 7-10cms above the selected site. The tourniquet should be able to be removed by pulling the end with a single motion**	• **To provide improved visibility of the veins; allows the selected vein to engorge**
• **Check for the distal pulse**	• **In the absence of pulse means the tourniquet is applied too tightly and should be reapplied loosely**
• **Have the client clench his/her fist prior to venepuncture. Maintain tourniquet only for 1–2 minutes**	• **To increase the venous distension and enhance visibility of the vein**

• **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**	• **To ensure straight, intact veins for easier puncture**
• **If the tourniquet has been on too long, release it and let the client rest for 1–2 minutes before reapplying tourniquet**	• **To prevent tissue hypoxia due to prolonged ischemia**

• **Prepare to obtain the blood sample. Technique varies depending on equipment used:**
  • Syringe method: **Have syringe with appropriate needle attached**
  • Vacutainer method: **Attach double-ended needle to Vacutainer tube and have the proper blood specimen tube resting inside the vacutainer. Do not puncture the rubber stopper yet**
	• **For accurate and adequate sample collection**

• **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**	• **For disinfecting the skin prior to venipuncture**
• **Remove the needle cover and alert the client that he/she will feel the needle prick for a few seconds**	• **To prepare the patient psychologically for the prick**
• **Place the thumb or forefinger of the non-dominant hand 1 inch below the site and pull the skin taut**	• **To help stabilize the vein during insertion**
• **Hold syringe needle or vacutainer at 15-30°angle from the skin with the bevel up**	• **To reduce the chance of penetrating through the vein during insertion. and trauma to the skin and vein**

• **Slowly insert needle/vacutainer. Technique varies depending on equipment used:**
  • Syringe method: **Gently pull back on syringe plunger and look for blood return. Obtain desired amount of blood into the syringe**
  • Vacutainer method: **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**
	• **To prevent puncture through the other side of the vein.**
	  • If blood does not appear, the needle is not in the vein.
	  • 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

• **After the specimen collection is completed, release the tourniquet**	• **To reduce bleeding from pressure when the needle is removed**
• **Apply 2x2 gauze over the puncture site without applying pressure and quickly withdraw the needle from the vein**	• **To prepare for needle removal and help to gently prevent the skin from pulling with the needle removal**
• **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)**	• **To stop bleeding and minimize formation of a hematoma**

• **For Syringe method to transfer blood into the specimen bottles:**
  • **Using one hand, insert the syringe needle into the appropriate 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**
  • **If any of the blood tubes contain additives, gently rotate back and forth 8–10 times**
	•
	  • To prevent needle stick injury
	  • To ensure that the additive is properly mixed throughout the specimen

• **Inspect the client's puncture site for bleeding. Reapply clean gauze and tape if necessary**	• **To keep the site clean and dry**
• **Assist the client into a comfortable position. Return the bed into low position with guard rails up if appropriate**	• **To provide comfort and safety for the client**
• **Check the specimen tubes for any external blood and decontaminate with alcohol as appropriate**	• **For infection prevention and control**
• **Label the specimen tubes. Place the tubes into appropriate bags/containers for transportation to the laboratory**	• **To ensure the specimens are properly identified and processed on time**
• **Dispose off needles, syringe, and soiled equipment into proper container**	• **For infection prevention and control and needle stick injury**
• **Remove, dispose off gloves and perform hand hygiene**	• **For infection prevention and control**
• **Send specimens to the laboratory**	• **To facilitate timely handling of specimens and timely results**
For Cannulation **After applying tourniquet and palpating for the vein, have the following considerations in mind:**	
• **Select the most distal vein first to avoid bony prominence**	• **To reduce discomfort and prevent inadvertent infiltration from venous puncture**
• **Aseptically prepare the site and allow the alcohol/antiseptic to remain on the site for 30 seconds before venepuncture**	• **For infection prevention and control**
• **Remove the cannula needle cover and explain to the patient that the needle will be introduced to the vein**	• **To facilitate cooperation during the procedure**
• **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**	• **To stabilize the vein during insertion**
• **Introduce cannula at 15- 30 degrees over the vein in line with direction of blood flow**	• **To align the vein and promotes the patient's safety, prevent movement as the needle is introduced**
• **Advance the cannula until a backflow of blood is observed in the flash chamber**	• **To get access and confirm successful entry into the vein**
• **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 center of vein lumen**	• **To confirm establishment of venous access**
• **Remove the needle**	• **To prevent puncturing of the opposite vein wall, maintains vein integrity and prevents infiltration and dislodgement**
• **Flush the cannula with sterile water for injection or normal saline. Secure the cannula with adhesive tape**	• **To prevent coagulation and maintain patency of the line**

• **Apply splints and bandage if in a child**	• **To provide support and to prevent dislodgment of the cannula**
• **Leave the patient comfortable and clear all used equipment appropriately**	• **To enhance the patient's comfort, safety and tidiness of the environment**
• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Site for bleeding or haematoma**	• To institute appropriate interventions where necessary
• **The patient's understanding of the purpose of the tests**	• 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)

Subtitle: Maintaining an Intravenous Insertion Site

Definition:

This is a nursi7ng 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
• **The client understands of the need for IV therapy**	• To provide information on teaching needs
• **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**	• To facilitate interventions to prevent further damage
• **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**	• 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
• **Review the prescription for IV therapy**	• **To ensure validity of the procedure**
• **Review the client's/patient's history for medical conditions or allergies**	• **To prevent risk of fluid over load and allergic reactions**
• **Review the client's/patient's IV site record, intake and output record**	• **To assess for potential problems with fragile IV sites and fluid balances**
• **Perform hand hygiene**	• **For infection prevention and control**
• **Obtain the client's/patient's vital signs**	• **To determine physiological status of the patient**
• **Check the IV fluid rate, volume, patency of tubing and additives at the beginning of the shift (Fig 2.12, Fig 2.13 below)**	• **To ensure the client's/patient's is receiving correct therapy**
• **Check IV tubing for either tight connections, dislodgement or leaks after every 4 hours (Fig 2.14 below)**	• **To ensure there are no fluid leaks from the tubing and connections**
• **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** NB: **If an occlusive dressing is used, do not remove the dressing when assessing the site**	• **To monitor extravasations and resultant phlebitis that could lead to tissue necrosis**
Figure 2.12 Check the IV Fluid Rate, Volume, Patency of Tubing and Additives at the Beginning of the Shift *Figure 2.12 Check the IV Fluid Rate, Volume, Patency of Tubing and Additives at the Beginning of the Shift*	*Figure 2.13 Aspirate for Blood Return when Assessing for Patency* *Figure 2.13 Aspirate for Blood Return when Assessing for Patency*
• **Observe the vein track for redness, swelling warmth or pain hourly and document IV site findings in the nursing record or fluid chart**	*Figure 2.14 Check for tight Connections and Infiltration Hourly* *Figure 2.14 Check for tight Connections and Infiltration Hourly* • **To detect early signs of phlebitis**
• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **For signs of infection and impairment of skin integrity**	• To determine the quality of care given
• **Patency and dislodgement of the cannula**	• To determine need for change

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

Subtitle: 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
• **The client's understanding (if conscious) of the procedure**	• To determine education needs
• **The patient's ability to lie in the supine position without a pillow**	• To assess if the patient can tolerate the procedure
• **The patient's vital signs, intake and output**	• 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
Taking a CVP with a Manometer	

• **Perform hand hygiene and don gloves**	• **For infection prevention and control**
• **Explain procedure to the patient**	• **To allay anxiety and promote cooperation**
• **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**	• **To obtain accurate measurements**
• **Connect the IV fluid (normal saline) to a three-way stopcock and flush the other two ports**	• **To flush air out**
• **Perform hand hygiene, don sterile gloves and mask**	• **For infection prevention and control**
• **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**	• **To prepare for the commencement of the procedure**
• **Allow normal saline to flow rapidly into the patient for a few seconds, with stopcock closed towards the manometer**	• **To establish the patency of the line and in readiness for the procedure**
• **Turn the stopcock to fill manometer with normal saline up to the 20cc mark above the upper limit of normal CVP range**	• **To allow fluctuations for accurate reading (normal CVP reading varies from 6 to 12cm of water)**
• **Hold manometer at the phlebostatic axis and turn the stopcock off to the normal saline and release manometer fluid to the patient**	• **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)**
• **Watch as the fluid falls in the manometer. Mark the central venous pressure reading when the fluid stabilizes**	• **To establish actual CVP reading**
• **Turn the stopcock off from the manometer**	• **To prevent air entry to the manometer at the end of the procedure**
• **Store the manometer in an upright position (usually hanging from the IV pole)**	• **To prevent air bubbles from entering the fluid column on the client and to prevent contamination of the manometer**
• **Perform hand hygiene**	• **For infection prevention and control**
• **Document reading**	• **To communicate findings for continuity of care**
Taking a CVP with a Transducer	
• **Perform hand hygiene**	• **For infection prevention and control**
• **Prime the transducer and the IV lines that are attached to it using appropriate solution (usually heparinized normal saline)**	• **To be ready for the procedure and to prevent clotting**
• **Place the IV bags into a pressure bag and apply pressure on the IV solution**	• **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)**
• **Connect the IV pressure tubing from the transducer to the central line then connect the transducer to the pressure monitoring equipment**	• **To prepare for the commencement of the procedure**
• **Place the patient in the supine position with the bed flat if tolerated**	• **For accuracy of the readings**
• **Level the pressure transducer to the phlebostatic axis and zero the monitor according to the manufacturer's instructions**	• **To initiate the procedure**
• **The CVP will appear on the monitor. (if the reading varies use the reading obtained at the end of the patient's expiration)**	• **To obtain the actual reading**
• **Return the patient to a position of comfort**	• **For the patient's comfort**

• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **CVP findings and the patient's condition during and after the procedure**	• 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

Subtitle: 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
• **The client's understanding regarding the need for IV therapy**	• To provide information on teaching needs
• **The patient's condition**	• To determine the rate and type of solution to be infused
• **Condition of the venepuncture cannula**	• To confirm the cannula patency and identify signs of infection
• **Vital signs**	• 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
• **Review the patient's record**	• **To verify order for IV therapy and history for medical conditions or allergies**
• **Explain the procedure to the patient**	• **To allay anxiety**
• **Perform hand hygiene and don clean gloves**	• **For infection prevention and control**
• **If necessary perform venepuncture *(Refer to procedure 2.3-1, Performing a Venepuncture)***	• **To obtain IV-line access**
• **Verify the type, volume, expiration date of the infusion solution and examine the IV solution for particles, abnormal discoloration and cloudiness**	• **To ascertain correct solution, prevent risk of fluid overload; suitability and allergic reactions**
Preparing the bag	
• **Place the bag on a flat, stable surface or hang it on an IV pole/drip stand**	• **To support the bag while fixing the administration spike**
• **Remove the protective cap or tear the tab from the tubing insertion port and remove the protective cap from the administration set spike**	• **To prepare for the administration spike insertion**
• **Hold the port firmly with one hand, and insert the spike with your other hand**	• **For ease of spiking**
• **Hang the bag on the IV pole, and squeeze the drip chamber until its half full**	• **To facilitate flow by gravity**
• **Label the bag with the patients name and identification number, date and time, ordered rate and duration of the infusion and your initials**	• **To enable for continuity and accuracy of care**
• **Add any prescribed medication to the solution and place a completed medication label on the bag**	• **To ensure appropriate treatment administration**
Priming the tubing	
• **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**	• **To release trapped air bubbles and to avoid air embolism**
• **Close the clamp and attach the IV tubing to the flash back chamber using the sterile technique**	• **For infection prevention and control**
Drop rate calculation	
• **Calculate the number of drops per minute**	• **To determine the accurate drop rate (for the children refer to Basic Paediatric Protocol by MOH)**
• **Remove the watch and hold it next to the drip chamber**	• **To observe the watch while counting drops simultaneously**
• **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**	• **To ensure the correct drop rate is achieved**
• **Check the flow rate every 15 minutes until stable and then every hour and adjust as needed**	• **To detect irregularities**
• **Inspect the IV site for complications, and assess the patient's response to therapy regularly**	• **To detect any complications**
• **Leave the patient comfortable, clear all used equipment appropriately, remove and discard gloves**	• **To promote the patient's comfort and for infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **The patient's condition during and after the procedure**	• To assess the achievement of the procedure
• **Fluid Intake and out put**	• 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

Subtitle: 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
• **Indications for blood products to be given**	• To allow for precision of transfusion treatment
• **The patient's transfusion history especially any reactions and pre-transfusion medication given**	• To prevent risk of reactions and anaphylactic shock
• **Vital signs**	• To provide baseline information for intervention
• **Signs and symptoms that might be misinterpreted for reaction during the transfusion**	• Prevents erroneous stoppage of blood transfusion
• **Type, integrity and patency of venous access**	• To allow for successful completion of transfusion
• **The patient's understanding of the procedure**	• To determine educational needs and cooperation of the patient
• **Mental and physical state of the patient**	• 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
- 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
• **Perform hand hygiene**	• **For infection prevention and control**
• **Take equipment to the patient's bed side**	• **To promote accessibility and efficiency of the procedure**
• **Ensure emergency medications such as antihistamines and steroids, extra intravenous infusion fluids are within reach**	• **To prepare for prompt interventions in case of reactions**
• **Explain the procedure to the patient /guardian again**	• **To allay anxiety and gain the patient's cooperation**
• **Review the patient's understanding of the procedure, side effects and experiences that must be reported to the nurse**	• **To allow the patient to cope and comply with the procedure**
• **Take vital signs**	• **To establish baseline data for intervention**

• **Verify with another nurse the following (Fig 2.15):**
  • **The blood product or unit of blood to be transfused as per the prescription**
  • **The patient's identification data on the nurse's notes with patient's blood transfusion card and the transfusion unit (blood to be transfused)**
  • **The blood group and the Rhesus factor type**
  • **Cross match compatibility**
  • **If the blood has been screened for infections**
  • **Expiry date and time on the blood bag**
  • **Presence of clots in the blood**
	• **To promote the patient's safety**
	Figure 2.15 Verify Blood Products with another Nurse
	Figure 2.15 Verify Blood Products with another Nurse

• **Instruct the patient to empty his/her bladder**	• **To promote comfort and prevent unnecessary blood flow distractions**
• **Perform hand hygiene again and don gloves**	• **For infection prevention and control**
• **Open the blood administration tube/kit and move roller clamps to commence installation**	• **To initiate preparations for commencement of the transfusion**
For Y-tubing Set	
• **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**	• **To allow the nurse to switch from infusing N/ saline to blood**

• **Squeeze sides of the drip chamber and allow transfusion filter to partially fill (Fig 2.16 below)**
  • **Open the lower roller clamp and allow the tubing to fill with Normal saline to the hub**
  • **Close the lower clamp**
  • **Spike the blood bag and open the clamps on inlet tube to allow blood to cover the filter completely**
 	
  • **Close the lower clamp**
 	
Figure 2.16 Prime the Chambers in Readiness for Transfusion
Figure 2.16 Prime the Chambers in Readiness for Transfusion
	• **Allows for accurate drop count**
	
	  • To remove all air from the tubing system
	
	  • To prevent wastage of IV fluid
	  • Fragile RBCs may be damaged if they drop on an uncovered filter
	  • To prevent blood from flowing until the tubing is attached to various catheters. To attach the tubing to the blood unit.

• **Spike the blood bag**
  • **Squeeze the drip chamber and allow the filter to fill with blood to the hub.**
  • **Allow flow from the tubing to various catheters using sterile precautions and open lower clamp.**
  • **Infuse the blood at a lower rate of 2-5 mls per minute according to prescription.**
  • **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.**
  • **Dispose the bag, tubing and gloves according to the waste disposal procedure.**
  • **Explain to the patient signs of delayed reactions and the need to report**
	• To prevent air flowing into the vein.
	• To allow flow of blood/ blood product into the veins
	• To follow policy guideline and prevent bacterial growth
	• To identify early signs of reactions
	
	• To prevent transfer of infection and for the safety of patients and hospital staff
	• To facilitate early detection and intervention

D. Evaluation

Evaluate	**Rationale**
• **For any adverse reaction during and after the procedure**	• To provide data for planning appropriate interventions
• **Improvement of the patient's condition or relief of symptoms**	• 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

Title: Musculoskeletal and Integumentary System

Subtitle: 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
• **Condition of the client and the wound**	• To establish suitability of the procedure
• **The client's understanding of the need for dressing**	• To identify education needs
• **Extent of skin impairment and the drainage from the wound (amount, colour and odour)**	• For clinical decision on suitable antiseptics and instruments to be used
• **The client's possible risk/benefit associated with wound dressing**	• To identify contraindications to the procedure
• **Equipment and required assistance**	• To promote efficiency
• **Appropriateness of the working environment**	• For both the client's and the nurse's safety and comfort
• **The client for history of allergies to dressing solution and materials**	• To avoid reactions and further skin breakdown
• **Need for analgesia**	• 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
• **Close windows and screen the bed**	• **For the client's privacy and comfort**
• **Wash the hands and don gloves**	• **For infection prevention and control**
• **Ensure that the trolley is clean then disinfect it with spirit. Allow the spirit to dry**	• **To ensure a sterile working field**
• **Place sterile dressing pack on the top shelf and wheel trolley to the bedside**	• **For easy accessibility and efficiency**
• **Explain the procedure and position the client appropriately**	• **For co-operation and to allay anxiety**
• **Loosen the dressing**	• **Facilitates subsequent removal of dressing without trauma**
• **Perform hand hygiene**	• **To minimize cross infection**
• **Open the dressing pack to expose dissecting forceps**	• **For readiness of the procedure**
• **Using the dissecting forceps, arrange the instruments**	• **For easy access during the procedure**
• **Use the same dissecting forceps to remove the loosened dressing from the wound and discard dressing into the clinical wastes receiver**	• **To expose the wound in preparation for dressing**
• **Place the forceps into the jug/kidney dish with decontaminant**	• **For safe handling of instrument thereafter**
• **Ask the assistant to pour dressing solutions into the gallipots and add extra sterile materials on the sterile field as required**	• **For efficiency and to prevent break in technique during the procedure**
• **Perform surgical hand scrub *(Refer to procedure 1.2-2, Surgical Scrubbing, Gowning and Gloving)***	• **To prevent contamination of hands and facilitate donning of gloves**
• **Dry hands using sterile towels and don sterile gloves**	• **To allow handling of sterile supplies without contaminating**
• **Drape the patient with a dressing towel**	• **To create a sterile surface**
• **Note condition of the wound, surrounding tissues, and odour**	• **To assess wound status prior to dressing**

• **Prepare the cotton wool swabs as follows:**
  • **Using the dissecting forceps, put enough cotton wool balls in the dressing solution. (If using two solutions, put swabs in both)**
  • **With the dressing forceps in the dominant hand, squeeze excess solution from the swabs, and place them on the extra gallipot/kidney dish/Petri dish**
	• **To prevent contamination and for infection prevention and control**

• **Using the dissecting forceps pick a wet swab and transfer to the dressing forceps**	**18 – 23. To prevent contamination and for infection prevention and control**
• **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**	•
• **Place the dressing forceps into the disinfectant.** NB: **If using two solutions repeat the procedure with second solution**	•

• **Transfer the dissecting forceps to the dominant hand and pick the second dissecting forceps with the non-dominant hand**	•
• **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)**	•
• **Place forceps into the disinfectant**	•
• **Secure the dressing with strapping**	• **To ensure the dressing remains in place**
• **Remove the drape and place it on trolley. Use the towel lining the trolley to cover used equipment**	• **For infection prevention and control**
• **Position the patient appropriately**	• **Promotes comfort and safety**
• **Dispose the waste and manage equipment as per hospital policy, then perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Changes in the status of the wound i.e. decrease in size, increased granulation, raised wound edge - stagnation**	• To ascertain appropriate response to intervention
• **Alteration in sensation or pain**	• Provides information for further wound management
• **The patient's nutritional status**	• Improve the nutritional status for faster healing and avoid complications
• **The surrounding skin**	• 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

Subtitle: 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
• **The suture line**	• To ascertain extent of closure
• **Condition of the client**	• To establish suitability of the procedure
• **The client's understanding of the need for removal of stitches/staples**	• To identify and fill in any knowledge gaps
• **The client's possible risks associated with the procedure**	• To identify previous problems or contraindications to the procedure
• **Equipment and assistance required**	• To promote efficiency
• **Appropriateness of the working environment**	• For both the client and the nurse's safety and comfort
• **Drainage from the wound, amount, odor and color**	• To determine intervention needed
• **The client history of allergies to dressing solution and materials**	• To avoid reactions and further skin breakdown
• **Need for analgesia**	• 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 packs

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
• **Follow the procedure for** *Wound Dressing 2.4-1* **up to step 16**	• **To ensure sterility and minimize the risk for infection**
• **Place the gauze a few inches from the suture line**	• **To act as a receptacle for removed sutures/clips/ staples**
• **Grasp scissor/blade/cutter/staple remover in the dominant hand and forceps in the non-dominant hand (avoid cutting skin)**	• **To smoothly remove sutures without tension to suture line, thus for the client/patient's comfort**
• **Cut suture as close to the skin as possible away from the knot**	• **For infection prevention and control from the skin surface**
• **Grasp the staple/clip or knotted end of suture and remove in one continuous action and place on gauze**	• **To ease removal and accurate counting of removed sutures**
• **Repeat the steps until every suture is removed and counted** NB: **Clean wound with solution if there is a discharge**	• **To ensure all pieces are removed**
• **Apply light dressing if the wound has not healed with first intention. Expose the wound if completely healed**	• **To prevent wound dehiscence and infection**
• **Clear equipment as for wound dressing *(Refer to procedure 2.4-1, Wound Dressing)***	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Incision site**	• To determine the extent of the healing process
• **For presence of pain**	• 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

Subtitle: 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
• **The condition of the patient**	• To establish suitability of the procedure
• **The suture line**	• To determine the extent of wound closure
• **The client's understanding of the need for removal of the drain**	• To identify education needs
• **Possible risks associated with the procedure**	• To identify previous problems /contraindications to the procedure
• **Equipment and assistance required**	• To promote efficiency
• **Appropriateness of the working environment**	• For both the client and the nurse's comfort
• **Location and purpose of the wound drain**	• To facilitate appropriate planning
• **Drainage present on the patient's dressing**	• To determine the position of the drain
• **Type and number of drains**	• To facilitate planning for appropriate intervention
• **The drain system for proper functioning**	• 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
For Under Water Seal Drain (UWSD)	
• **Position the patient in semi Fowler's position**	• **To enhance lung expansion and drainage**
• **Keep the bottle upright in a protective rack and ensure it is below chest level**	• **For the client's comfort and aid drainage by gravity**

• **Ensure the following:**
  • **That the UWSD bottle has the required amount of water/saline e.g. 1000 ml**
	•
	  • To assess the amount of drainage

• **The tube from the client is 2 cm below water level**	• To maintain the seal; that will prevent air from drawing back to the pleural space
• **If suction is connected, it is at recommended pressure**	• To prevent tension and injury to tissues
• **The tubes are well secured, not kinked and patency is maintained**	• To prevent backflow into the pleural space
• **The fluid is fluctuating**	• To verify effectiveness of the procedure
• **Observe the volume, color and type of drainage**	• **To detect abnormalities and to assess progress**
• **Observe the following on the client:**	•
• **Change in respiratory status**	• To verify lung expansion
• **Oxygen saturation and vital signs**	• To ascertain effectiveness of the system and to detect abnormalities
• **Assess for pain**	• To determine the need for analgesia
• **Breath sounds, depth and regularity**	• To ensure normal breathing sound is achieved and removal of secretions
• **Ensure the drain remains well secured with suture and clean dressing**	• To ascertain effectiveness of the procedure

• **To change the bottle:**
  • **Clamp the chest tube with 2 artery forceps**
	•
	  • To prevent pneumothorax

• **Disconnect the bottle**	• For infection prevention and control
• **Connect a clean bottle with the prescribed amount of saline**	• To create a vacuum with a new bottle
• **Remove artery forceps**	• To facilitate communication between the drainage bottle and the pleural cavity
• **Observe fluctuation of the fluid in the tube** NB: **For Vacuum Drains** • **Follow steps as for UWSD** • **Clamp the drainage tube before emptying the vacuum bottle** • **Ensure the vacuum is present before recommencing drainage**	• To confirm the seal is maintained and is functional
For Corrugated and Rubber Drains	
• **Position the client appropriately**	• **To facilitate drainage and the client's comfort**

• **Observe the following:**
  • **That drains are secure with sutures in place (A corrugated drain may have a safety pin to secure it).**
  • **Colour and amount of drainage**
  • **Absorbent dressings are secure**
	•
	  • To maintain the security of the drain
	
	  • To detect any abnormalities
	  • To avoid leakage or exposure

To shorten corrugated/ rubber drain	
• **Perform hand hygiene and don gloves**	• **For infection prevention and control**
• **Remove absorbent material using stitch cutter, remove stitches on the drain**	• **To facilitate withdrawal of the drain**
• **Support the drain upwards with artery forceps and the patient's skin with gauze using non-dominant hand**	• **To facilitate shortening**
• **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**	• **To allow it to lie neatly at the drain site**
• **Cut off extra length of the drain**	• **For infection prevention and control**

• **Clean the skin around the drain with antiseptic. Apply absorbent dressing under and over the pin. Secure the dressing** NB: **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**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **The patient's condition by monitoring vital signs and oxygen saturation**	• To detect complications and facilitate early interventions
• **Amount and type of drainage**	• To determine the effectiveness of the drain
• **Dressing at the insertion site**	• To maintain the seal and firm dressing
• **Patency of the drainage tube**	• For effectiveness of the procedure
• **If the water seal is maintained**	• To avoid complications associated with the chest tube drainage and enhance effective drainage
• **The drainage for colour, consistency, odour and amount**	• For appropriate intervention
• **The drain insertion site for collection of fluid under the skin**	• For appropriate intervention
• **The patient's level of comfort**	• To determine the effectiveness of the procedure

E. Documentation

Record:

- Date and time
- Baseline vital signs and SPO_2/SaO_2, 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

Subtitle: 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
• **The site for bleeding, oozing, wetness or infectious process and integrity of any suture**	• To establish the need for dressing and identify the infectious process
• **The client's understanding of the need of change of dressing**	• To determine the need for education and to achieve co-operation
• **The client's possible risks associated with allergies to the material for dressing**	• To prevent complications related to the procedure
• **Equipment and assistance required**	• To promote efficiency
• **Appropriateness of the working environment**	• 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
• **Explain the procedure to the client/patient**	• **To allay anxiety and promote cooperation**
• **Perform hand hygiene and put on clean gloves**	• **For infection prevention and control**
• **Remove dressings carefully and discard with gloves**	• **To prevent unnecessary trauma**
• **Observe the site for redness, swelling, discharge, integrity of sutures**	• **To detect signs of infection and other abnormalities**
• **Repeat hand hygiene**	• **For infection prevention and control**
• **Open the sterile dressing change kite**	• **In readiness for the procedure**
• **Put on mask and don sterile gloves**	**7 -9. For infection prevention and control**
• **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**	•
• **Repeat cleansing in the same manner with the second alcohol swab**	•
• **Use the third swab stick to clean any catheter or tubing that will be covered by the sterile dressing** NB: **When dressing central venous line follow the wound dressing procedure**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Tolerance to the procedure**	• To determine effectiveness in patient preparation
• **The condition of the wound for healing and infection**	• To determine any interventions required to facilitate healing
• **The catheter for stability**	• 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

Subtitle: 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
• **Condition of the client**	• To establish suitability of the procedure
• **The client's understanding of the need for wound irrigation**	• To identify education needs, allay anxiety
• **The client's possible risk/benefit associated with wound irrigation**	• To identify contraindications to the procedure
• **Equipment and required assistance**	• To promote efficiency
• **Appropriateness of the working environment**	• To ensure safety and comfort
• **Extent of the skin impairment and the drainage from wound (amount and colour)**	• To make a clinical decision on suitable solutions and equipment needed
• **The client for history of allergies to irrigation solution and materials**	• To avoid reactions and further skin breakdown
• **Need for analgesia**	• 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
• **Confirm the physician's prescription for wound irrigation; note the type and strength of the prescribed irrigation solution**	• **For nursing action**
• **Assess the client's pain level and medicate with analgesic 30 minutes before procedure if the medication is to be given orally or intramuscularly**	• **To allow time for analgesic to take effect**
• **Explain the procedure to the client**	• **To promote the client's cooperation**
• **Place a waterproof pad on the bed**	• **To Prevent soiling of the linen**
• **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**	• **For infection prevention and control**
• **Perform hand hygiene and don the clean gloves. Remove and discard the old dressing**	• **To allow for assessment of the status of the wound**
• **Assess the appearance of the wound and note quantity, colour and odour of the drainage**	• **To determine the status of the wound**

• **Remove and discard the disposable gloves and wash hands**	• **For infection prevention and control**
• **Prepare the sterile irrigation tray and dressing materials. Pour the irrigation solution into the solution container. Perform hand hygiene and don sterile gloves**	• **For infection prevention and control**
• **Position the sterile basin against the lower edge of the wound to receive the irrigation fluid**	• **To prevent spillage and soiling of the environment**
• **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**	• **For infection prevention and control**
• **Dry the edges of the wound**	• **To prevent maceration of tissues due to excess moisture**
• **Assess the appearance of the wound and drainage**	• **To provide indication of change in wound status**
• **Apply a sterile dressing. Remove the sterile gloves and wash hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **The wound for cleanliness (absence of debris, exudates and pathogens)**	• To determine the effectiveness of the procedure
• **The wound for hydration status**	• 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

Title: Emergency Care

Subtitle: 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**
• **Safety of both the patient and the staff**	• To determine timeliness of providing BLS or not
• **The patient's state of consciousness and airway patency**	• To confirm the need for resuscitation
• **For breathlessness and check for carotid and brachial pulse depending on the age of the patient**	• 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
• **Assess the working environment**	• **To determine safety for self and the client/ patient**
• **Perform hand hygiene and don gloves**	• **To protect self and the client/patient**
• **Stimulate the patient**	• **To assess the patient's level of responsiveness**
• **If the patient is not responsive, Call for Help/ Activate the Emergency System**	• **To improve the quality of interventions and the success of BLS**
• **Lay the victim on a firm surface in supine position without pillows**	• **For ease of external chest compression and cardiac massage**

• *Figure 2.17 Using Chin Lift-Head Tilt to a Sniffing Position to Open Airway* *Figure 2.17 Using Chin Lift-Head Tilt to a Sniffing Position to Open Airway*	• **To establish and maintain patent airway thus facilitating ventilation**
• **If the airway is blocked with mucus or frothy thick saliva, or blood, suction to the point you can see**	• **To establish need for suctioning**
• **Assess breathing (Look for chest rise, Listen to any breath sounds and Feel for any air movement)**	• **To determine need for initiation of effective oxygenation**
• **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**	• **To improve oxygen reserves in the lungs**
• **Palpate for carotid pulse in adult and children or brachial for infants for up to 10 seconds (Fig 2.18, 2.19)** *Figure 2.18 Observe for Breathlessness (Adapted from Craven & Hirnle,2000)* *Figure 2.18 Observe for Breathlessness (Adapted from Craven & Hirnle,2000)*	• **To confirm restoration of cardiac activity** *Figure 2.19 Child Position for Chest Compression (Adapted from Craven & Hirnle,2000)* *Figure 2.19 Child Position for Chest Compression (Adapted from Craven & Hirnle,2000)*
• **If pulse is absent or less than 60b/min initiate chest compression:**	• **To stimulate the heart thus initiate circulation**
For Adults (Fig 2.18)	

• **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)** **Give 30 compressions with 2 breaths for 1 minute then re-assess**	• **To stimulate the heart and to take proper position for the procedure and avoid air in the abdomen** To stimulate the heart thus initiate circulation and to determine the progress of the resuscitation
For Children (Fig 2.19)	
• **Place heel of one hand on lower third of the sternum above xiphoid process /one finger breath above the xiphisternum** • **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**	**1 -2. To stimulate the heart and to take proper position for the procedure and avoid air in abdomen**
• **Give 15 compressions for every 2 breaths for 1 minute then re-assess** • **(one finger breadth above the xiphisternum)**	• **To stimulate the heart thus initiate circulation**
• **Reassess the following: - Breathing, Pulse, Oxygen Saturation (If possible), Distention of Abdomen**	• **To determine the progress of resuscitation**

D. Evaluation

Evaluate	**Rationale**
• **Carotid pulse by observing every 2 minutes**	• To determine adequacy of perfusion to body tissues
• **For spontaneous return of respirations and/or heart rate**	• To assess the effectiveness of CPR
• **Neurological signs e.g. pupillary reaction to light, posturing and muscle tone**	• 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

Subtitle: 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**
• **For air exchange, wheeze, stridor and clutching**	• To determine if obstruction is complete or partial. Partial airway obstruction will have some airway exchange
• **Ability of the client to cough**	• To allow for clinical judgment and the need for Heimlich Manoeuvre
• **For presence of stridor and drooling in a child**	• 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
• **Encourage the client to forcefully cough (If there is good air exchange and the client is able to cough)**	• **To enhance expulsion of foreign body**
• **Perform five back blows between shoulder blades (Fig 2.20) alternate with Heimlich Manoeuvre/abdominal** *Figure 2.20 Back Blows between Shoulders* *Figure 2.20 Back Blows between Shoulders*	• **To increase intrathoracic pressure forcing the foreign body out**

• **Stand behind the client**
  • **Wrap your hands around the client's waist (see Fig 2.21 below)**
 	
Figure 2.21 Wrap Both Arms around the Client's Waist
Figure 2.21 Wrap Both Arms around the Client's Waist
 	
  • **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)**
	• *Figure 2.22 Make a Fist. Place a Fist Below the Xiphoid Process, above the Client's Navel*
	Figure 2.22 Make a Fist. Place a Fist Below the Xiphoid Process, above the Client's Navel
	
	  • For effectiveness of the manoeuvre and for preventing internal organ damage

• **Perform a quick upward thrust to the client's abdomen; each thrust should be separate and distinct**	• **To facilitate expulsion of the foreign body**
• **Repeat this process until the client either expels the foreign body or loses consciousness** NB: **For Conscious Adult Client- may Sit or Stand for Heimlich Manoeuvre**	• **To remove persistent foreign body**
• **If procedure is not successful and the patient develops respiratory distress or complete blockage, activate emergency response for assistance**	• **For teamwork as you continue with the resuscitation**

• **If the patient becomes unconscious proceed to BLS *(Refer to procedure 2.5-1, Performing Basic Life Support)***	• **For prevention of respiratory arrest**
Steps in infant airway obstruction;	
• **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**	• **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**
• **Deliver five back blows between the infant's shoulder blades**	• **To force the foreign body out**
• **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**	• **To dislodge the obstruction**
• **With your free hand, deliver five chest thrusts in the same manner as infant external cardiac compressions**	• **To aid in dislodging the obstruction**
• **Assess for a foreign body in the mouth of the unconscious and utilize the finger sweep only if a foreign body is visualized**	• **To prevent pushing foreign object further into the air way increasing obstruction**
• **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**	• **To allow for some oxygenation to the client**
• **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**	• **To maintain the life-saving efforts**
Small child –airway obstruction (conscious, sitting or standing);	
• **Assess air exchange and encourage coughing and breathing. Provide reassurance to the child that you are there to help**	• **To enhance expulsion of foreign body and reassure the child**

• **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:**
  • **Stand behind the child with your arms wrapped around his waist and administer six to ten sub-diaphragmatic abdominal thrusts**
  • **Continue until the foreign body is expelled or the child becomes unconscious**
	• **To confirm obstruction and in readiness for the manoeuvre**
	  • For proper positioning that is essential for success of the manoeuvre and prevention of another organ damage
	  • To maintain life-saving efforts

Small child- airway obstruction (unconscious);	
• **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**	• **For proper positioning that is essential for success of the manoeuvre and prevention of another organ damage**
• **Open airway by lifting the lower jaw and tongue forward. Perform a finger sweep- only if a foreign body is visualized**	• **To allow visualization of the oral cavity**
• **If breathing is absent, begin rescue breathing. If the chest does not rise, reposition the child and attempt rescue breathing again**	• **To restore respiratory activity**
• **Repeat this sequence as long as necessary**	• **For the success of the manoeuvre**

• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **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)**	• For normal gaseous exchange and respiratory process to take place
• **If the client experienced minimal discomfort during the Heimlich Manoeuvre or other method of airway clearance**	• For the comfort of the client leading to the success of the manoeuvre
• **If the client developed complications related to airway obstruction**	• 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

Subtitle: Bag Valve Mask Ventilation

Definition:

This is a process of assisted breathing by use of Bag Valve Mask via either artificial airways (Endo-tracheal 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
• **The need to use manual ventilation**	• To establish the suitability of manual ventilation
• **For signs and symptoms that may indicate the need to provide manual ventilation**	• To guide on appropriate intervention
• **The client's present and past medical history**	• To determine intervention needed
• **The client's understanding and ability to cooperate with the procedure**	• 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 another 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
• **Take the client's observations including vital signs**	• **To provide a baseline for comparison after procedure, to assess tolerance and improvement in clinical status**

• **Prepare, connect, and check functioning of necessary equipment;**
  • **Oxygen supply/tubing**
  • **Suctioning equipment/supplies**
  • **Correct size adapter or mask**
	• **To provide a safe organized approach to the procedure**

• **Raise or lower the bed, table, to a suitable working height**	• **To maintain good body mechanics for the nurse throughout the procedure**
• **Perform hand hygiene, don gloves and face shield**	• **For infection prevention and control**

• For the client with an existing endotracheal or tracheostomy tube requiring suctioning or transfer:
  • **Remove the current mechanical ventilation system.**
  • **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.**
  • **Adjust the flow meter to ensure adequate oxygenation.**
  • **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 stabilizing the airway tube during ventilation.**
  • **The chest movement is assessed to verify air flow.**
 	
NB: **If airways suction is required during this procedure follow suction procedure 2.2-2: Endotracheal and Tracheal Tube Suctioning**
	•
	  • To ensure readiness for BVM connection (Opens airway for BVM use).
	  • To provide hyperinflation and increases oxygen levels,
	  • For adequate air flow necessary to fully inflate the lungs, thus preventing atelectasis
	  • To provide adequate oxygenation to the lungs via existing airways
	  • To determine adequacy of inspiratory effort and airflow into the lungs

• For the client who is unconscious and not intubated;
  • **Assess appropriateness of use of BVM with mask or immediate intervention with intubations. The steps for the procedure include:**
  • **Clear oral cavity of vomitus, mucus, or other debris**
  • **Insert an oropharyngeal airway**
 	
  • **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**
  • **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**
  • **The dominant hand is used to deliver breaths to the client. Breath rate is administered according to cardiopulmonary resuscitation protocol**
  • **The chest movement is assessed to verify adequate inspiration flow**
  • **Assess for the need to insert a nasogastric tube**
 	
  • **Suction as necessary**
 	
NB: **An on-going assessment to be carried out to determine the progress as evidenced by:**
  • **Endotracheal or tracheostomy secretions minimal and artificial airway patent**
  • **Client no longer coughing or bucking ventilation**
  • **Stable vital signs and haemodynamic status**
  • **Client no longer cyanotic**
  • **Return of spontaneous respirations**
  • **Decreased intracranial pressure**
  • **Use of alternative ventilation like mechanical ventilation if long ventilation is required**
	•
	
	  • To establish suitability of use of bag valve mask with either face mask
	  • To help prevent aspiration into lungs.
	
	  • To assist in maintaining airway patency and preventing the tongue from falling back into the oropharynx
	  • To align the airway for air flow into the lungs and maintain the head in a neutral position to avoid further cervical damage
	
	  • To ensure adequate ventilation
	
	  • To provide adequate oxygenation per cardiopulmonary resuscitation protocol
	
	  • To determine patency of airway and adequacy of manual ventilation support
	  • To prevent aspiration during the ventilation
	  • To maintain a patent airway and prepare the oropharyngeal cavity for intubation if necessary
	  • To determine for the appropriate intervention

• **Remove the BVM and re-attach client to mechanical ventilatory system if client/patient has either endotracheal or tracheostomy tube**	• **To maintain ventilation and adequate set oxygen support as necessary**
• **It is preferable to have two health care providers performing the skill as BVM may be difficult to compress with one hand**	• **To promote the client's comfort and safety**
• **Suctioning may be required during this procedure so follow endotracheal or tracheostomy tube suctioning procedure**	• **To assist in prevention of aspiration during the procedure and also clear the airways**
• **Discontinue oxygen flow to the BVM**	• **To prevent oxygen wastage**

• **Reposition the client and return the bed and side rails to the original position**	• **For the client/patient's comfort and safety**
• **Dispose waste and clear other equipment as per institutional protocol, then perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **The client has spontaneous respirations or is maintained on mechanical ventilation with stable vital signs**	• To determine the need/appropriateness for discontinuation of the manual ventilation

• **Laboratory tests and the client monitoring equipment indicate appropriate CO^2 and O^2 levels.**
  • **The intracranial pressure is within normal limits**
  • **The client is able to maintain effective ventilation during transportation.**
  • **The client has improved airway clearance as evident by removal of secretions, or mucus plugs, from the endotracheal/ tracheostomy tube.**
  • **The client experienced minimal anxiety related to the procedure**
	• To demonstrate success of the procedure

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

Subtitle: 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 synchronized 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
• **The client/patient's cardiac and respiratory pattern and rhythm**	• To determine the need for defibrillation
• **Environment for appropriateness of the procedure**	• For safety of the patient and the nurse
• **Equipment and assistance needed**	• 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
• **Activate the emergency protocol and organize the resuscitation team**	• **For efficiency and effectiveness of the procedure**
• **Assist the patient to a supine position**	• **For ease of the procedure**
• **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)**	• **To confirm cardiac rhythm and monitor the progress of the procedure**
• **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 part of the electrode surface and the electrode gel should not spread on the chest (if possible use gel impregnated pads)**	• **To prevent accidental electrocution during the defibrillation**
• **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**	• **To offer warning prior to the release of the shocks to prevent accidental electrocution**
• **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**	• **To deliver the shocks appropriately to the cardiac muscle to evoke voluntary contractions**

• **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**	• **To maximize safety during the defibrillation procedure**

D. Evaluation

Evaluate	Rationale
• **For achievement of normal rhythm on the monitor**	• To establish if the procedure was successful
• **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)**	• 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)*

Subtitle: 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

A. Assessment

Assess	Rationale
• **Assess the patient's condition**	• To enable the procedure to be performed in a safe manner and initiate appropriate interventions
• **Check for contraindications**	• 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
• **Explain the procedure to the caregiver/ child (age appropriate)**	• **To provide information, promote understanding of the procedure and ensure cooperation**
• **Obtain informed consent from parents**	• **For medical legal purposes**
• **Perform hand hygiene, dry and wear appropriate Personal Protective Equipment**	• **For infection prevention and control**
• **Identify the site to be accessed (proximal tibia, distal tibia, Distal femur, Sternum, Humeral head)** *Figure 2.23: Proper position of Intraosseous Needle (Adapted from Epals, 2016)* *Figure 2.23: Proper position of Intraosseous Needle (Adapted from Epals, 2016)* • **Insertion site is located approximatelely1cm (1 fingerbreadth) below and 1cm (1 fingerbreadth) medial to the tibial tuberosity on the anteromedial surface of the tibia.** IO Insertion Landmark- older children and adolescents: • **2-3 cm below and medial to tibial tuberosity on anteromedial surface of the tibia**	• **For appropriate anatomical placement**
• **Clean the skin around selected site with an alcohol-based solution from the centre outward**	• **For disinfection of the access site**
• **Infiltrate the skin through to the periosteum with local anaesthetic agent if appropriate**	• **To minimize pain during insertion**
• **Immobilize the limb with the non-dominant hand ensuring no hands are placed under the limb**	• **To minimize movements**
• **Using the dominant hand, grasp the needle and position it at 90^0 angle on the skin at the prepared site** • **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.** • **Unscrew and withdraw the trochar** • **Attach the 3-way tap and extension tubing and withdraw the bone marrow for samples.** • **Flush the line with 2mls of 0.9% saline.** • **Secure the line with adhesive tape** • **Arrange for transportation of the specimen to the laboratory** • **Give fluids and medications as indicated** • **Perform hand hygiene**	• **To prepare for cannula insertion** • To confirm placement of the cannula and collect samples for investigation s • To confirm patency • To avoid dislodging the line for analysis • For analysis and reporting • To correct shock • For infection prevention and control

D. Evaluation

Evaluate	Rationale
• **Patency of the line**	• To facilitate rapid delivery of medication and minimize pain
• **Improvement of patient's condition**	• To confirm appropriateness of intervention measures
• **Any discomfort especially pain**	• To ensure correct placement and prevent bone damage
• **Any complications e.g. extravasation, fractures, compartment syndrome and sepsis**	• 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

Title: Ophthalmology Procedures

Subtitle: 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
• **Ocular history**	• For baseline data
• **Ocular mobility and alignment**	• To determine visual acuity
• **For crusting and sticking**	• To establish extent of the damage
• **For ptosis (drooping of eyelids)**	• To asses extent of light obstruction
• **Ability of the patient to read**	• 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
• **Explain the procedure to the patient**	• **To allay anxiety and enhance cooperation**
• **Move tray to the examination room**	• **For access of equipment**
• **Measure 6 meters distance from the patient to chart**	• **For accuracy in determining acuity**
• **Ask the patient to close one eye then ask the patient to read the chart starting from the top to the bottom**	• **To measure each eye separately and determine capacity**
• **If the patient cannot see the top most in the chart move the chart 1m , 2m until 3 meters towards the patient**	• **To establish the level of acuity independently for each eye that will inform appropriate interventions**
• **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**
• **If they cannot count at 1m then wave your hand at 0.9m**	•
• **If the patient cannot see hand movement shine a torch next to the patients eyes**	•
• **Record the level at which the patient is able to read or notice the torch light**	• **To note the acuity level**
• **Repeat the steps 6 to 9 for the other eye** NB: **Note any discrepancies in visual acuity between the two eyes**	• **For appropriate visual correction for each eye**
• **Position the patient appropriately, clear equipment, dispose waste and perform hand hygiene**	• **For clean and safe environment, the patient's comfort, and for infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Patient's experience during assessment**	• 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

Subtitle: 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
• **The condition of the eye**	• For planning purposes
• **Ability of the patient to cooperate**	• To determine need for assistance
• **The patient's visual acuity**	• 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
• **Explain the procedure to the patient**	• **To allay anxiety and gain cooperation**
• **Wheel trolley to the bed side**	• **For accessibility to the instruments**
• **Ask the patient to lie in dorsal position and ensure enough lighting**	• **For comfort and visibility during the procedure**
• **Perform hand hygiene and don gloves**	• **For infection prevention and control**
• **Ask the assistant to open the tray**	• **To expose the sterile items**
• **Ask the assistant to pour the solution into the gallipot**	• **For infection prevention and control and ease of the procedure**
• **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**	• **To prevent contamination and cross infections**
• **Repeat the procedure in the other eye** NB: **If both eyes are affected start with the right eye**	• **To ensure that both eyes are clean**
• **Clear the equipment, discard waste as per waste disposal procedures and leave the patient comfortable**	• **To ensure a clean environment and enhance the patient's comfort**
• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **The condition of the eye after swabbing**	• To determine the success of the procedure
• **The patient's tolerance to the procedure**	• 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

Subtitle: 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
• **The client's clinical status by taking history and performing physical examination**	• To provide baseline data for planning
• **The type of offending chemical**	• If alkaline cold water is used to avoid further seepage into ocular tissues
• **The eye and the extent of the burn**	• To identify damaged ocular tissues for planning of care
• **The patient's understanding of the procedure**	• 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

• **Explain the procedure to the patient**	• **To gain cooperation and allay anxiety**
• **Wheel the trolley to the bedside**	• **For ease accessibility of items**
• **Position the patient with the head tilted towards the affected eye. (If it is only one eye that is affected)**	• **To prevent the fluid from draining to the unaffected eye**
• **Perform hand hygiene and don gloves**	• **For infection prevention and control**
• **Test the PH of the tears with a litmus paper and continue checking between irrigation (intermittently)**	• **Improvement in PH indicates chemical wash out is working**
• **Gently insert the lid retractors by separating the upper and lower eye lids with your non dominant hand**	• **To anesthetize sensitive cornea and reduce discomfort**
• **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**	• **To prevent spillage and soiling of the environment**
• **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)**	• **For accuracy of the procedure**
• **In between the irrigation ask the patient to look up, down and side ways to roll the eyes**	• **To be able to clean out as many foreign objects/ chemicals from the fornices and ocular tissues as possible**
• **Continue irrigating until the pH is between 7.2-7.8 or foreign bodies are all out**	• **To allow for maximum removal of chemical/ foreign bodies**
• **Remove the lid retractors and dry the eye lid with sterile cotton wool**	• **To leave the patient comfortable**
• **Instill the prescribed medication**	• **For continuity of care**
• **Clear waste, decontaminate the used equipment and perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **The PH of the tears**	• To determine if all chemicals are cleared
• **For any loss of vision**	• To indicate the extent of damage
• **The state of the cornea**	• To rule out corneal ulcers
• **Client's level of comfort**	• 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

Subtitle: 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
• **The condition of the eye**	• To help choose the type of compression to apply
• **The client's understanding of the procedure**	• 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
• **Check the prescribed solution, frequency and duration of treatment**	• **To ensure right prescription for the right patient**
• **Explain the procedure to the client**	• **To gain co-operation**
• **Screen the patient**	• **To maintain privacy**
• **Perform hand hygiene**	• **For infection prevention and control**
• **If the patient has an eye patch already put on gloves and remove it**	• **To prepare the patient for the replacement**
• **Remove the gloves and clean your hands again**	• **For infection prevention and control**
• **Position the patient in supine, support the head with a pillow and turn the head on the unaffected side**	• **To help hold the compress in position**
• **Drape a towel around the patient's shoulders**	• **To avoid soiling the patient's clothes in-case of any spills**
• **Moisten the sterile gauze with the normal saline**	• **To help conduct the cold from the ice pack**

• **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 the patient complains of pain remove the ice pack)**	• **To start the cold compress**
• **Keep the pack for about 15-20 minutes or as per the order then remove and discard**	• **To observe for any adverse reaction**
• **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**	• **To start the warm compress**
• **Change the compress as necessary for the prescribed period of time**	• **To allow time for therapeutic effect**
• **Apply ophthalmic ointment or an eye patch as prescribed**	• **To continue with management**
• **Clear waste and perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **The affected eye for adverse reaction to either cold or heat**	• To take appropriate intervention
• **The patient's response to treatment**	• 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

Title: Specialized Procedures

Subtitle: Pre and Post-Operative Care

Subtitle: 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**
• **The type of surgical procedure**	• To determine the type of preparation required
• **The patient's needs:** • **Physical/Physiological** • **Emotional/Psychological** • **Spiritual/Social**	• • To allay anxiety and ensure the patient's comfort • To ensure homeostatic balance and prevent post-operative complications • For support, rehabilitation and follow up care
• **The patient's status by carrying out a focused physical examination**	• For baseline data, for comparison at the end of the procedure and to determine the patient's suitability for surgery
• **The patient's and family members' understanding of his /her condition and the ability to follow instructions**	• 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)
- Sphygnomanometer
- 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
• **Explain the surgical procedure to the patient**	• **To allay anxiety and promote co-operation**
• **Ensure the patient has an identification band**	• **To facilitate identification of the patient**
• **Ensure the patient has given informed consent for the operation**	• **For medical-legal purposes**
• **Ensure all investigation orders are done and results are available**	• **To determine suitability for surgery and identify risk factors for appropriate intervention**
• **Give medication and treatment as prescribed**	• **For therapeutic purposes e.g. relieving pain and allaying anxiety**
• **On the night prior to surgery, ensure the patient is settled and sleeps well. Administer the prescribed medication**	• **To allay pre-operative anxiety to maintain therapeutic levels**
• **Ensure the patient is nil per oral 6-8hours before surgery**	• **To prevent gastric reflux and aspiration during surgery**

• **On the morning of the surgery, prepare the client/patient by performing the following:**
  • **Remove all jewelry**
  • **Remove nail polish**
 	
  • **Ensure availability of blood for transfusion 30 to 60 minutes before surgery**
	•
	
	  • To ensure the patient's safety
	  • To allow for good visualization of nail beds and monitoring of oxygen status using the pulse oximeter
	  • To facilitate intra-op transfusions should need arise

• **Check the patient's identification band**	• **Confirming the patient's identity ensures that the right patient undergoes surgery**
• **Encourage the patient to void**	• **For the patient's comfort and prevention of accidental bladder injury**
• **Obtain vital signs**	• **To establish pre-op baselines**
• **Administer ordered pre-operative medication**	• **To induce mild sedation and prevent anaesthetic complications**
• **Place an arm band on the patient's dominant hand in line with national patient safety guidelines**	• **To identify the patient to be at risk of post sedation effects**
• **Raise the bed side rails**	• **To restrain the patient in bed and prevent falls**
• **Place call bells within reach and instruct the client to call for assistance**	• **To facilitate communication and safety**
• **Encourage the guardian and significant others to stay with the patient**	• **To decrease anxiety**
• **Transfer the client gently to the stretcher; ensure his/her comfort and safety**	• **To ensure readiness for transportation to the theatre and for the security of the patient**
• **Ensure the patient's notes are complete:** • **Complete and signed Pre-operative checklist** • **A signed informed consent** • **All preoperative charts are present** • **All required laboratory and radiological results are present** • **Ensure availability of blood and blood products if needed**	• **For continuity of the patient care**
• **Accompany the patient to the theatre with his/her appropriate notes**	• **To ensure the patient safety and legality of the procedure**

D. Evaluation

Evaluate	**Rationale**
• **The patient's understanding and readiness for the procedure**	• To allay anxiety
• **Completeness of the patient's surgical procedure requirements**	• To ensure efficiency and effectiveness of the surgical procedure

E. Documentation

Record:

- Date and time
- Completed pre-operative check list

Subtitle: 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**
• **The equipment for post-operative care: i.e. Surgical bed, resuscitation equipment**	• To ensure readiness
• **The possible post-operative complications**	• For prompt intervention
• **The appropriate human resource**	• For efficiency and minimize delays
• **The patient's airway patency**	• To ensure effective breath
• **Vital signs**	• To detect any abnormalities
• **Level of consciousness**	• To test the effect of anaesthesia
• **Pain status**	• To allow controlling pain and encourage early mobility
• **Nausea/vomiting**	• To avoid pressure on suture line
• **Surgical site**	• 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
• **Perform hand hygiene and organize supplies**	• **For infection prevention and control and ensures efficiency**

• **Make the initial observations about the following:**
  • **Vital signs**
  • **Level of consciousness**
  • **Operation site for any bleeding or discharge**
	• **To provide information on post-operative status**

• **Receive report of the surgery done and post-operative prescriptions**	• **To help in planning postoperative interventions**
• **Gently transfer the patient from the stretcher to the bed**	• **To minimize trauma and ensure safety of the patient during transportation to the ward**
• **Ensure position of the head is tilted as indicated**	• **To maintain a patent airway and allow for easy flow of secretions**
• **Ensure the postoperative tray is within reach**	• **For easy access to the tray if there Is need for resuscitation**
• **Transfer the patient to the ward while ensuring the patient's head is on the nurse's side**	• **To monitor the patient's condition**
• **In the ward, lift the patient carefully from stretcher to the bed**	• **To ensure safety of the patient**
• **Position the patient appropriately on the bed**	• **To facilitate flow of secretions and prevents chest compression**
• **Cover the patient using the prepared linen carefully while removing the theatre linen and ensure the bedside rails are in place**	• **To promote the patient's comfort and safety**
• **Connect appliances e.g. oxygen, vacuum drainage, nasogastric tube, IV. lines, urine bags etc. as indicated**	• **To promote oxygenation, elimination and corrects fluid volume imbalance**
• **Take and record vital signs, immediately and half hourly, until the patient is fully awake as prescribed**	• **To detect complications and adverse reactions**

• **Observe for bleeding at the site of operation and any postoperative complications**	• **To allow for detection of factors that may interfere with recovery process and for interventions**
• **Administer the prescribed treatment and fluid regimen *(Refer to procedure 1.4-2.4, Administering Intravenous (IV) Medications)***	• **To promote healing; correct fluid volume imbalances**

• **Observe catheters and drainage systems for:**
  • **Patency/obstruction**
  • **Characteristics and amount of drainage**
	• **To monitor progress of I.V. fluids**
	  • To monitor fluid output and any signs of urinary and other complications
	  • To ensure effective functioning of the system, detect excessive bleeding and other complications

• **Allow the guardian and significant others at bedside as soon as possible**	• **To provide support to the patient and allay anxiety**
• **Care for pressure areas as appropriate**	• **To maintain the patient's skin integrity**
• **Encourage exercise and ambulation**	• **To prevent muscle disuse atrophy and deep venous thrombosis**
• **Change of wound dressing and/or remove stitches /clips/skin staples as appropriate**	• **To monitor progress, aid recovery, detect any complications and to facilitate wound healing**
• **Give health education as appropriate**	• **To promote compliance**

D. Evaluation

Evaluate	**Rationale**
• **The patient's outcome following the surgical procedure**	• To determine effectiveness and efficiency of care
• **If post-operative recovery is within the expected time**	• 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

Subtitle: 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 pertonitis

A. Assessment

Assess	**Rationale**
• **The history of the condition including known allergies**	• To avoid medication reactions
• **Vital signs**	• For baseline data
• **The effect of the condition on the respiration and measure abdominal girth**	• To determine urgency of the procedure
• **The patient's understanding of the condition**	• 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
- Scapel (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
• **Explain the procedure to the patient**	• **To gain co-operation**
• **Ensure the patient's privacy**	• **To maintain dignity and self esteem**
• **Ask the patient to empty the bladder**	• **For comfort and to avoid bladder injury**
• **Bring equipment to the bedside**	• **For ease of access**
• **Position the patient in Semi-Fowlers position or Fowlers position**	• **To reduce pressure of diaphragm**
• **Encourage pooling of fluid in the lower position of the peritoneal cavity**	• **For infection prevention and control**
• **Expose the site and cover the chest**	• **For accessibility**
• **Perform hand hygiene and ask the assistant to open the sterile pack, pour antiseptic solution into the sterile gallipot**	• **For infection prevention and control**
• **Label the specimens**	• **To ensure the right specimen for the right patient**
• **Ensure that the tubing is draining into a sterile closed system**	• **To prevent infection**

• **Control the rate of flow**	• **To avoid sudden reduction in intraabdominal pressure**
• **Observe the patient throughout the procedure**	• **To detect any adverse reactions**
• **Apply sterile dressing and strapping, secure tubing and drainage bag with safety pins or tape or holder**	• **To ensure safety of the patient, avoid pulling out of the cannula and prevent interference with the procedure**
• **Maintain the patient in Semi-Fowlers position throughout the procedure**	• **To promote drainage of fluids**
• **Dispose waste, disinfect and sterilize the linen and equipment as per policy**	• **For infection prevention and control**
• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **Vital signs**	• To verify the patient's physiological status
• **Urine colour and output for 24 hours**	• To assess for haematuria which may indicate bladder trauma
• **The dressing over the cannula site**	• To assess for bleeding or leakage
• **Abdominal girth and weight**	• To determine change after drainage
• **The amount of abdominal fluid drained**	• 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

Subtitle: 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**
• **Vital signs**	• For baseline data for comparison during and after the procedure
• **The patient's understanding of the procedure and its purpose**	• To identify and fill in the knowledge gaps about the procedure. Ensures cooperation and allays anxiety
• **The patient's ability to remain still in required position**	• To determine if any extra assistance or any other intervention will be required
• **If the consent form is signed**	• For medical-legal requirement for the procedure
• **For history of bleeding disorders**	• To determine if the reason to control bleeding is required
• **History of allergies**	• 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
• **Reassure the patient**	• **To allay anxiety and gain cooperation during the procedure**
• **Wheel the trolley to the bed side and screen the bed**	• **For easy access to the equipment and to ensure privacy**
• **Perform hand hygiene**	• **To reduce risks for infections**
• **Administer analgesic/anaesthetic agent if required**	• **To prevent pain and discomfort**
• **Position the patient appropriately and expose the puncture site**	• **To ensure convenience during the procedure**
• **The physician performs the procedure**	• **To ensure the safety of the procedure**
• **Observe the patient's condition**	• **To monitor any complications arising out of the procedure**
• **Ensure the specimen is placed on glass slides or on the test tubes, well labelled and taken to the laboratory**	• **For accurate results identification in the laboratory**
• **Apply anaesthetic ointment and gauze dressing**	• **For pain control and infection prevention and control**

• **Leave the dressing intact for two days**	• **To prevent bleeding and for infection prevention and control**
• **Assist the client to a suitable position**	• **To promote comfort and facilitate recovery**
• **Dispose waste and clear equipment according to hospital guidelines then perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Vital signs ¼ hourly the first one hour and then 4 hourly thereafter**	• To detect any deviation from the normal
• **Dressing site for any leakage**	• To detect any active bleeding from the puncture site
• **If the procedure was successful**	• 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

Subtitle: 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
• **The patient's condition**	• To determine requirements for examination
• **Whether all instructions have been followed e.g. Starving, enema, premedication, omitting certain medications, full bladder**	• To determine the patient's readiness for examination
• **For any contraindications e.g. Pregnancy, allergies, age, the patient's condition etc**	• To promote safety for the client
• **The patient's ability to tolerate and cooperate during examination**	• To determine any assistance required
• **For any post examination requirements and instructions**	• To facilitate clinical judgment for effective communication
• **If the patient has any implants**	• 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
• **Explain the procedure to the patient**	• **To allay anxiety and gain cooperation**
• **Ensure the patient has correct identification band and is in appropriate gown**	• **For positive identification**
• **Ensure the patient is escorted to the examination room**	• **To promote the client's safety**
• **Ensure a properly filled request form**	• **To avoid errors and accountability**
• **Assist with the radiological procedure where necessary**	• **To ensure success of the procedure**
• **Escort the patient gently back to the ward**	• **For continuity of care**
• **Follow the post procedure instructions**	• **To avoid any complications**
• **Ensure all results are interpreted and taken back to the clinician**	• **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
• **The patient's condition after the procedure**	• 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

Subtitle: 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
• **The client's understanding of procedure**	• To allay anxiety and enhance cooperation
• **The client's/ patient's weight**	• To determine contraindication (in clients over 136 kg)
• **The client for presence of cardiac pacemaker, aneurysm clips and history of valve replacement or other metal objects in the body**	• To prevent movement of metal or electronic objects
• **The client's/ patient's for claustrophobia as the electromagnet is a large tube that does not allow for any movement**	• To prevent movement by sedating the patient as needed
• **The client/patient for pregnancy**	• To prevent radiological effect on the foetus
• **The client's/ patient's ability to remain still for 30-90 minutes during the procedure**	• To ensure accuracy as movement results in blurred images

• **The client's/ patient's for allergies to dye or contrast medium**	• To avoid anaphylactic reaction
• **The client's/ patient's for adequate venous access**	• 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
• **Explain the procedure**	• **To allay anxiety and fear of the unknown**
• **Have the client remove all metallic objects, such as watch, rings, coins, keys, hair pins, credit cards, dentures containing metal and external prosthesis**	• **To reduce artefacts on the scan for accuracy**
• **Instruct the client to void**	• **To ensure the client's comfort and avoid movement during procedure**
• **Assist the client onto padded electromagnetic table**	• **To provide correct positioning for the procedure**
• **Secure the client on the table with velcro straps**	• To keep the client from moving during the procedure
• **Provide the client with earplugs, intercom or earphones**	• To decrease noises of machines and provide communication between the client and technologist
• **If the head is to be scanned put some special helmet around the head**	• To provide adequate imaging
• **Observe the client for signs of claustrophobia or inability to remain still**	• **To determine need for sedation**
• **If contrast medium is injected, during the procedure assess for an allergic reaction**	• **To provide immediate detection of life-threatening emergency**
• **The technologist performs the MRI**	• **For safety and accuracy of the procedure**
• **After the study is completed, assist the client to a sitting position**	• **To decrease risk of orthostatic hypotension**
• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **The client's tolerance to the procedure**	• To determine success of preparation
• **If the client remained still during the procedure**	• To determine success of the procedure
• **Any complications during the procedure**	• 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

Subtitle: 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
• **Confirm the patient's identity**	• To confirm the right patient for the procedure
• **The need for informed consent**	• To ensure that institutional and legal regulations are followed
• **The patient's ability to remain still, supine for up to 1 hour**	• To establish need for sedation
• **The patient for feelings of claustrophobia**	• To prevent anxiety due to confinement in the scanner during the procedure
• **The patient for allergy to iodine or other contrast agents**	• To prevent adverse reactions to contrast agents
• **For history of compromised renal function**	• Contrasts are contraindicated in patients with renal injury
• **The patient's need for sedation during procedure**	• 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
• **Prepare the patient for the procedure as per instructions**	• **To reduce anxiety and facilitate compliance**
• **Have the patient remove all metallic objects, such as watch, rings, coins, keys, hair pins, credit cards, dentures containing metal and external prosthesis**	• **To reduce artefacts on the scan. Avoids damage to some metal objects by the magnetic field**
• **Instruct the patient to void**	• **For comfort during the procedure**
• **Assist the patient onto padded CT scan table. Secure the client on the table with velcro straps**	• **To ensure the client's comfort and avoid movement during procedure**

• **Observe the patient for signs of claustrophobia or inability to remain still**	• **To determine the need for sedation**
• **If contrast medium is injected, during the procedure assess for an allergic reaction**	• **For immediate detection of life-threatening emergency**
• **Technologist performs CT scan**	• **For safety and accuracy of the procedure**
• **After the study is completed, assist the client to a sitting position**	• **To decrease risk of orthostatic hypotension**
• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **Vital signs as required**	• To monitor patient's condition
• **If all results are interpreted and taken back to the clinician**	• To help in planning of care
• **The patient's tolerance to the examination**	• 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

Subtitle: 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**
• **The patient's condition**	• To determine the right renal replacement therapy for the particular patient and duration of treatment
• **The patient's preparedness**	• 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 2.24 Dialysis Machine

Figure 2.25 Patient undergoing Haemodialysis
Figure 2.25 Patient undergoing Haemodialysis

C. Implementation

Steps	**Rationale**
• **Weigh the patient and take other vital signs**	• **To determine the amount of fluid to remove from the patient**
• **Connect the dialysis tubings and the dialyzer**	• **To establish a complete circuit and to thread the machine**
• **Run normal saline to prime the circuit**	• • To remove air to minimize chances of clotting • To rinse the tubes off the preservatives to prevent adverse reaction • To open up the membranes to increase the surface area of contact between the blood and the dialysate compartment
• **Set machine parameters**	• **To enable the machine to program the anticipated parameters and the desired treatment outcome**
• **Prepare the patient's access site**	•
• Catheter (subclavian, jugular, femoral) • **Clean and apply dressing on the catheter site**	• To prevent infection and establish whether there is infection and take necessary interventions
• **Aspirate the heparin lock, check for clots and check for patency**	• To ensure prevention of thrombo-embolism

• **Administer a loading dose of heparin/ appropriate anticoagulant**	• To prevent clotting by thinning the blood
• **Flush the fistula needles with normal saline**	• To remove air and rinse any preservatives
• **Cannulate the arterial fistula, check for patency by observing for pain expression and swelling at the cannulation site**	• To gain access to the patient's system
• **Cannulate the venous fistula, check for patency and give the loading dose of heparin**	• To prevent clotting by thinning the blood
• **Initiate dialysis starting with a low flow rate for 15 minutes. Increase the flow rate to maximum within 30 minutes**	• **Prevent hypotensive shock**
• Intradialysis	
• **Measure the patient's vital signs hourly**	• To identify complications promptly and initiate necessary interventions
• **Monitor Transmembrane Venous and Arterial Pressure**	• To determine any adjustments required
• **Monitor Conductivity and heparinization**	•
Disconnection of patient from dialysis (At the end of treatment time)	
• **Explain the procedure to the patient**	• **To gain cooperation of the patient and allay anxiety**
• **Perform hand hygiene and don gloves**	• **For infection prevention and control**
• **Reduce the blood flow rate**	• **To maintain hemodynamic stability of the patient**
• **Stop the pump**	• **To enable disconnection process**
• **Clamp, disconnect the arterial line, connect to normal saline bottle and restart the pump**	• **To clear blood from the circuit to the patient's system**
• **Allow the machine to run its course until it clamps and then disconnect the venous line**	• **To allow disconnection from the machine**
• **Lock arterial and venous ports with heparin (quantity depending on the manufacturer's instructions)** NB: **Take the patient's blood pressure before locking the venous port**	• **To prevent clotting and establish need for bolus infusion in case of hypotension**
• **Dress the access point**	• **To cover and prevent infection at the access point**
• **Take vital signs**	• **To establish the client/patient's stability and initiate necessary interventions**
• **Take the patient's post dialysis weight leaving the client comfortable**	• **To assess the patient and confirm achievement of dry weight**
• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **Signs of intradialytic complications**	• To institute appropriate interventions promptly
• **Achievement of dry weight, solute clearance and electrolyte balance**	• 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

Subtitle: 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
• **The patient's knowledge**	• To determine the patient's ability to manage the procedure
• **The patient's condition**	• To ascertain the patient's suitability for the procedure
• **Peritoneal dialysis access**	• 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
• **Verify the doctor's order for dialysis and Dialysate to be used**	• **To ascertain the right order for the right patient**
• **Explain the procedure to the patient**	• **To allay anxiety and increase cooperation**
• **Obtain and record the patient's vital signs, weight and abdominal girth**	• **To establish baseline data**
• **Verify the dialysate for the following: glucose concentration, amount, expiry date, leakages and sediments**	• **To confirm safety for usage**
• **Warm the dialysate to body temperature and bring to the bedside**	• **To increase rate of urea removal and prevent discomfort and excessively lowering the core body temperature**
• **Wash hands and don clean gloves**	• **For infection prevention and control**
• **Place the patient in semi fowlers position**	• **For comfort and adequate room for peritoneal expansion**
• **Assemble the dialysate bag and remove the outer cover**	• **To prepare for the procedure**
• **Scrub hands, dry and don gloves**	• **For infection prevention and control**
• **Establish a sterile field under the end of the peritoneal catheter using the sterile drape**	• **To provide a sterile surface for cleaning the catheter for infection prevention and control**
• **Ask your assistant to spray the ports of the dialysate bag using the antiseptic solution**	• **For infection prevention and control**
• **Remove the cap from the dialysate bag, disconnect the effluent bag and connect the transfer set to the dialysate bag**	• **To ensure readiness for the initiation of the procedure**
• **Add any prescribed medication to the dialysate using strict sterile technique**	• **For proper treatment and to avoid contaminating the dialysate**
• **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**	• **To support the bag and to promote inflow by gravity**
• **Assess the client for pain**	• **To intervene and ensure the patient's comfort**
• **Clamp, disconnect, discard the bag and roll up the transfer set to the patient's comfort**	• **To prevent air entry into the tubing**
• **Allow the solution to dwell as per the prescribed time**	• **To ensure the dialysate remains in the abdomen for osmosis and diffusion to occur from the blood into the dialysate**
For subsequent exchange	
• **Unclamp the line to the drainage bag for 20 to 30 minutes**	• **To allow the effluent to drain out**
• **Compare the volume drained versus dwell volume**	• **To determine completeness of emptying of the effluent**
• **Measure the effluent, look at its consistency: bloody, cloudiness, presence of fibrins**	• **To determine the need for any intervention**
• **Discard the effluent, clean and apply dressing on the exit site**	• **For the patient's comfort and infection prevention**

D. Evaluation

Evaluate	Rationale
• **The patient's outcome in comparison to general condition prior to treatment**	• To determine response to the treatment and guide on plan of action
• **The patient for intradialytic complications**	• 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

Subtitle: 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 prostrate (TURP)
- Recurrent hematuria
- Distant metastases
- Obstructive symptoms in prostate cancer

A. Assessment

Assess	Rationale
• **The condition of the client**	• To ascertain suitability of the procedure
• **The patient's understanding of the purpose and plan of the procedure**	• To determine educative needs of the patient
• **The patient for signs of claustrophobia**	• To prevent anxiety
• **The patient for presence of pregnancy**	• To determine for contraindications
• **The vital signs**	• 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
• **Explain the procedure to the client and ensure informed consent is obtained**	• **To allay anxiety, gain co-operation and ascertain the client's acceptance. For legality of the procedure**

• **Ensure the client's privacy**	• **To maintain dignity and self esteem**
• **Observe vital signs**	• **To provide baseline data**
• **Ask the client to empty bladder**	• **For comfort and to avoid bladder injury**
• **Prepare the client preoperatively for theatre**	• **Insertion of the isotope is a surgical procedure**
• **Assemble the requirements in the designated isolation room**	• **For accessibility to the client**
• **Ensure the client has fully recovered from theatre and escort him/her to the designated room**	• **To ensure safety and warmth**
• **Label the door with radiation caution label and with specific instructions for the radioisotope used**	• **To alert and protect others that radiation is in progress**

• **Precautions to be taken when nursing the patient:**
  • **Organize nursing tasks to take the shortest time in the radiation room**
  • **Wear a lead shield/apron**
  • **Rotate assignments to ½ an hour per shift with one nurse caring for only one patient**
  • **Pregnant nurses and those under 16 years should not be allowed into the room**
  • **Visitors to be limited to take only ½ an hour per day**
 	
NB: **When the implant dislodges accidentally:**
  • **Use some long handle forceps to place it in a lead container and call the physician.**
  • **If unable to locate it, bar visitors from entering the room and notify the physician**
	• **To minimize the exposure and transmission of radiation**

D. Evaluation

Evaluate	Rationale
• **If the procedure was tolerated by the client**	• To confirm effectiveness of preparation
• **Radiation safety compliance**	• 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

Subtitle: 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

• **The patient's understanding of the procedure**	• To allay anxiety and gain the patient's cooperation
• **Baseline observations**	• 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
• **Explain the procedure to the patient/guardian**	• **To gain the patient's cooperation**
• **Screen the bed**	• **To provide privacy**
• **Wheel the trolley and set up the requirements**	• **To ensure readiness for the procedure**
• **Observe and record vital signs and condition of the patient prior to the procedure**	• **To obtain baseline data to monitor the patient's condition during and after the procedure**
• **Perform hand hygiene and don appropriate PPEs**	• **For infection prevention and control**
• **Position the patient on the side with both knees and head flexed at an acute angle with a pillow under the neck**	• **To allow maximum lumbar flexion and separation of interspinous space and thus easier access to the subarachnoid spaces**
• **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**	• **To maintain the patient's safety and to detect change in the patient's condition during the procedure**

• **Assist the doctor to seal the puncture site**	• **To prevent loss of spinal fluid through the dura matter and minimize infection through the punctured site**
• **Leave the patient comfortably lying flat on his back for 2-3hours**	• **To prevent spinal fluid leakage and thus minimize headache and backache commonly associated with the procedure**
• **Take vital signs ½ hourly, check the site for bleeding and leakage and ask the patient if they have severe headache or pain for the first 12 hours**	• **To identify any complications and intervene as appropriate**
• **Decontaminate and clean equipment and dispose waste as necessary (follow institution policy) then perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **Adequacy, type and color of specimen obtained**	• To confirm diagnosis and institute appropriate treatment
• **The patient's tolerance to the procedure**	• To confirm adequacy of preparation and effectiveness of the procedure
• **Vital signs**	• 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

Subtitle: 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 hypoplesia
- Injuries – penetrating
- Tumors
- Diseases e.g. diverticular disease

Contraindications:

Laryngeal carcinoma

A. Assessment

Assess	**Rationale**
• **The patient's understanding of the procedure**	• To allay anxiety and gain the patient's cooperation
• **Baseline observations**	• To ascertain the suitability of the patient for the procedure
• **The skin integrity around the stoma and general appearance**	• To establish the skin breakdown or leaking of the pouch
• **The amount and character of effluent in the pouch**	• 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
• **Wash hands and wear gloves**	• **For infection prevention and control**
• **Spread Mackintosh and draw sheet**	• **To protect linen**
• **Remove used pouch & skin barrier gently by pushing the skin away from the barrier**	• **Reduces trauma, jerking, irritates skin and can cause tear**
• **Remove flange by gently pulling it toward the stoma. Support the skin with your other hand. An adhesive remover may be used.** NB: **If a rod is in situ, do not remove**	• **To prevent skin tears**
• **Remove the clamp and empty the contents into the receiver, rinse the pouch with tepid water or normal saline**	• **To minimize the odour and growth of microbes**
• **Discard the disposable pouch in the relevant colour coded bin**	• **For infection prevention and control**
• **Observe stoma for colour, swelling, trauma and healing. Stoma should be moist and pink**	• **To detect any deviation from normal**
• **Cover the stoma with a gauze piece**	• **To prevent the effluent from contacting with the skin**
• **Clean peristomal region gently with warm tap water using gauze pad. Do not scrub the skin, dry completely by patting the skin with gauze**	• **Stoma surface is highly vascular. Skin barrier does not adhere to wet skin**
• **Remove dressing, clean stoma with gauze and pat dry**	• **For easy adherence of the pouch to the skin**
• **Measure the stoma using measuring guide**	• **To ensure accuracy in determining correct pouch size needed**
• **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**	• **For accurate fitting onto stoma**
• **Put skin barrier and pouch over the stoma, and gently press on to the skin, for 1-2 minutes**	• **To prevent irritation to the skin**
• **If the pouch is drainable, use a clamp or clip**	• **To prevent leakage**
• **Leave the patient comfortable**	• **To enhance the patient's comfort**
• **Clear all used equipment appropriately**	• **To ensure safety and tidiness of the environment**
• **Perform hand hygiene**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Vital signs**	• To verify the patient's physiological status
• **Effluent colour and consistency**	• To detect deviation from normal
• **The amount of effluent fluid drained**	• To determine functionality of stoma
• **Stoma and peristomal skin**	• To determine any irritation
• **The dressing over the stoma site**	• 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, color and consistency of the effluent drained
- Health messages shared

Subtitle: 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
• **The client's history**	• The client's history
• **Present and past medical and surgical history**	• To determine the client's suitability for the procedure
• **The client's history of allergies to anesthetic and antiseptic solution**	• To avoid reaction and skin breakdown. To determine the type of antiseptic and anesthetic agent to use
• **Targeted physical examination**	• To determine the client's suitability for the procedure
• **Vital Signs (Blood Pressure, Temperature, Pulse Rate)**	• To obtain baseline data for comparison during and after the procedure
• **The client's weight**	• To determine dosage of the anesthetic agent
• **The client's understanding of the procedure**	• To identify and fill in the knowledge gaps about the procedure
• **The client's willingness to undergo male circumcision procedure and ensure consent form is signed**	• • To ensure co-operation and allays anxiety • To avoid coercion of the client • Medical Legal requirement for the procedure
• **Appropriateness of the working environment**	• To determine the safety and privacy of both the client and the nurse.
• **The client's possible risk associated with male circumcision**	• To identify contraindications to the procedure
• **Availability and functionality of required Equipment**	• 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 Chlohexidine 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 (peadiatric 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**
• **Explain safe male circumcision procedure to the client**	• **To reduce anxiety and enhance the client's cooperation during the procedure**
• **Prepare the client for the procedure as per male circumcision training manual**	• **To ensure effectiveness and efficiency in performance of the procedure**
• **With the client on the coach perform skin preparation and draping** **(see Fig 2.26-2.28 below)**	• **To ensure aseptic technique and maintain the sterile field**
Figure 2.26 Performing Skin Preparation *Figure 2.26 Performing Skin Preparation* *Figure 2.27 Performing Skin Preparation* *Figure 2.27 Performing Skin Preparation*	*Figure 2.28 Draping Using Centre "O" Drape* *Figure 2.28 Draping Using Centre "O" Drape*
• *Figure 2.29 Administering Penile Ring Block* *Figure 2.29 Administering Penile Ring Block*	• *Figure 2.30 Administering a Penile Dorsal Nerve Block* *Figure 2.30 Administering a Penile Dorsal Nerve Block*
• **Assess and separate adhesions if any (see Fig 2.31)** *Figure 2.31 Separation of Adhesion* *Figure 2.31 Separation of Adhesion*	• **Reduce the risk of accidental injury to the glans and ensure adequate skin removal**

• **Mark the intended incision line using surgical marker pen or gentian violet (see Fig 2.32- 2.33)** *Figure 2.32 Making Incision Line* *Figure 2.32 Making Incision Line*	• *Figure 2.33 Making Incision Line* *Figure 2.33 Making Incision Line*
• **Perform the surgical procedure using Dorsal Slit technique.**	
• **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)** *Figure 2.34 Positioning the Artery Forceps* *Figure 2.34 Positioning the Artery Forceps*	• To bring the penis into symmetry and help in traction (pulling of foreskin)
• **Using straight forceps clamp the foreskin for about 30 seconds before making the slit**	• To help in minimization of blood loss
• **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)**	• To avoid injury to the glands and remove the foreskin

Steps	**Rationale**
Figure 2.35 Making a Dorsal Slit *Figure 2.35 Making a Dorsal Slit*	*Figure 2.36 Performing Circumferential Incision* *Figure 2.36 Performing Circumferential Incision*
• *Figure 2.37 Trimming Rugged Edges of Incision Line* *Figure 2.37 Trimming Rugged Edges of Incision Line*	• To achieve a good cosmetic effect
• **Stop bleeding using compression, ligation and under running stitches**	• To arrest bleeding and achieve hemostasis
• **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**	• To avoid urethral injury or accidental trauma to the glans and reduce wound gaping to enhance healing by primary intention

Steps	**Rationale**

Figure 2.38 Horizontal Mattress *Figure 2.38 Horizontal Mattress*	*Figure 2.40 Simple Interrupted Stitches* *Figure 2.40 Simple Interrupted Stitches* *Figure 2.39 Vertical Mattress* *Figure 2.39 Vertical Mattress*
• **Irrigate the incision site with normal saline**	• To achieve hydration of the incision site and to assist with visual examination
• **Apply dressing sequentially**	• To render the incision site free of micro-organisms and enhance healing
• **Clean the client's soiled parts with a sterile towel**	• For infection prevention and control
• **Assist the client to get out of the operating table**	• To help avoid injury
• **Assist the client to dress up and put on a well-fitting pant**	• To prevent penile contact with the clothing causing discomfort and pain

Figure 2.41 Voluntary Medical Male Circumcision in Progress - Photo (Adapted from VMMC Adverse Event Action Guide by PSI 2016)
Figure 2.41 Voluntary Medical Male Circumcision in Progress - Photo (Adapted from VMMC Adverse Event Action Guide by PSI 2016)

Steps	**Rationale**
Post-Operative Care	
• **Check for any adverse reactions after the procedure**	• **To inform on appropriate interventions**
• **Take the client's vital signs (Blood Pressure, Pulse Rate, Temperature and Respiratory Rate) 30min post-surgery**	• **For comparison with baseline data to plan for appropriate interventions**
• **Assess the dressing applied at the incision site**	• **For swelling or bleeding and to take necessary intervention (Refer to adverse event action guide)**
• **Carry out pain assessment (see Fig. 1.4)**	• **To determine the level of pain and take appropriate action**
• **Discuss with the client on post-operative wound care and targeted health information on post male circumcision**	• **To ensure that the wound healing process in in course with primary intention**
• **Review the client's level of comfort, and give necessary medicines and instructions**	• **Determines the need for additional analgesics and ensure the client understands basic instructions**

D. Evaluation

Evaluate	**Rationale**
• **Appropriate removal of the foreskin**	• Determine male circumcision Dorsal slit technique is performed as per the national guidelines
• **Any excessive blood loss**	• Determine if the dressing on the incision site is soaked by blood and take appropriate intervention
• **Infection prevention control**	• To ensure Infection prevention and control measures are practiced
• **Extent of pain experienced by the client**	• 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

Title: Antenatal Care

Subtitle: 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
• **Environment**	• For warmth, safety, privacy and comfort
• **The client and companion's readiness for the procedure**	• To allay anxiety and promote cooperation
• **Availability of required supplies and equipment**	• 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 90^0 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 color bins

Requirements

Assemble and arrange the following items on a trolley or table:

- Pens of different colors
- Plain papers
- Antenatal record book
- Antenatal cards
- Vital signs observation equipment
- Antenatal Registers
- Calendar and the gestation calendar wheel

C. Implementation

Steps	Rationale
Introductory phase	
• **Greet and welcome the client and her companion and offer them a place to sit**	• **To establish rapport**
• **Address the client by name**	• **For the patients' respect and dignity**

• **Assume a relaxed sitting position that demonstrates availability of time**	• **To enhance comfort, relaxation and promote cooperation**
• **Inquire the language the client is comfortable with**	• **Makes the client and companion feel accepted, relaxed and promotes disclosure**
• **Explain to the client the approximate time history taking is likely to take and what is required of her**	• **To ensure efficiency in communication prevents anxiety**
• **Inquire from the companion(s) the relationship with the client**	• **For privacy and confidentiality**
• **Discuss general topics for about one minute**	• **Allows for relaxation and promotes disclosure**
Working phase	
• **Take vital signs**	• **For baseline data**
• **Observe principles of interviewing techniques**	• **Determines validity and accuracy of information**
• **Observe the client for non-verbal communication and validate them**	• **Reveals some information the client may not express verbally**
• **Ask open ended questions and use simple language**	• **Encourages self-expression**
• **Obtain, interpret and record complete information of the following;**	• **Identifies clients and aids in tracing the patient in the event of follow up**
• Personal data**:** • **Name** • **Age** • **Address and telephone number** • **Level of education** • **Occupation of the client** • **Religion** • **Name and contact of next of kin** • **Alcohol use and Smoking and any other substance addiction**	
• Medical and surgical history (Specific diseases and conditions): • **TB, Heart Disease, Chronic Renal Disease, Epilepsy, Diabete Melitus, hypertension, psychiatric, thyroid conditions, hepatic diseases** • **History of surgery and Anaesthetic complications** • **Sexually Transmitted Infections** • **Reproductive tract conditions or diseases.** • **HIV Status if known** • **Other conditions depending on Prevalence in that region (e.g. Malaria, Sickle Cell Trait)** • **Operations other than Caesarean Section** • **Blood Transfusions** • **Current use of Medication –specify** • **History of drug and food allergies**	• Identify women with special health conditions and /or those at risk for developing complications and refer for higher level of care for necessary interventions

• Menstrual/Gynecological history:
• **Menarche**
• **First day of Last menstrual period**
• **Menstrual cycle**
• **Menstrual problems e.g**
  • **Dysmenorrhoea**
  • **Menorrhagia**
  • **Metrorragia**
  • **Polymenorrhagia**
	• To determine the exact gestation by dates and aid in calculation of the expected date of delivery
	• To aid in management of labor and any abnormality like severe after pains and heavy bleeding after delivery

• Obstetric history: • **Number of previous pregnancies** • **Duration of labour** • **Mode of delivery** • **Date and outcome of each event (live birth, preterm, stillborn)** • **Birth weight** • **Sex of the newborn and current status** • **Maternal complications and events in previous pregnancies, specify which pregnancy, validate by records (if possible):** • **Gynaecological operations** • **Perinatal complications and events in previous pregnancies**	• To identify any risk factor and prepare to act accordingly
• FP history: • **Use of FP method** • **Type of FP method** • **Duration of use** • **Any complications resulting from FP use** • **When and reasons for stopping or non-use**	• To plan for family planning postnatally or after puerperium
Termination phase	
• **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**	• **Encourages the client/companion to clarify their issues of concern. Ensure continuity of the care**
• **Ask the client and companion(s) if they have questions to ask**	• **Ensures that the clients' issues have been clarified**
• **Thank the client and companion(s) and prepare for physical examination and ante natal profile**	• **Demonstrates appreciation and promotes cooperation**
• **Document the findings accurately**	• **For record and subsequent references**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **Comprehensiveness of history obtained**	• To determine if further history is required
• **Adequacy of history in planning interventions**	• 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

Subtitle: 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**
• **If the client understands physical examination procedure**	• To determine teaching needs of the client and gain co-operation
• **Required equipment**	• To determine availability and efficiency

• **Condition of the environment**	• To determine if it is conducive, provides for privacy and safety
• **Ability of the client to comply with position changes required during the examination**	• 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
• **Ask the client to void prior to the examination**	• **For the client’s comfort and to facilitate uterine and adnexal evaluation**
• **Collect urine specimen**	• **To obtain specimen for laboratory testing**
• **Instruct the client to sit on the examination couch**	• **Provides easy accessibility to body parts being examined**
• **Wash and dry hands**	• **For infection prevention and control**

• **Record the client's:**
  • **Height**
  • **Weight**
  • **Temperature**
  • **Pulse**
  • **Respirations**
  • **Blood pressure**
	• **To obtain baseline data and identify deviations from normal and take necessary action. Contracted pelvis is more common in women with height of<150cm**

• **Perform general survey**	• **Provides preliminary information on the state of health and guides priority sharing of health messages**

• **Note the general stature and gait when the client is walking to the couch**
  • **Structural and physical abnormalities**
  • **With the client in sitting up/fowlers position Assess for mood e.g. calm, anxious, depressed, hydrated**
  • **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.**
  • **Neck for cleanliness and palpate the thyroid gland for enlargement**
	• **To rule out other medical conditions**

• **Instruct the client to lie on the couch on supine position with one pillow under the head**	• **To expose anterior aspects of the client for effective examination**
• **Cover the client and expose only the part being examined**	• **To maintain privacy, comfort and warmth**

• **Examine breasts *(Refer to procedure 3.1-3, Breast Examination)* and perform abdominal examination *(Refer to procedure 3.1-4, Abdominal Examination)***
 	
RE:
  • **Do not check breast activeness**
  • **Perform vaginal examination only if there is an indication**
	• **Rule out any abnormalities and to prevent premature labour induction**

• **Lower extremities**
  • **Expose both legs up to mid-thigh and examine for size shape and equality.**
  • **Inspect for color, fungal infection in between the toes, capillary refill, oedema, ulcerations and varicose veins**
  • **Palpate for temperature, oedema and texture**
  • **Palpate the popliteal, dorsalis pedis and posterior tibial pulses**
  • **Inspect muscle size and palpate muscle tone of the legs and feet**
  • **Assess range of motion and strength of the hips, Knees, ankles and feet**
  • **Assess for clonus**
	• **To identify anatomical deviations and rule out varicosity**

• **Inguinal area**
  • **Inspect and palpate the inguinal lymph nodes**
  • **Inspect for inguinal hernias**
  • **Palpate the femoral pulses**
  • **Auscultate the femoral pulses for bruits *(Refer to procedure 3.1.6, Performing Antenatal Profile Tests)***
	• **To rule out lymph node enlargement and presence of the pulses**

• **Genitalia:**
  • **Inspect pubic area for: hair distribution, presence of parasites, skin color and condition**
  • **Inspect mons pubis, vulva, clitoris, urethral meatus, vaginal introitus, sacrococcygeal area, perineum, and anal orifice**
  • **Palpate the labia, urethral meatus, skene's glands, vaginal introitus, and perineum**
	• **To rule out any deformities and female genital mutilation that may likely cause obstructed/ prolonged labor and perineal tears**

• **Give feedback to the client and request her to dress up**	• **Encourages the client/companion to clarify their issues of concern. Ensure continuity of the care**
• **Remove the gloves, wash & dry hands then remove the receptacle for dirty swabs and dispose according to waste disposal procedures**	• **Prevents spread of infection and promotes safety for staff, midwife and clients**
• **Clear appropriately**	• **Prepare for subsequent use**
• **Document the findings on the appropriate records**	• **For record keeping and reference during follow up**

D. Evaluation

Evaluate	Rationale
• **That the general health and pregnancy status of the client has been ascertained**	• To aid in giving comprehensive feedback and health education
• **Whether history is consistent with findings of physical examination**	• Gives an indication for more investigations
• **If the client requires further interventions**	• For effective management

E. Documentation

Record:

- Assessment findings in the appropriate records
- Schedule for the next visit
- The health education provided

Subtitle: 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
• **The client's readiness for the procedure**	• To alley anxiety and promote participation
• **Required equipment and supplies**	• For ease of access and efficiency
• **The working environment**	• 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
- Color Coded bin

C. Implementation

Steps	Rationale
• **Explain the procedure to the client**	• **To allay anxiety and promote participation**
• **Instruct the client to sit at the edge of the bed/ couch**	• **For ease of access**
• **Close nearby window**	• **To promote privacy**
• **Ensure good lighting**	• **For better visibility**
• **Wash hands and dry**	• **For infection prevention and control**
• **Expose both breasts and inspect for size, shape, scars, symmetry**	• **To detect any abnormalities from normal**
• **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**	• **Rule out inflammations and early signs of breast cancer**
• **Check for: discoloration, puckering dimpling/ inverted/retracted nipple and nipple discharge**	• **To rule out masses and adhesions or cancer**
Breast Palpation	
• **Ask client to lie in supine**	• **To allow breast to lie flat on the rib cage**
• **Client to raise her hand and place it behind the neck (start from the furthest breast to the nearest)**	• **Promotes effectiveness and ensures no part is left out**
• **Expose the breast of the raised hand**	• **To elevate tissues for easy palpation**
• **Use the pads of the three middle fingers to palpate**	• **To prevent accidentally missing lumps**
• **Support the breast with the other hand (if necessary)**	• **To immobilize and support during palpation**

• **Using light, medium and firm pressure, examine breast in four segments**
  • **From the under arm down one side of the breast to the lower bra line**
  • **Across the breast, to the breast bone**
  • **Up the other side of the breast to the collar bone**
  • **Back across the upper half of the breast to the axilla**
	• **To rule out any breast masses**

• **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** NB: **Do not squeeze the nipple of a pregnant client**	• **To detect for any abnormalities that would warrant addition examinations and intervention**
• **Palpate the supraclavicular and infraclavicular lymph nodes**	• **To ensure examination of the whole breast and accessory organ**
• **Cover the breast**	• **To avoid over exposure, chilling and maintain the client's dignity**
• **Repeat the procedure on the other breast while demonstrating to the client**	• **To allow the client to do return demonstration. To facilitate involvement in decision making and intervention**

• **Cover the breast and allow her to dress up**	• **To avoid unnecessary exposure**
• **Give client feedback of the examination and findings**	• **Promote cooperation and continuity of care**
• **Clear the equipment appropriately**	• **To leave the environment clean and safe**
• **Appreciate the client and share appropriate health messages**	**22-23. For accountability, record keeping, continuity of care and avoid duplication.**
• **Document findings**	•

D. Evaluation

Evaluate	Rationale
• **The breast condition**	• To plan for appropriate interventions
• **The client's readiness for breastfeeding**	• Allows preparation for breastfeeding
• **The client's knowledge and skills on self-breast examination**	• For planning appropriate interventions
• **Self-breast examination**	• To determine if further education is required
• **Appropriateness of the intervention**	• To ensure the right intervention is instituted promptly

E. Documentation

Record:

- All data obtained
- The patient's response to the procedure
- Name and signature of the examining nurse

Subtitle: **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
• **The client's readiness for the examination**	• To alley anxiety and promote cooperation
• **Required equipment and supplies**	• To determine the need and confirm availability
• **Appropriateness of the examination environment**	• 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

• **Instruct the client to assume a supine position on the examination bed/couch with her knees slightly bent**	• **Relaxes the abdominal muscles, facilitating palpation of the foetal parts**
• **Provide a pillow under the client's head**	• **For comfort**
• **Maintain privacy throughout the examination**	• **Promotes comfort and dignity**
Inspections	
• **Inspect contour, symmetry, pigmentation and color, umbilicus, scars, striaeprominent linea nigra foetal movements**	• **To detect deviation from normal and plan appropriate action**
• **Inspect for size and shape**	• **Curves and dips in the uterus may indicate foetal position**
• **Auscultate bowel sounds, Bruits, venous and friction hum**	• **To detect deviations from normal**
Palpation	
• **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** *Figure 3.1 Assessing Fundal Height (Using A Tape Measure Photo Adapted from MCHIP Honors Word AIDS Day (2012)* *Figure 3.1 Assessing Fundal Height (Using A Tape Measure Photo Adapted from MCHIP Honors Word AIDS Day (2012)*	• **Warm hands help prevent tightening of the abdominal muscles and promote the client's comfort**
• **Use Leopold's maneuver to complete abdominal examination**	•
• First maneuver (Fundal Palpation/grip): **Palpate the uterine fundus with both hands while facing the head of the client (Fig 3.2a)** *Figure 3.2a 1st Leopold Maneuver* (Adapted from Merano, n.d) *Figure 3.2a 1st Leopold Maneuver* (Adapted from Merano, n.d)	• To determine the presentation. (A hard, smooth, ballotable mass at the fundus means the foetus is in breech presentation.)

• Second maneuver (Lateral Palpation/umbilical grip): **move hands to sides of the abdomen to locate the foetal back while still facing the clients head. (Fig 3.2b)** **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**	• For ease of access of foetal heart and the lie and foetal parts *Figure 3.2b 2nd Leopold Maneuver* (Adapted from Merano, n.d) *Figure 3.2b 2nd Leopold Maneuver* (Adapted from Merano, n.d)
• Third maneuver (Pawlik's Grip): **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 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)**	• To determine the degree of engagement and mobility of presenting part *Figure 3.2c 3rd Leopold Maneuver* (Adapted from Merano, n.d) *Figure 3.2c 3rd Leopold Maneuver* (Adapted from Merano, n.d)
• Figure 3.2d 4th Leopold Maneuver (Adapted from Merano, n.d) Figure 3.2d 4th Leopold Maneuver (Adapted from Merano, n.d)	• To determine the foetal attitude and descend 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)
• **Palpate the liver and spleen** NB: **Throughout the examination, ask yourself;** • **What part am I feeling?** • **What is the presentation of the foetus?** • **What is the size of the foetus?** • **Is there more than one foetus?**	• To determine any deviation from normal
Percussion	
• **Percuss the liver if applicable**	• **To detect any abnormality**
Auscultation	

• **Locate the foetal heart by placing the foetoscope or Doppler on the foetal back**	• **To determine heart tones**
• **Auscultate the foetal heart rate for one minute while comparing it with the maternal pulse**	• **To confirm that the abdominally detected rate is that of the foetus, not the client**
• **Note any deviation from normal and take appropriate action**	• **Facilitates clinical judgments and appropriate interventions**

D. Evaluation

Evaluate	Rationale
• **The status of the pregnancy**	• To ensure wellbeing of the client and foetus
• **Whether history is consistent with findings of physical examination and antenatal profile**	• 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

Subtitle: 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
• **The client's readiness for the examination**	• To alley anxiety and gain co-operation
• **Required equipment and supplies**	• To determine availability and access
• **Condition of the examination environment**	• 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
- Color coded disposal bins

C. Implementation

Steps	Rationale

• **Instruct the client to empty the bladder and to undress from the waist down/change into an examination gown**	• **To promote comfort and ease access**
• **Give the client a clean bed sheet to cover herself**	• **To provide privacy and warmth**
• **Explain the procedure to the client**	• **To alley anxiety and promote cooperation**
• **Instruct the client to assume lithotomy position**	• **For ease of access**
• **Encourage the client to remain calm and take slow deep breaths during the procedure**	• **To minimize discomfort and promote relaxation**
• **Ensure that the client is dry and comfortable after the procedure**	• **For the patient's comfort and dignity**
• **Before handling specimens, wash hands and put on gloves. Prepare specimens for transfer to the laboratory**	• **To promote infection prevention**
• **Instruct the client to a sitting position ensuring that she remains covered with the drape then provide privacy to dress up**	• **For privacy and termination of the procedure**
• **Ask the client whether she has questions before she leaves**	• **To determine understanding of the procedure and interventions**

D. Evaluation

Evaluate	**Rationale**
• **The findings**	• To validate diagnosis for appropriate intervention
• **Appropriateness of specimen collection**	• For accurate diagnosis
• **Planned intervention**	• For appropriate and timely intervention

E. Documentation

Record:

- Examination findings
- Planned interventions
- Health education provided
- Areas of follow up care

Subtitle: 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**
• **The client's understanding of specimen collection procedure**	• To determine teaching needs of the client
• **Required supplies and equipment**	• To determine availability and efficiency
• **Availability of requisite facilities**	• 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

• **Complete the laboratory request forms:**
  • Urine: **for urine analysis**
  • Blood: **syphilis test, HIV, Grouping and rhesus factor, Malaria parasite, haemoglobin**
	• **For accuracy and follow-up of results**

• **Direct the client to the right test areas**	• **To ease location of facilities**
• **Perform the relevant tests**	• **Promotes identification of infection and facilitates planning for appropriate interventions**
• **Receive and review results**	• **Provides an opportunity for intervention**
• **Perform appropriate post-test counseling**	• **To prepare the client for the results and interventions**
• **Give feedback and intervene appropriately**	• **To facilitate decision making on interventions**
• **Appreciate the client**	• **To demonstrate appreciation and ensure the client receives required management**
• **Wash and dry hands**	• **For infection prevention and control**
• **Document in appropriate records**	• **For record keeping**

D. Evaluation

Evaluate	Rationale
• **Values of results obtained**	• To form a basis for management and health messages sharing
• **Consistency of history, physical examination and antenatal profile**	• 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

Title: Intrapartum Care

Subtitle: Admission of a Client in Labor

Definition:

A process of confining a pregnant client who is in labor in a maternity unit.

Purpose:

To ensure the safety of the client and foetus, plan accurately for the course of labor and birth, and promote a rewarding experience for the client and the family.

Indications:

- A client in labor

A. Assessment

Assess	Rationale

• **Physiological and emotional state of client**	• To determine level of comfort to gain cooperation
• **Equipment**	• For ease of access and readiness
• **Environment**	• 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 bins
- 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

• **Ask the client the following:**
  • **Reasons for coming to hospital**
  • **When her labour pains began and how often they come**
  • **Whether membranes have ruptured**
	• **For baseline data and guide further intervention**

• **Explain to the client all procedures**	• **To allay anxiety, and gain confidence and cooperation**
• **Give an orientation to the unit**	• **To create awareness of the surrounding**
• **Ask the client to change into hospital gown**	• **To be in appropriate clothing for ease of examination and infection prevention and control**
• **Ask the client to empty the bladder**	• **To ensure comfort during abdominal examination**
• **Assist the client to lie onto the couch/bed on the lateral position**	• **For comfort and effective perfusion**
• **Take vital signs and do a quick abdominal examination**	**7 - 12. For baseline data and to guide subsequent intervention**

• **Obtain history by:**
  • **Reviewing antenatal card carefully noting all risk factors**
  • **Clients who did not attend antenatal clinic should be interviewed as if they were attending antenatal clinic for the first time**
 	
NB: **If the client is in active labour, obtain the most important information and postpone the other history**
	•

• **Obtain information about labour**
  • **Note nature of labour pains**
  • **Vaginal bleeding**
  • **Foetal movements**
  • **Drainage of liquor**
  • **Any other relevant symptoms**
	•

• **Perform physical examination:** ***(See procedure on Physical Examination 1.1-3)***	•
• **Perform abdominal examination** ***(See procedure on Abdominal Examination 3.1-5)***	•
• **Perform vaginal examination** ***(See procedure for Vaginal Examination 3.2-2)***	•
• **Explain findings to the client and companion and leave her comfortable in bed**	• **To allay anxiety, promote involvement in care**
• **Decontaminate the soiled linen and equipment**	**14 - 16. For infection prevention and control**
• **Clean the trolley with soap and water**	•
• **Wash and dry hands**	•

D. Evaluation

Evaluate	Rationale
• **The findings**	• To determine intervention to be planned, for accountability, record keeping, continuity of care and avoid duplication
• **Expectations during labor**	• To promote cooperation and confidence

E. Documentation

Record:

- Maternal and foetal findings
- Partograph if indicated

Subtitle: Vaginal Examination

Definition:

A procedure performed through the vagina to assess progress of labor.

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 labor

Contraindications:

- Antepartum haemorrhage
- Preterm labor with premature rapture of membranes
- Extensive vaginal warts
- Active herpes simplex

A. Assessment

Assess	Rationale
• **Availability of required equipment**	• To ensure ease of access
• **General condition of the client**	• For baseline data
• **Genitalia for discomfort**	• Plan for measures to alleviate discomfort
• **Environment**	• 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
• **Wash and dry hands**	• **For infection prevention and control**
• **Place the sterile vaginal pack on the top shelf and Complete setting the trolley with the equipment stated above**	• **In readiness for the procedure**
• **Wheel the trolley next to the couch**	• **For ease of access**
• **Screen the bed/couch**	• **To promote privacy**
• **Inform the client on every step being done and describe the sensations to expect**	• **To reduce anxiety and facilitate cooperation**
• **Perform abdominal palpation**	• **For comparison of the findings with those of vaginal examination**

• **Position the client in lithotomy and drape her appropriately**	• **Enhance comfort, privacy and access**
• **Instruct your assistant to open the top flap of sterile pack taking care not to contaminate it**	• **For infection prevention and control**
• **Instruct the assistant to pour the lotion and lubricant respectively in the bowl and gallipot taking care not to contaminate sterile field**	• **To determine the appropriate intervention**
• **Inspect the vulva for any discharge, scars, lesions, inflammation and smell**	**10 - 13. For infection prevention and control**
• **Wet the cotton swabs in the antiseptic solution, squeeze excess solution, place them on the dominant hand**	•
• **Drop the first four swabs, one swab at a time into the non-dominant hand**	•
• **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**	•
• **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**
• **Lubricate the index and middle finger of the dominant hand**	•
• **Instruct the client to relax and to begin slow, rhythmic breathing**	•
• **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.** NB: **Do not remove fingers until you have completed the examination to reduce infections and discomfort**	**17 - 18. To obtain baseline data to guide intervention** **Prevents transfer of microorganisms to the client**

• **Assess the following parameters:**
  • **Cervical position**
  • **Cervical consistency**
  • **Cervical effacement**
  • **Cervical dilatation**
  • **Presenting part**
  • **Foetal position as determined by the foetal suture lines and position of the fontanelle (in cephalic presentations) in relation to the maternal pelvis**
  • **Foetal station as determined by the presenting part in relation to the ischial spines of the pelvis**
  • **Status of membranes**
  • **Pelvic adequacy**
	•

• **Determine dilatation as follows:**
  • **Insert fingers into the cervix; determine the internal os, of the cervix by curling tip of index finger over upper edge of cervix.**
  • **Without stretching estimate the cervical dilation**
	19 - 20. To obtain baseline data to guide intervention
	Prevents transfer of microorganisms to the client

• **Determine the position of the foetal head:**
  • **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**
  • **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**
	•

• Pelvic adequacy: **Where necessary perform assessment of pelvic adequacy in the following order:**
  • **Try to tip the sacropromontory**
  • **Feel the curve of the sacrum**
  • **Feel the mobility of the coccyx**
  • **Your fingers to the sides and feel the ischial spines**
  • **Turn the upwards towards the subpubic angle and estimate the angle**
  • **After removing your fingers from the vagina, fold your examining hand and estimate the intertuberous diameter using your four knuckles**
	• **To determine pelvic diameters and rule out deviation from normal**

• **Remove the fingers from the vagina and inspect them for discharge color, amount and smell**	• **To rule out infections**
• **Remove the draping towels, place a clean pad and help the client to a suitable position and dry her**	• **To terminate the procedure and restore comfort and dignity**
• **Explain the examination findings to the client and her companion**	• **To promote decision making and involvement in intervention**
• **Remove the gloves and wash your hands**	• **For infection prevention and control**
• **Clear the equipment clean and store the trolley**	• **For preparation for the next procedure**
• **Record the findings**	• **For subsequent references and action**

D. Evaluation

Evaluate	**Rationale**
• **Labor progress**	1 – 2. To plan for intervention
• **If findings were within the expected range**	

E. Documentation

Record:

- Findings as follows:
  - Vaginal examination
  - Abdominal examination
  - Foetal status
  - Maternal status
- Record labor progress as indicated in the partograph

Subtitle: Monitoring Labor using a Partograph

Definition:

A process of assessing the progress of labor using a graphic record containing relevant details of the client and the foetus.

Purpose:

- To monitor progress of labor for appropriate intervention

Indications:

- All clients in active labor

A. Assessment

Assess	Rationale
• **Onset of active labor**	• To determine if the client meets the criteria for commencement of partograph and mode of care
• **The client's understanding of frequent monitoring**	• Allays anxiety and facilitates cooperation
• **Availability of the partograph**	• 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 colors
- Second hand watch

C. Implementation

Steps	Rationale
• **Wash and dry hands**	• **For infection prevention and control**

• **Record the client's information on the partograph:**
  • **Full name**
  • **Registration/file number**
  • **Age**
  • **Gravidity**
  • **Parity**
  • **Date and time of admission**
	• **For positive identification of the client and baseline data**

• **Time elapsed since rupture of membranes**	• **To institute appropriate intervention**
• **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**	• **To monitor the status of the foetus and help in instituting appropriate interventions**

• **At each vaginal examination *(Refer to procedure 3.2-2, Vaginal Examination)***
describe and record the state of membranes and or liquor as follows:
  • I **– Intact membranes**
  • R **– Membranes ruptured**
  • C **– Membranes rupture, clear fluid**
  • M **– Meconium stained fluid**
  • B **– Blood stained fluid**
  • ARM**- Artificial rupture of membranes**
	• **For baseline data to institute intervention and to identify signs of foetal distress for prompt intervention**

• **Record the degree of moulding as follows:**
  • '0' **– if the bones are separated, sutures felt easily**
  • + **Sutures apposed**
  • ++ **Sutures overlapped but reducible**
  • +++ **Sutures overlapped and not reducible**
	• **To determine the adequacy of the pelvis and institute corrective interventions**

• Cervical dilatation
  • **Assessed at every vaginal examination and marked with a cross "X"**
  • **Begin plotting on the partograph at 4 cm dilatation and above with regular painful contractions**
  • **Chart the dilatation on the alert line; write the time directly under the X in the space for time**
	• **To monitor labor progress and effacement**

• Descent: **Assessed by abdominal palpation Plotted as "O" and measured in fifths:**
  • 5/5 **head completely above the pelvic brim**
  • 4/5 **sinciput high, occiput easily felt**
  • 3/5 **sinciput easily felt, occiput felt.**
  • 2/5 **sinciput felt, occiput just felt**
  • 1/5 **sinciput felt, occiput not felt**
  • 0/5 **no palpable foetal head**
	• **To ascertain the descent of the presenting part into the pelvic brim**

• Hours: **Record the time that has elapsed since the onset of active phase of labor**	• **To monitor labor progress and need for additional interventions from the nurse**
• Time: **Record time of admission as zero time. The actual hour of the day is recorded below the hour time**	• **To calculate average duration of labor**

• Contractions: **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).**
 	
Chart contractions as follows:
  • Less than 20 seconds
  • Between 20-40
  • More than 40 Seconds
	• **To determine the efficacy of the contraction in relation to the expulsion of the foetus**

• Oxytocin: **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**	• **To augment labor, monitor effectiveness and adverse reactions**
• **Record any additional drugs and I.V fluids given in the space provided as appropriate**	• **To prevent medication errors and overdose**

• **Vital signs**
  • **Take and record the maternal pulse every 30 minutes and mark with a** dot (•)
  • **Take and record the maternal blood pressure every four hours and indicate with** arrows
  • **Take and record the actual maternal temperature every four hours**
	• **To monitor maternal progress and coping, and to guide intervention**

• **Encourage the client to pass urine every two hours and test for protein and acetone, note the volume and record the findings** NB: **Whenever you chart the partograph, review the whole partograph, take note of all the parameters, analyze, interpret and take the appropriate action**	• **To enhance descent, comfort, prevent bladder injury and aid intervention**

• **At the end of the fourth stage of labor, record the summary of labor on the partograph. Remember to write your name in the space provided**	• **For record keeping, continuity of care and accountability by midwife**

D. Evaluation

Evaluate	Rationale
• **The Findings**	1 - 2. To validate diagnosis and aid in planning intervention
• **The accuracy of plotting on the partograph**	•
• **Interventions**	• To ascertain the effectiveness of intervention

E. Documentation

Record:

- Findings
- Interventions

Figure 3.3 Partograph

Figure 3.3 Partograph

Subtitle: 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

Subtitle: Care during Second Stage of Labor

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
• **The signs of second stage**	• To aid in institution of appropriate intervention
• **Availability of the required equipment and if assistance is needed**	• Ensure appropriateness and efficiency during the procedure
• **Safety, warmth and privacy of the environment**	• To ensure a conducive and safe birth environment for the client, companion and newborn
• **The condition of the foetus**	• Identifies immediate measures to be taken during the delivery process
• **The client's confidence**	• Facilitates maximum cooperation during birth

B. Planning

Self

- Appropriate grooming
- Empty bladder
- Review guidelines on care during second stage of labor
- 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

Steps	Rationale
• **Confirm 2nd stage of labor (full dilatation of the cervix)**	• **To prepare for the delivery of the baby**

• Recognize the presumptive signs of second stage:
  • Steady descent of foetus through birth canal
  • Onset of expulsive (pushing) phase
  • Contractions increase in frequency and duration
  • Client may vomit
  • The perineum bulges and the skin become tense and glistening
  • The anus may gape
	• To ascertain onset of second stage of labor

• 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	• To allay anxiety and assist the mother to cooperate and participate in the process of delivery
• Allow the client to assume a position of her choice during the procedure	• For cooperation and comfort
• Wash hands and wear protective gear	• For infection prevention and control
• Encourage the client to push with every contraction without holding the breath continuously and rest in between contractions	• To aid descent, reduce exhaustion and improve perfusion
• Encourage the client to sip drink(s) of her choice in between contractions	• To prevent dehydration and enhanced energy

• Instruct the assistant to:
  • Check foetal heart rate after every contraction,
  • Check maternal pulse every 10 minutes,
  • Wipe sweat from the client's face (If birth companion is present she/he can assist in wiping sweat.)
	• Ascertain foetal and maternal wellbeing, institute appropriate interventions and enhance comfort

• Once the client is in the expulsive phase of the second stage, encourage the client to assume the position she prefers and bear down	• To enhance comfort and descend
• Wet the cotton swabs in the antiseptic solution, squeeze excess solution, and place them on the dominant hand	• To prepare for cleaning of the mother
• Drop the first four swabs, one swab at a time into the non-dominant hand	• Infection prevention and control
• 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	• Prevents cross infection; for hygienic purposes
• 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	• For infection prevention and control
• Drape the client starting with the nearest thigh, abdomen, furthest thigh and the bottoms incase the client is in a supine position	• For privacy and dignity
• Encourage the client to bear down with every contraction without holding the breath continuously until the newborn's head delivers	• To aid in descend, prevent exhaustion and enhance perfusion
• 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)	• To maintain flexion and to prevent forceful expulsion and injury

• **Place palm of the non-dominant hand on the foetal head to keep it flexed (bent) and prevent expulsion.** NB: **It is important that the foetal head is only controlled and not held back**	• **To prevent injury from accidental falls**
• **Keep observing the perineum to detect early signs of an impending tear and consider an episiotomy**	**18 - 20. To eliminate pain and widen the passage and prevent unnecessary perineum tissue damage**
• **If an episiotomy is required, infiltrate with local anesthesia, wait until the perineum is thinned out then perform the episiotomy**	•
• **Continue to gently support the perineum as the newborn's head is delivered**	•
• **Once the newborn's head is delivered, ask the client to relax and stop pushing**	• **To allow for restitution of the head and rotation of the shoulder**
• **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**	• **To clear the airway**
• **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** (caution: CUTTING SHOULD ONLY BE THE LAST RESORT)	• **To prevent compression of the cord blood vessels or strangulation of the baby**
• **Wait for restitution of the head then support the head at the parietal bones using the palms of your hands**	• **To aid in delivery of the shoulders**
• **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**	• **To facilitate the delivery of the baby and prevent injury**
• **Note and shout time of birth**	• **To determine the time of birth**
• **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**	• **To maintain warmth and promote bonding**
• **Palpate the abdomen and confirm absence of the second twin**	• **To rule out the presence of a second twin**
• **Inform your assistant to administer 10 iu of oxytocin Intramuscularly within one minute of birth of the baby**	• **To aid in the contraction of the uterus**
• **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** NB: • **Most babies begin crying or breathing spontaneously within 30 seconds of birth:** • **If the newborn is crying or breathing i.e. chest rising at least 30 times per minute, leave the newborn with the client** • **If the newborn does not start breathing within 30 seconds,** call for help **and take steps to resuscitate the newborn.** ***(See procedure on Resuscitation of a Newborn 3.4-2)***	• **To prevent hypothermia, encourage bonding and institute appropriate interventions**

• **Clamp and cut the cord at 3 and 5 cm from the umbilicus** NB: **The companion can be allowed to cut the cord once clumped. In this case, hold the cord and show the companion where to cut**	• **To separate the baby from the placenta leaving appropriate length to aid in clamping**
• **Show the client and her companion their newborn and let them identify the sex and congratulate the client**	• **To correctly identify the sex of the baby, alley anxiety, and commend her efforts**
• **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.** NB: **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**	• **To maintain warmth, promote bonding, and nourish the baby**
• **Proceed with the other steps of active management of the third stage of labor which includes:** • **Controlled cord traction** • **Uterine massage** ***(See procedure on Management of Third Stage of Labor 3.2-6)***	• **To ensure safety of both the baby and the mother**

D. Evaluation

Evaluate	**Rationale**
• **Outcome of labor**	1 - 3. To determine the need for intervention. For accountability, record keeping, continuity of care and avoid duplication
• **Maternal and foetal condition**	•
• **Partograph**	•

E. Documentation

Record:

- Duration of second and third stage
- Any drugs administered
- State of the perineum
- Estimated blood loss
- Progress during 2nd stage of labor
- Mode of delivery
- Condition of the newborn and the client
- Initiation of breastfeeding

Subtitle: Management of Third Stage of Labor

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 labor

A. Assessment

Assess	**Rationale**
• **Whether 10 iu of oxytocin has been administered**	• To aid in uterine contraction
• **Availability of required equipment**	• For ease of access
• **The client's understanding of the procedure**	• To gain cooperation

• **Comfort of the client and the newborn during the procedure**	• To gauge the success of the process
• **Environment**	• To determine safety, appropriateness and privacy

B. Planning

Self

- Appropriate grooming
- Review the procedure on active management of third stage of labor
- 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 labor *(Refer to procedure 3.2-5, Care during the 2nd Stage of Labor)*
- A calibrated jug
- Sterile gloves

C. Implementation

Steps	Rationale
• **Wash and dry hands and put on two pairs of sterile gloves**	• **For infection prevention and control**
• **Clamp the cord close to the perineum using sponge forceps**	• **To secure the cord and prevent bleeding.**
• **Palpate the abdomen to confirm contraction of the uterus**	• **To prevent inversion of the uterus during delivery of the placenta**
• **Place the other hand just above the client's pubic**	• **To stabilize the uterus by applying counter traction during controlled cord traction**
• **Keep slight tension on the cord and await for a strong uterine contraction (two to three minutes after administration of oxytocin)**	• **To safely deliver the placenta**
• *Figure 3.4 Delivery of the Placenta; Controlled Cord Traction (Adapted from Posner, G.D., et al, 2013)* *Figure 3.4 Delivery of the Placenta; Controlled Cord Traction (Adapted from Posner, G.D., et al, 2013)*	• **To prevent uterine inversion and ensure delivery of a complete placenta**
• **If the placenta is not delivered with the first contraction, gently hold the cord and wait for the next uterine contraction and repeat controlled cord traction**	**7 - 9. Helps prevent tearing off the thin membranes**
• **Using the sponge forceps, keep clamping the cord closer to the perineum as it lengthens**	•
• **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**	•
• **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**	• **To aid in uterine contraction**

• **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)** NB: **In case uterine inversion occurs, reposition the uterus using the guidelines**	• **To ascertain the completeness of the placenta, cord and membranes**
• **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**	• **For infection prevention and control**
• • **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.** • **Gently insert the fingers of the dominant hand into the vagina and inspect the birth canal.**	• • To minimize trauma • To determine the presence of trauma to the birth canal.
• **If tears, laceration or episiotomy are present pack as you prepare to stitch**	• **To compress blood vessels to prevent bleeding**
• **Put a sterile pad and clean the thighs**	• **For comfort, infection prevention and control**
• **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 become relaxed (soft) after you stop uterine massage**	• **To maintain a contracted uterus to reduce bleeding**
• **Instruct your assistant to take vital signs of the client, observe excessive bleeding and report** NB: **Understand the cultural beliefs and practices for disposal of the placenta**	• **To monitor the mother post delivery**
Examination of the Placenta	
• **Spread the placenta on a flat surface**	• **Facilitates examination of the placenta**
• **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**	• **Determines completeness and condition of the placenta and rules out any abnormalities of the placenta**
• **Weigh the placenta**	• **Determine whether its weight is 1/6 of newborn's weight**
• **Estimate blood loss correctly** NB: **Consider blood on the linen, floor and collected then correlate with the client's vital signs**	• **To institute the appropriate intervention**
• **Decontaminate used equipment and soiled linen**	**5 - 7. For infection prevention and control**
• **Clean the trolley with soap and water and disinfect**	•
• **Oversee the clearing of the coded bin** NB: **Continue with management of 4th stage of labour**	•

D. Evaluation

Evaluate	**Rationale**
• **Blood loss**	• **To institute appropriate intervention**
• **State of placenta/membranes**	• **To detect deviation from normal and completeness**
• **Asepsis observed throughout the delivery process**	• **For infection prevention and control**
• **The state of the uterus**	**4 - 5. To determine the contraction of the uterus**

• **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

Subtitle: 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
• **The client's status and readiness for the procedure**	• To gain co-operation
• **Required equipment and medication**	• For ease of access and efficiency
• **Condition of the environment**	• 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 coach/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
• **Ask the client to void or catheterize if necessary**	• **To aid contraction of uterus**
• **Commence Normal saline IV fluids using a wide bore cannula**	• **To secure access for institution of appropriate intervention**
• **Administer appropriate analgesia**	• **To control pain**
• **Give prophylactic antibiotics**	• **To prevent sepsis**
• **Place a gloved hand into the uterus, with the other hand externally placed on the fundus of the uterus to support the fundus**	• **To stabilize the uterus**
• **Follow the umbilical cord to find the edge of placenta. (Fig 3.5)**	• **To guide in locating the attachment area**
• **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 excess force in such a case can result in life-threatening hemorrhage or uterine trauma – hysterectomy is often required) (Fig 3.6)**	• **To ease the detachment and aid in complete evacuation of the placenta**
Figure 3.5 Manual Removal of Placenta (Adapted from WHO, 2003) *Figure 3.5 Manual Removal of Placenta (Adapted from WHO, 2003)*	*Figure 3.6 Manual Detachment of Placenta (Adapted from WHO, 2003)* *Figure 3.6 Manual Detachment of Placenta (Adapted from WHO, 2003)*
• **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**	• **To prevent uterine inversion**
• **Explore the uterine cavity**	• **To ascertain complete evacuation**
• **Examine the placenta *(Refer to procedure 3.2-8, Examination of Placenta)***	• **To determine deviation from normal**
• **Give parenteral oxytocics where necessary**	• **To aid in contraction of the uterus**
• **Ask an assistant to massage the fundus of the uterus**	• **To stimulate the contractions and prevent bleeding**

D. Evaluation

Evaluate	Rationale
• **If the placenta has been completely removed**	• **To prevent postpartum hemorrhage**
• **If the placenta is complete**	• **To be sure no lobes or membranes were retained**
• **If the client is bleeding**	• **To institute necessary intervention**

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

Subtitle: 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

• **The client's understanding of the procedure and her willingness to observe it**	• To gain co-operation
• **Required equipment**	• For ease of access
• **Condition of the environment**	• 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
• **Place the placenta with the foetal surface uppermost noting shape, size, colour and smell**	• **For easy visualization**
• **Examine the cord noting the length insertion point and presence of true knots or false knots**	• **To determine deviation from normal**
• **Inspect the umbilical cord vessels at the cut end and count them**	• **To determine completion, detect abnormalities**
• **Observe the foetal side for irregularities such as succenturiate lobes, missing cotyledons, fatty deposits or infarction**	• **To ascertain need for interventions**

• **By lifting the cord and holding the placenta up, you can then observe the membranes and inspect for completeness.**
  • **There should be a single hole present where the newborn has passed through the membranes**
  • **Return the placenta to the surface and spread the membranes out in order to look for extra vessels, lobes, or holes in the surface**
	• **To ensure no parts were left in the uterus**

• **Separate the amnion from the chorion by pulling the amnion back over the base of the umbilical cord to ensure both are present**	• **To verify their continuity and completion**
• **Turn the placenta over to inspect the maternal side**	• **For calcification and other indicators of reduced perfusion in utero**
• **Examine the cotyledons, note presence of infarcts, blood clots or calcification**	• **For completeness**
• **Take cord blood samples if required**	• **For laboratory evaluation and testing**
• **Weigh the placenta swab or take samples if indicated**	• **To determine maternal nutrition during pregnancy**
• **Clean away the equipment and dispose the placenta appropriately**	**11 - 13. For infection prevention and control**
• **Wash hands**	•
• **Explain the findings to the client**	•

D. Evaluation

Evaluate	Rationale
• **The placenta, cord and membranes**	• **To determine deviations from normal**
• **Interventions implemented**	• **To ascertain the effectiveness of planned actions**

E. Documentation

Record:

- Document findings on the cord, membranes and the placenta
- Interventions planned

Subtitle: Epidural Care of the Client following Epidural Anaesthesia during Labor

Definition:

Care of the client who has undergone administration of opioids and/or local anesthetics into the epidural space during labor.

Purpose:

- To maintain analgesia during labour
- To prevent complications

Indications:

- All clients who have undergone epidural anaesthesia during labour

A. Assessment

Assess	Rationale
• **The client's status and readiness for the procedure**	• To gain co-operation of the client
• **Required equipment and medication**	• For ease of access
• **Condition of the environment**	• 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 form the client
- Update the client and her companion on the progress of labour
- Explain the non-pharmacological and pharmacological pain relieve 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
• **Start and maintain IV infusion as prescribed**	• **To maintain hydration**
• **Continue labour and foetal monitoring as required**	• **For baseline data and intervention**
• **Position the client in a lateral or semi-recumbent position after the initial placement of the epidural catheter, and explore ambulation if the condition allows**	• **Prevent orthostatic hypotension due to compression of the inferior venacava**
• **Change the client's position every hour if she is not ambulating**	• **Ensure comfort and facilitate labour progress**
• **The patient should ambulate in Labour and Delivery unit only**	• **For vigilance**
• **Encourage the patient to void every 2 hours**	• **To facilitate descend and prevent bladder injury**
• **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**	• **Ensure progress and prevent complications**

• **Monitor the client for:**
  • **Effectiveness of the drug**
  • **Sedation level**
  • **Respiratory distress**
  • **Nausea and vomiting**
  • **Itching of the body**
  • **Pressure on the lower back**
  • **Urinary retention**
  • **Level of sensory block**
  • **Level of motor nerve block**
  • **Epidural site care**
	8 - 9. To prevent complications and institute appropriate interventions

• **After delivery, continue monitoring the above until anesthesia completely wears off**	•

D. Evaluation

Evaluate	Rationale
• **Effectiveness of epidural**	**1 - 2. Promote comfort**
• **Outcomes of labour**	•
• **Complications**	• **Institute prompt interventions**
• **Interventions**	• **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

Subtitle: 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
• **The client's understanding of the procedure and her willingness to cooperate**	• To gain co-operation of the client
• **Availability and functionality of required equipment**	• For ease of access
• **Condition of the environment**	• 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-**
    - **A**sk for help, to assist in the procedure
    - **A**ddress the client
    - **A**naesthesia adequate?
  - **B-** **B**ladder empty
  - **C-** **C**ervix fully dilated
  - **D-**
    - **D**ecent 1/5 and below
    - Determine position of the head
  - **E-** **E**quipment familiarity and in working condition
  - **F-** **F**lexion point- 2-3cm in front of the posterior Fontanelle
  - **G-** **G**entle traction with contraction
  - **H-**
    - **H**alt when cup slips off twice and in 20 minutes if the head is not about to be delivered
    - **H**alt traction after contraction
  - **I-** **I**ncision- evaluate need for an episiotomy
  - **J-**
    - **J**aw visible- remove the cup
    - **J**ump 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 coach/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
• **Examine the client abdominally and vaginally**	• **To confirm indications and prerequisites**
• **Explain the procedure**	• **To gain consent and cooperation**
• **Prepare equipment. In addition to routine delivery supplies add vacuum extractor**	• **For ease of access**
• **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**	• **To determine functionality**
• **Ask the client to void or catheterize her if necessary**	• **To prevent bladder injury and descend**
• **Instruct the client to assume the lithotomy with the head supported**	• **To allow full accessibility of the perineum**
• **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)**	• **To ascertain correct placement and aid flexion**
• *Figure 3.7 Insertion of Fingers into Vagina to Access the Appropriate Position to Fix the Cup (Adapted from Damos JR, Bassett R., (2003))* *Figure 3.7 Insertion of Fingers into Vagina to Access the Appropriate Position to Fix the Cup (Adapted from Damos JR, Bassett R., (2003))*	• **For ease of access to the foetal head**
• **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**	• **To be sure no maternal tissue has been caught under the cup**
• **Create a vacuum of 0.2kg/cm2 (at the yellow level)**	• **To create adequate suction**

• **Confirm that there is no maternal tissue trapped between the cup and foetal head**	• **To prevent injury**
• **Increase vacuum up to a maximum of 0.8kg/cm2 (at the green level)**	• **To create adequate suction for traction**
• **Instruct the client to communicate the start and the end of a contraction**	• **To allow synchrony between traction and expulsive forces**
• **Place the index finger on the scalp and the thumb on the cup**	• **To feel for the earliest signs of cap slippage**
• **If perineal resistance is encountered perform an episiotomy after perineal infiltration with local anaesthetic**	• **To aid in the in the delivery of the head and prevent injury**
• *Figure 3.8 Proper Placement of the Cup in front of the Posterior Fontanelle (Adapted from Damos JR, Bassett R., (2003))* *Figure 3.8 Proper Placement of the Cup in front of the Posterior Fontanelle (Adapted from Damos JR, Bassett R., (2003))*	**16 - 18. To prevent slippage and maintain flexion of the foetal head**
• **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**	
• **Continue pulls for a maximum of three contractions which should be sufficient**	•
• **Once the jaw of the newborn is visible, release pressure, remove cup and proceed with the delivery of the newborn**	• **To signify the end of the vacuum delivery**

Steps	**Rationale**
Figure 3.9 Removing the Cup when the Foetal Jaw is Reachable (Adapted from Damos JR, Bassett R., (2003)) *Figure 3.9 Removing the Cup when the Foetal Jaw is Reachable (Adapted from Damos JR, Bassett R., (2003))* NB: • **Abandon the procedure if the cup slips twice and if in 20 minutes of traction, the head is not about to be delivered.** • **Refer to the manufacturer's instructions for different types of equipment.**	
• **Perform active management of third stage of labour**	• **To deliver the placenta**
• **Repair any perineal tear or episiotomy**	• **To prevent postpartum hemorrhages**

• **Clean the equipment in preparation for next use**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **The outcome of the second stage**	• **To intervene appropriately**
• **Interventions**	• **To ascertain the effectiveness of actions taken**
• **The client and newborn**	• **To determine deviation from normal**

E. Documentation

Record:

- Document the outcome of the delivery
- Interventions planned

Subtitle: 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
• **Availability of the equipment**	• For ease of access
• **Extent of the episiotomy**	• For appropriate intervention
• **Client's understanding of the procedure**	• 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
• **Move trolley next to the couch**	• **For convenience and efficiency**
• **Place the coded bin near the couch**	• **For proper waste disposal**
• **Assist the client to a lithotomy position**	• **For ease of access**
• **Wash and dry hands and put on sterile gloves**	• **For infection prevention and control**
• **Ask the assistant to open the pack**	• **To prevent contamination**
• **Perform vulval cleansing (do incision site last)**	• **For infection prevention and control**
• **Place a sterile towel under the perineum**	• **To prevent soiling of the environment**
• **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**	• **To eliminate pain**
• **Inspect the vulva**	• **To ensure the are no other perineal tears and ascertain the diameters of the episiotomy**
• **Identify the apex of the incision and infiltrate the episiotomy with lignocaine hydrochloride in a 'fan-shape' technique** NB: **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**	• **For appropriate alignment and prevent complications**
• **Repair the vaginal wall using a continuous 2-0 suture (Fig 3.10B)** *Figure 3.10 Episiotomy Repair* *Adapted from Robson & Higgs (2011)* *Figure 3.10 Episiotomy Repair* *Adapted from Robson & Higgs (2011)*	• **A continuous stitch achieves better homeostasis**
• **Open the incision with two fingers of the non-dominant hand**	• **For infection prevention**
• **Start the repair about 1 cm above the apex (top) of the episiotomy. Continue the suture to the level of the vaginal opening**	• **For better alignment of severed tissues**
• **At the opening of the vagina, bring together the cut edges of the vaginal opening**	• **To restore anatomical alignment**
• **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**	• **To minimize chances of dehiscence**

• **Repair the skin starting at the fourchette downwards using continuous stitches or subcuticular stitches**	• **To ensure aesthetic and anatomical restorations**
• **Clean the area and place a sterile sanitary pad**	• **For infection prevention and control**

Steps	**Rationale**
• **Perform a digital rectal examination** *Figure 3.11 Digital Rectal Examination* *Figure 3.11 Digital Rectal Examination*	• **To ascertain the patency of the rectum**
• **Explain to the client the extent of tissue injury and repair**	**19 - 20. To promote involvement in self-care**
• **Conduct health education on care of episiotomy**	•
• **Clear linen, instruments, equipment and waste in accordance with waste disposal procedures. Ensure emptying of the coded bin**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **Alignment of the tissues**	• **To promote healing**
• **Level of haemostasis**	• **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

Subtitle: Breech Delivery

Definition:

The care of a client in labor 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
• **The general condition of the client**	• Allay anxiety and gain the client's cooperation
• **The level of understanding of the type of delivery**	• Determine need for additional information
• **Availability of the required equipment and if assistance is needed**	• Ease of access and efficiency
• **Environment**	• For safety, privacy and comfort
• **The stage of labor**	• 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
• **Review for indications**	• **To establish relevance of the interventions**
• **Start an IV access**	• **For fluid and medication administration**
• **Provide emotional support and encouragement**	• **Allays anxiety and encourages cooperation from the client**
• **Inform the obstetrician and pediatrician**	• **For specialized intervention when need arises**
• **Assist the client into lithotomy position with her buttocks at the edge of the delivery couch**	• **Readiness for delivery and ease of access for maneuvers**
• **Ask the assistant to open the delivery pack on top of the trolley**	• **To prevent contamination and cross infections**
• **Wash and dry hands and put on gloves**	• **For infection prevention**
• **Drape the client *(Follow steps as stipulated in Management of 2nd stage of Labour Procedure 3.2-6)***	• **To prevent unnecessary exposure, dignity**
• **Perform a vaginal examination**	• **Confirm full dilatation of the cervix and engagement of the breech**
• **Catheterize the client**	• **To ensure empty bladder and aid descend**
• **Once the buttocks have entered the vagina and the cervix is fully dilated, tell the client to bear down with the contractions**	• **For progressive descent of the foetus**
• **As perineum distends decide the need for episiotomy**	• **To allow enough room for the foetus to pass**
• **Adhere to the principle of "hands off the breech" as the newborn progressively descents**	**13 - 14. To allow gravitational descent of the newborn**

• **Let the buttocks deliver until the lower back and the shoulder blades are seen** NB: **in a complete breech the legs and the hands deliver spontaneously without assistance**	•
• **Gently loosen the loop of the cord**	• **To prevent traction and compression of blood vessel**
• **Gently hold the buttocks in one hand, but do not pull**	• **To support them and prevent accidental fall**
• **If the legs do not deliver spontaneously, deliver one leg at a time:** • **Push behind the knee (popliteal fosa) to bend the leg** • **Grasp the ankle and deliver the foot and leg** • **Repeat for the other leg**	• **To prevent injury and facilitate the delivery of the leg**
• **Hold the foetus on the bonny pelvis (by the hips) using a towel**	• **To facilitate delivery, prevent hypothermia and prevent slippage**
• **After delivery of the trunk, allow the breech to hang, then gently pull the loop of the cord**	• **To prevent traction and compression of cord blood vessels**
• **Feel for the pulsation on the cord**	• **To ascertain foetal wellbeing**

Steps	Rationale
• **Allow the arms to disengage spontaneously one by one. Only assist if necessary (Fig. 3.12)** *Figure 3.12 Delivery of the shoulder that is posterior* *Source: www.who.org (2007)* *Figure 3.12 Delivery of the shoulder that is posterior* *Source: www.who.org (2007)*	**21 - 23. To facilitate the delivery of the arms** *Figure 3.13 Lovsets Manoeuvre* *Source: www.who.org (2007)* *Figure 3.13 Lovsets Manoeuvre* *Source: www.who.org (2007)*
• **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)**	•
• **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**	•
• **Allow newborn to hang by its own weight (hands off breech principle)**	• **To allow the head to engage into the pelvic floor**

• **The occiput rotates ⅛ of a circle forwards until the airline is visible**	**25 - 29. To facilitate the delivery of the head**
• **Hold foetal body over your hand and arm**	•
• **Place first and third fingers on the newborn's cheek bones**	•
• **Use the other hand to grasp the newborn's shoulders**	•
• **With two fingers of this hand flex the foetal head towards its chest. (See Fig 3.14. Mauriceau-Smellie-Veit manoeuvre)** *Figure 3.14 Mauriceau-Smellie-Veit Manoeuvre Adapted from EmONC (2013)* *Figure 3.14 Mauriceau-Smellie-Veit Manoeuvre Adapted from EmONC (2013)*	•
• **Remove secretions from the newborn's face with gauze sponges and suction the mouth and nose, if necessary**	• **To clear the airway**
• **Record the time of delivery**	• **To determine the time of birth**
• **Place the newborn on the client's abdomen and quickly stimulate and dry the newborn with a sterile dry pre warmed towel**	• **To stimulate breathing, bonding and maintain warmth**
• **Give an Apgar Score of the newborn at 1 minute**	• **To ascertain foetal wellbeing and institute appropriate intervention**
• **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)**	• **Separates the newborn and the placenta**
• **If the newborn is stable, instruct the assistant to put the newborn on the breast if not contraindicated**	• **For bonding and nourishment and continuity of care**
• **Administer oxytocin injection to the client. Proceed with active management of third stage of labour *(Refer to procedure 3.2-6, Management of 3rd Stage of Labour)*** NB: **Repair episiotomy *(Refer to procedure 3.2-11, Episiotomy Repair)*. The rest of the steps in this procedure are similar to the process of management of second stage of normal labour**	• **To prevent postpartum haemorrhage and facilitate delivery of the placenta**
• **Clean the client's perineum with antiseptic lotion and place a clean pad**	• **To prevent post-partum sepsis**
• **Examine the placenta, the cord and membranes**	• **Detects any deviation from normal**

• **Estimate the blood loss**	• **To institute appropriate interventions**
• **Remove the gown and gloves and wash hands**	• **For infection prevention and control**
• **Take the client's vital signs**	• **For baseline data and institute appropriate interventions**
• **Transfer the client and the newborn to the postnatal ward**	• **For continuity of care**
• **Decontaminate linen and instruments, wash the trolley with soap and water, then wash hands with soap and water and dry them**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Outcome of the delivery**	• **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

Subtitle: 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

Subtitle: 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

Subtitle: 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
• **Readiness for procedure**	• To gain cooperation
• **Required equipment**	• For easy access and efficiency

• **Condition of the environment**	• 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
- Tenacullum-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 3.15 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

Figure 3.16 Basic Components of an MVA Kit

Source: http://www.postabortioncare.org/sites/pac/files/mva_instruments_guide_0.pdf

C. Implementation

Steps	Rationale
• **Explain the procedure to the patient and provide privacy**	• **To gain informed consent and cooperation**
• **Provide emotional/verbal support and encouragement throughout the procedure**	• **To allay anxiety, for cooperation**
• **Administer Pethidine 50mg IM 30 minutes before the procedure at the hospital level or Diclofenac or Ibuprofen at health centre level**	• **To manage pain and reduce anxiety**
• **Maintain aseptic technique**	• **To prevent and control infection**
• **Assemble the equipment**	• **For easier accessibility**
• **Administer oxytocin 10 IU in incomplete abortion(mostly administered post procedure)**	• **To make the myometrium firm and reduce the risk for perforation**

• **Place the client in lithotomy**	• **To provide comfort and easier access**
• **Perform 6 swab technique to clean the vulva and vagina with chlorhexidine**	• **To prevent and control infection**
• **Drape the vulva**	• **For privacy and promotion of the patient's dignity**
• **Perform bimanual pelvic examination**	• **To check on the size and position of the uterus and degree of cervical dilatation**
• **Insert the speculum gently and remove the visible products of conception**	• **To complete the process of abortion and minimize risk of haemorrhage**
• **Clean the cervix**	• **To prevent risk for ascending infections**
• **Examine the cervix for tears, lacerations, etc**	• **To rule out trauma, and prompt intervention**
• **Administer a paracervical block** NB: **Avoid giving it at 12, 6, 9 and 3 o'clock because these areas are highly vascular and the risk of bleeding is high**	• **To control and manage pain**
• **Put single tooth tenaculum or vulsellum forceps on anterior lip of the cervix**	• **For ease of visibility**
• **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 performed mechanical cervical dilatation**	• **To easily reach the fundus for complete evacuation**
• **Withdraw the cannula 1cm away from the fundus**	• **To ensure free movement of the cannula during evacuation**
• **Attach the prepared syringe with vacuum to the cannula**	• **For maximum function of the syringe**
• **Release the pinch valve on the syringe**	• **To create negative pressure effective to start the evacuation**
• **Evacuate any contents of the uterine cavity by gently rotating the cannula and syringe**	• **To ensure the uterus is empty and restore normal uterine tone**
• **Check for red or pink foam, no more tissue in the cannula or 'gritty' sensation**	• **This is a sign of competed evacuation**
• **Gently withdraw the cannula and detach it from the syringe**	• **For completion of the procedure**
• **Quickly inspect the products of conception**	• **For consistency, and signs of total evacuation**
• **Administer Oxytocin 10 IU IM**	• **For uterine contraction and minimization of bleeding**
• **Process the MVA equipment according to standards**	• **To prepare for the next use**
• **Observe the client/patient for 30 minutes**	• **To ensure the client is in stable general condition**
• **Complete counseling process including Family Planning and provision of the chosen method**	• **To enhance the patient's comfort and ensure the patient makes an informed choice of family planning method**

D. Evaluation

Evaluate	**Rationale**
• **If the uterine content has been completely evacuated**	• **To determine need to repeat the procedure**
• **If the client is bleeding per vagina**	• **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

Title: Postnatal Care Procedures

Subtitle: 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
• **Availability of required equipment**	• For ease of access and efficiency
• **Environment**	• For safety, privacy and comfort
• **General condition of the client**	• To ascertain wellbeing
• **Condition of the breast**	• 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
• **Wash and dry hands**	**1 - 2. For infection prevention and control and ease of access to breasts**
• **Ask the client to wash her hands with soap and water and change into a clean gown with the open side in front**	•
• **Wheel the trolley next to the client**	• **For efficiency and access of equipment**
• **Ensure the client is seated on a chair a or stool**	• **To promote comfort and cooperation**
• **Instruct the client to hold the cup below the left breast with left hand or vice versa**	• **To ensure that the expressed milk flows in to the cup**
• **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**	• **To ease performance of the procedure**

• **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**	• **To avoid spillage and promote milk flow**
• **Ask the client to continue expressing milk for 5 – 7 minutes with 3 or 4 rests in between**	• **For maximum breast stimulation and complete emptying of the breast**
• **When the client has completed expressing, wipe, dry and cover the breast**	• **To maintain hygiene, prevent infection and promote privacy**
• **Expose the other breast repeat the process, but change the hands as appropriate**	• **For continuity and completion of the procedure**
• **After the completion of the procedure, ask the client to remove the gown, wash and dry her hands**	• **For infection prevention and control**
Expressing Breast Milk using the Breast Pump	
• **Repeat steps 1-5 above**	• **For ease of access, infection prevention and control**
• **Instruct the client to hold the breast pump with the dominant hand and fit it onto the breast**	• **To create suction in the pump**
• **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**	• **To create a balanced suction on the breast**
• **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**	• **To create appropriate suction**
• **Instruct client to support the breast with one hand firmly**	• **To maintain suction and prevent spillage**
• **Instruct the client to release the bulb gently and observe for flow of milk into the milk chamber**	• **For complete emptying of the breast**
• **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**
• **Repeat the process on the other breast and empty the milk into the cup as it fills the chamber during the process**	•
• **Wipe the breasts with wet gauze instruct the client to remove the gown and change into her dress**	• **For comfort, privacy, infection prevention and control**
• **Store the milk appropriately**	• **To insure safety, potency and availability of the milk when needed**

D. Evaluation

Evaluate	**Rationale**
• **Color, consistency and amount of milk expressed**	• To ascertain amount and quality for appropriate intervention
• **Discomfort**	• 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

Subtitle: 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
• **The required equipment**	• Ease of access
• **Readiness of the client for the procedure**	• For cooperation
• **Need for incorporating other family members in the client's care**	• 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
- Color coded bins

C. Implementation

Steps	Rationale
• **Wash and dry hands**	• **For infection prevention and control**
• **Move the trolley next to the bed**	• **For ease of access**
• **Avail coded bins**	• **For appropriate waste segregation and disposal**
• **Assist the client to lie on the bed in dorsal position**	• **For comfort and ease of access**
• **Remove bed covers leaving only the top sheet for covering the client**	• **Provides privacy, promote comfort and warmth; and easy access**
• **Wash hands, dry and put on gloves**	• **For infection prevention and control**

• Assess general status of the client (include focused history taking)	7 - 8. To obtain information for baseline data, noting abnormalities that would require immediate interventions
• Perform a systematic head to toe examination with special emphasis on the breasts, abdomen, perineum, lochia loss, and the extremities	•
Breasts	
• • Assess the fit and support provided by the client's bra	• To promote successful lactation, and identify need to for appropriate interventions
• Size and shape of the breasts	•
• Any abnormalities, reddened areas, engorgement	•
• Lightly palpate for softness, slight firmness associated with filling, firmness associated with engorgement, warmth or tenderness	•
• Assess nipples for fissures, cracks, soreness, inversion	•
• Teach the client on recognizing problems associated with the breast	•
• Non-breast-feeding client assessed for evidence of discomfort and relief measures taken when necessary	• To guide on suppression of milk and prevent breast complications
Palpation of the Abdomen	
• • Position the client flat on the bed with head comfortable on a pillow	a - b. For comfort and cooperation
• If the client is uncomfortable, may flex knees	
• 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
• Measure the height of the fundus in relation to the umbilicus	•
• Examine caesarean section site if applicable	• To evaluate the healing process
• Evaluate the bladder for distention	• To prevent discomfort and to promote uterine involution

• Perineum **Put on a pair of gloves and assess the lochia for amount, presence of clots, color and odor (See Fig 3.17)** *Figure 3.17 Lochia Loss* Source: www.nursekey.com *Figure 3.17 Lochia Loss* Source: www.nursekey.com	• **To determine the progress of involution and deviation from normal**
• **Assess the episiotomy or perineal laceration**	• **To assess the healing process**
• **Assess the extremities for varicosities, DVT, oedema**	• **To detect deviation from normal**
• **Carry out health education to include contraception**	• **To promote informed decision making**
• **Clear the trolley, remove gloves and wash hands** NB: • **Within 48 hours, assess for uterine contractions** • **After 48 hours, assess for uterine involution** • **Always perform head to toe examination to rule out other complications outside reproductive system**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **Health status**	• Determine post-delivery progress
• **Interventions planned**	• To evaluate effectiveness of actions instituted

E. Documentation

Record:

- Examination findings
- Health education given
- Interventions planed

Subtitle: 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
• **The required equipment**	• For ease of access and efficiency
• **Environment**	• For safety, comfort and privacy
• **The health status of the client**	• To determine deviation from normal
• **Know the client's knowledge on the procedure**	• 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 coach/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
• **Explain the procedure to the client**	• **To attain the client's cooperation and involvement**
• **Ask the client to empty the bladder/ensure the bladder is empty**	• **To promote comfort and cooperation**
• **Assist the client in dorsal position**	• **To promote access and efficiency**
• **Wash and dry hands**	• **For infection prevention and control**
• **Arrange the trolley and wheel to the bedside**	• **For efficiency and ease of access**
• **Wear sterile gloves**	• **For infection prevention and control**
• **Ask the assistant to pour warm lotion into the jug and into the bowl**	• **In preparation for disinfecting of the perineum**
• **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**	• **For hygiene and infection prevention**

• **Clean the labia majora using a downward stroke starting with the furthest then the near majora**	• Prevent microbial seeding of the vagina
• **Clean the labia minora using the same technique**	• Prevent cross infection
• **Clean the vestibule with the dominant hand using downward movement**	• Prevent transfer of microbes to the vestibule
• **Pat dry the perineal area**	• For comfort and convenience during the procedure
• **Turn the client laterally and clean the buttocks**	• **To promote comfort and ease of access**
• **Apply the pad and change the beddings**	• **For comfort**
• **Conduct health education**	• **To impart and update knowledge**
• **Clear the trolley, remove gloves and wash hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **The perineal area**	**To institute appropriate intervention**
• **Characteristic of the odor**	•
• **Skin integrity**	•

E. Documentation

Record:

- State of the perineal area
- Characteristic of lochia
- Health education provided
- Planned interventions

Title: Newborn Care Procedures

Subtitle: Assessing Agpar Score of a Newborn

Definition:

A systematic method of collecting data on a newborn's conditions after delivery at I 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**
• **Determine availability of required equipment**	• To facilitate efficiency and ease of access
• **General condition of the newborn**	• To ascertain the wellbeing of the newborn
• **Environment**	• For warmth, safety and comfort
• **Working surface**	• 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^{o}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

<table>
<tr><th>Steps</th><th>Rationale</th></tr>
<tr><td>• Place the newborn in a warm comfortable flat area for assessment</td><td>• To facilitate easy examination of the newborn while preventing hypothermia</td></tr>
<tr><td>• Wash and dry hands and put on gloves</td><td>• For infection prevention and control</td></tr>
<tr><td>• Note general condition of the newborn</td><td>• To determine status and wellbeing of the newborn</td></tr>
<tr><td>• Note the following five parameters:
• Color (Appearance - A): Note the color of the skin
• Heart Rate (P): A stethoscope is used to listen to the apical pulse
• Response to stimulation (Grimace-G). Gently rub onto the sole of the foot and note the grimace
• Activity of Muscle (A)
  • Note activity and muscle tone of the newborn
  • Stimulate arms and legs by pulling onto them
• Respirations Efforts (R): Note respirations by looking at the abdomen and chest</td><td>• For baseline data to institute appropriate interventions

<table><tr><td>Parameter</td><td>Score2</td><td>Score1</td><td>Score0</td></tr><tr><td>Appearance</td><td>Pink whole body</td><td>Pink body and blue extremities</td><td>Completely blue</td></tr><tr><td>Pulse</td><td>100 and above</td><td>Below 100</td><td>No pulse</td></tr><tr><td>Grimace</td><td>Strong ability to</td><td>weak</td><td>no</td></tr><tr><td>Activity</td><td>Strong muscle tone</td><td>Weak muscle tone</td><td>floppy</td></tr><tr><td>Respiratory effort</td><td>strong cry</td><td>Weak cry</td><td>No respiration</td></tr></table>Figure 3.18 AGPAR Scoring Guide</td></tr>
<tr><td>• Wrap up the newborn warmly and place on the client’s chest or place in a cot/incubator</td><td>• To maintain warmth</td></tr>
<tr><td>• Update the client on the condition of the newborn</td><td>• To allays anxiety and gains client’s cooperation</td></tr>
<tr><td>• Clean the used surface, remove gloves and wash hands</td><td>• To prevent and control infection</td></tr>
<tr><td>• Remove the tray and store in right place</td><td>• To clear the working space and allow proper equipment maintenance</td></tr>
</table>

D. Evaluation

Evaluate	Rationale
• **The APGAR Score**	• To determine the state of the child and appropriate intervention
• **Effectiveness of intervention**	• 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

Subtitle: 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
• **Condition of the new born**	• Determines appropriate intervention
• **The required equipment**	• To confirm availability
• **Environment**	• 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^{0}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**
• **Alert the resuscitation team members**	• **To assemble an effective team of experts essential for resuscitation**
• **Wash hands with water, liquid soap, dry and put on gloves**	• **For infection prevention and control**
• **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**	• **Aids in effective thermoregulation, prevents heat loss through evaporation**
• **Wipe the newborn's mouth with a clean towel if there are excessive secretions**	• **To clear and maintain patent airway**
• **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** NB: **If the newborn fails to respond to drying and stimulation, then the infant must be immediately actively resuscitated.**	• **For warmth, nourishment, and bonding**
• **Place in a warm firm surface under a radiant heat warmer** NB: **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.** "TABCD" **– T**EMPERATURE **– A**IRWAY **– B**REATHING **– C**IRCULATION **– D**RUGS **According to AHA/AAP**	• **For ease of access, provision of warmth**
Step 1	
• OPEN AND CLEAR THE AIRWAY. **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)**	• *Figure 3.19a Correct Position of the Head for Ventilation* *(Adapted from WHO - OMS, 1997)* *Figure 3.19a Correct Position of the Head for Ventilation* *(Adapted from WHO - OMS, 1997)*

• GENTLY CLEAR THE THROAT. **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).** NB: • **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.** • Never **hold an infant upside down to clear secretions** • **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**	*Figure 3.19b Suctioning the Mouth and Nose using Mucus Extractor* *Adapted from (WHO - OMS, 1997)* *Figure 3.19b Suctioning the Mouth and Nose using Mucus Extractor* *Adapted from (WHO - OMS, 1997)* *Figure 3.19c Suctioning the mouth and the Nose Source (Leardal Global Health, 2017)* *Figure 3.19c Suctioning the mouth and the Nose Source (Leardal Global Health, 2017)*
Step 2	
• **If a newborn doesn't breath after drying and stimulation start the infant breathing by providing adequate ventilation**	
• MASK VENTILATION: • **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)** *Figure 3.19d Correct Placement of the Mask* *Source: (Tjukurpa, M. K., 2015)* *Figure 3.19d Correct Placement of the Mask* *Source: (Tjukurpa, M. K., 2015)*	• *Figure 3.19e Holding Mask Tightly Over the Newborn Nose and Mouth* *Source: (Tjukurpa, 2015)* *Figure 3.19e Holding Mask Tightly Over the Newborn Nose and Mouth* *Source: (Tjukurpa, 2015)*
• **Give 5 inflation deep breath if newborn not breathing at birth, each lasting 2-3 seconds. Making sure the chest rises**	• To initiate spontaneous respiratory activity
• **The newborn breathing, color and heart rate must be reassessed**	• To determine level of oxygenation
• **Reassess by listening to neonatal heart rate and breathing using the stethoscope**	• To assess resumption of cardiac activity
• **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**	• To determine the success of the therapy and termination of the process

• **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**	• To ensure adequate oxygenation
Step 3	
• **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.**	
• **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.** **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)**	• To stimulate the heart and maintain brain tissue perfusion *Figure 3.19f Two Methods of Chest Compression Source: (Tjukurpa, 2015)* *Figure 3.19f Two Methods of Chest Compression Source: (Tjukurpa, 2015)*
• **Once both effective ventilation and chest compressions have been achieved for 2 minutes, reassess the newborn breathing, color and heart rate**	• To determine the next course of action
• **If the heart rate is below 60 beats per minute, continue with chest compressions until 60 beats per minute are achieved**	• To stimulate the heart and maintain tissue perfusion
• **If the heart rate is 60 beats and above, continue ventilating at the rate of 30-40 breaths per minute**	• For effective ventilation
• **Continue ventilating until a heart rate of above 100 beats per minute is achieved, respirations are between 30-40 breaths per minute.** NB: • **Use of drugs may be instituted if the basic resuscitation fails and investigations have been done** • **Stop resuscitation after 20 minutes if the newborn is not breathing, gasping, or after 30 minutes of resuscitation and spontaneous breathing has been achieved** • **Stopping resuscitation is guided by the available national guidelines**	• For effective tissue perfusion
• **If the newborn's condition improves put in an incubator, connect oxygen using a facemask at 2L/minute and continue observing**	• For close monitoring and continuity of care
• **Reassure the client and inform her of the infants condition**	• To allay anxiety and involvement of care
• **Discard disposable equipment into the coded bins, decontaminate equipment appropriately then remove gloves and wash hands**	• For infection prevention and control

D. Evaluation

Evaluate	Rationale
• **The newborn's condition**	• **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)

Subtitle: 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
• **Availability of required equipment**	• To ensure availability of required equipment and to save time
• **The health status of the newborn**	• To ascertain wellbeing of the newborn
• **The client's readiness to observe the procedure**	• For cooperation and to determine health education needs
• **Environment**	• 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**
• **Explain procedure to the client and companion**	• **To alley anxiety and gain cooperation**
• **Move the trolley next to the examination area**	• **For ease of access and efficiency**
• **Wash and dry hands and put on gloves**	• **For infection prevention and control**
• **Inspect the appearance, breathing pattern and activity**	• **To determine current status and detect any deviation from normal**
• **Expose only the area under examination**	• **To prevent hypothermia**
Head	
Inspect: • **Caput succedaneum, cephalheamatoma or moulding**	**6 - 9. To determine features of birth and intracranial injuries and malformations**
• **Size**	•
• **Palpate the fontanels and sutures**	•
• **Measure the head circumference**	•
Eyes	
• **Inspect colour, discharge, symmetry, distance between the eyes (should be approx. 3cms)**	• **To determine features of birth and intracranial injuries and malformations**
• **Reflexes (blinking, red reflex,) pupils' reaction to light**	• **To determine birth defects and any other deviation from normal**
Nose	
• **Inspect the nose for (discharge, continuity flaring, deviated nasal septum, blockage)**	• **To evaluate the presence of potential respiratory distress and other abnormalities**
Mouth	
• **Inspect the lips, gums, palate, tongue, frenulum or false teeth**	• **To evaluate the presence birth defects and presence of abnormalities**
• **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**	• **To determine normal neurological function**
Ears	
• **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**	• **To determine the maturity of the newborn**
• • **Palpate the cartilage of the ears** • **Visualize into the ears** NB: **Leakage of cerebral spinal fluid is a sign of intracranial injury, discharge is a sign of infection**	• **To evaluate the patency of external auditory meatus**
• **Inspect for webbing at the back of the neck , excess skin, and mobility**	• **To determine any birth defects**
• **Flex and rotate the head**	• **To determine any birth injuries**
Upper Limbs and Shoulders	

• **Palpate clavicles for continuity and rotate the shoulders for dislocation**	• **To determine any birth injuries**
• **Examine the arms for equality and free movements**	**20 - 22. To detect any deviation from normal**
• **Examine each hand at a time. And assess for grasping**	•
• **Flex and rotate the wrist joint**	•
Chest	
• **Inspect the chest for respiratory pattern, symmetry, retraction, nipple placement, nipple discharge**	• **To detect any deviation from normal**
• **Measure chest circumference**	• **To rule out hydrocephalus**
• **Auscultate heart sounds and apical pulse, and the respiration rate**	• **To determine the rate, identify congenital heart defects**
Abdomen	
• **Inspect for shape, colour and size**	• **To detect birth GIT defects**
• **Auscultate for bowel sounds**	• **For rate and rhythm of peristaltic movements**
• **Palpate gently**	• **To prevent reflux and reflex peristalsis**
• **Examine the umbilical cord for blood vessels, hernia, colour, stump if secure**	• **To rule out abnormalities**
Lower Limbs	
• **Inspect the limbs for, symmetry, tone, full range of motion in all joints, crasp reflex, leg appear bowed and sole crease present**	• **To determine musculoskeletal defects**
• **Examine each leg independently**	• **For comparison purposes**
• **Flex and rotate the ankle joint**	• **To determine birth trauma of the hip** • To exclude presence of birth and congenital injuries • To determine the presence of normal reflexes and function
• **Palpate the groins for swelling**	• **To detect any abdominal masses**
Hips	
• **Perform Ortolani's Test or Barlow's Test on the hips of the newborn.**	• **To exclude bleeding, birth injuries and congenital abnormalities**
Genitalia	

• **Examine the genitalia**
  • Male: **inspect shape, size, position of penis and urethra, fore skin for retraction, bruising, swelling or haematomas.**
  • Female: **part labia to visualize the opening, detect masses, swellings, discharge, abnormal anatomy**
 	
NB: **elicit information on whether the newborn has voided and passed meconium**
	• **To determine congenital abnormalities and birth injuries**

Anus	
• **Observe the position**	**36 - 38. To determine the patency of the anus, to exclude abnormalities**
• **Gently touch the anus to elicit contraction and retraction of the anal muscle (normal reflex)**	•
• **Insert a lubricated rubber catheter into the anus if newborn has not passed meconium**	•
Spine	
• **Position in prone, inspect and palpate the back and along the spine for clefts, dimples, sinuses, hairy patches**	• **To exclude vertebral malformation and injuries**
• **Check for other neonatal reflexes**	• **To determine neurological function**
Measurements	

• **Take weight and length of the newborn**	• **To confirm maturity of the newborn**
• **Dress up the newborn, hand over to the client**	• **To promote warmth and safety**
• **Take random blood sugar**	• **The measurements provide parameters against which future growth and development can be monitored**
• **Take the newborn's temperature** NB: • **Review prenatal and labour records for the client** • **Observe breastfeeding (position, attachment)**	• **To determine any deviation from normal**

D. Evaluation

Evaluate	Rationale
• **Abnormalities detected**	**1 - 3. Provides information about the general condition of the newborn**
• **Maturity level**	•
• **Presence of birth injuries**	•
• **Adaptations to extra uterine life**	• **Identify implementation gaps for subsequent planning**

E. Documentation

Record:

- The examination
- Health education
- Planned interventions

Subtitle: 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
• **The availability of equipment**	• For ease of access and efficiency
• **Environment**	• For warmth, privacy and safety
• **The client's readiness for the procedure**	• 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
• **Explain the procedure to the client**	• **To allay anxiety and gain cooperation**
• **Wash and dry hands**	• **Infection prevention and control**
• **Clean the trolley and set equipment stated above**	**3 - 4. For ease of access and efficiency**
• **Wheel the trolley next to the bed**	•
• **Close nearby windows**	• **Promote warmth**
• **Screen the bed**	• **Promote privacy**
• **Ensure coded bins are in place**	• **For waste segregation and disposal**
• **Wash dry hands and put on gloves**	• **Infection prevention and control**
• **Undress the newborn but do not over expose him/her**	• **Ease of access and warmth**
• **Talk to the client and the newborn**	• **To alley anxiety and enhance sensory stimulation**
• **Place the newborn in supine position and make a physical observation of the newborn**	• **For ease and convenience during assessment**
• **Perform physical examination of the newborn beginning from head to toe**	• **For systematic evaluation and approach**
• **Gently palpate the anterior and posterior fontanelles**	• **For presence, pulsations and to rule out features of increased intracranial pressures**
• **Identify any new swelling e.g. cephalohaematoma and caput succedaneum and determine if moulding is subsiding**	• **To determine overlooked findings during the initial assessment**
• **Examine the eyes for discharge or stickiness and yellow coloration of the sclera**	• **To rule out eye infections, and instill appropriate interventions for neonatal eye care**
• **Examine the nose**	• **For congenital defects, patency of the naris**
• **Examine the mouth**	• **For birth defects and other abnormalities**
• **Examine the ears**	• **For symmetry and discharges**
• **Examine the neck**	• **For motion, rigidity and swellings**
• **Examine the chest**	• **To detect abnormalities and defects, signs of respiratory and cardiac symptoms requiring urgent attention**
• **Examine both extremities**	• **For defects, abnormalities**
• **Examine the abdomen**	• **For deviations from normal**
• **Examine the cord stump.**	• **For signs of healing or infection**
• **Examine the groin**	• **For growths, swellings and herniations**
• **Examine the genitalia**	• **For birth defects and abnormalities**
• **Examine the buttocks**	• **For abnormalities**
• **Weigh and dress the newborn**	• **To determine current weight deviations, and for warmth**
• **Enquire from the client whether newborn is feeding, sleeping, crying and voiding well**	• **To determine general wellbeing of the newborn**

• **Observe the client breastfeeding to ensure appropriate position and attachment**	• **To establish attachment and need for additional and appropriate intervention**
• **Give feedback to the client**	• **To alley anxiety and promote involvement**

D. Evaluation

Evaluate	Rationale
• **The newborn's condition**	• **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

Subtitle: 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
• **The required equipment**	• For ease of access
• **Environment**	• For warmth, safety, and comfort
• **The general condition of the newborn**	• 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
• **Wash dry hands and put on gloves**	• **Infection prevention and control**
• **Unwrap the newborn and observe the general condition of the newborn**	• **To determine wellbeing of the newborn and institute appropriate intervention**
• **Explain to the client why the newborn must be admitted**	• **To allay anxiety, and promote cooperation**
• **Set the incubator temperature at 32-34^{o} C and humidity at 60-80%**	• **For thermoregulation and prevention of hypothermia**
• **Place the newborn in the incubator**	• **For warmth and subsequent care**
• **Clean the trolley**	• **Infection prevention and control**
• **Set the equipment as above.** NB: **Prioritize the care depending on the condition of the newborn e.g. if the cord is bleeding ligate.**	• **For ease of access and efficiency**
• **Obtain the history of the pregnancy, labor and delivery from the client or the person who is accompanying the newborn**	• **For baseline data and institute appropriate intervention**
• **Perform a head to toe physical examination**	• **For baseline data, deviation from normal and to institute appropriate intervention**

• **Take the vital signs i.e.**
  • **Rectal temperature if the baby has not passed meconium**
  • **Apex Beat**
  • **Respiration**
  • **Observe Colour**
  • **Cry Activities**
  • **Take random blood sugar**
	• **For baseline and determine the current status of the child upon which subsequent references shall be based upon**

• **Take weight and length of the newborn**	• **Determine the current weight in comparison to the birth weight**
• **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**	• **To prevent cross infection**
• **Perform top and tailing if general condition of the newborn allows**	• **For hygienic purposes**
• **Clean cord using 4% chlorhexidine**	• **To disinfect and prevent microbial culturing that could result in neonatal sepsis**
• **Clean the trolley, decontaminate the equipment and the linen**	• **For infection prevention and control**
• **Inform the pediatrician about the admission and the general condition of the newborn**	• **For review and additional medical specialist care and collaborations**

D. Evaluation

Evaluate	Rationale
• **The newborn's general condition**	• **To institute appropriate intervention**
• **Interventions**	• **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

Subtitle: 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
• **General condition of the newborn**	• To determine a suitable thermoregulation intervention
• **The psychological and physical status of the client**	• To determine level of understanding of the newborn's condition and need for incubator care
• **The client's knowledge on the newborn's condition**	• To reassure the client of the expertise care in order to allay anxiety and win her confidence
• **The condition of the parent/guardian**	• 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;

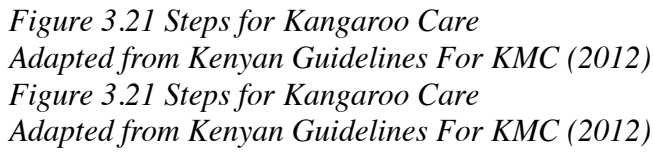
- Incubator (ready for use)
- Oxygen apparatus
- Drip stand
- Intravenous fluids
- Nasogastric tubes
- Suction apparatus
- Bucket for dirty containers/swabs
- Cardex, newborn's notes, fluid charts, weight record book
- Weighing machine
- Neonatal head caps

- Diaper/nappy
- Socks
- Wrapper
- Gloves

C. Implementation

Steps	Rationale
Incubator	
• **Explain the need for incubator care**	• **To allay anxiety and promote cooperation**
• **Set the equipment neatly in the drawers or on the bottom tray**	• **For ease of access and efficiency**
• Prepare incubator: **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**	• **For continuous warmth**
• **Ensure good visibility of the site for the incubator**	• **To easily visualize the newborn while in the incubator**
• **Keep the accessories in the room/midwifery**	• **Easy accessibility when required**
• **Place the newborn without a wrapper in the warm incubator with a temperature between 32°C to 35°C humidity 60% to 80%**	• **To prevent overheating or too cold conditions**
• **Clear the airway – with mucous catheters using a suction machine**	• **Maintain patency of the airway and improve tissue perfusion**
• **Administer oxygen as necessary**	• **To meet the body demand and improved tissue oxygenation**
• **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**	• **To monitor and ensure regulated temperature within normal range**
• **Assess passing of urine and meconium**	• **To determine elimination status of the newborn**
• **Ensure the newborn gets the correct amounts of feeds either IV or via naso-gastric tube as prescribed by the doctor. The mode changes to breastfeeding as the condition improves**	• **To take care of nutritional aspect of the newborn**
• **Clean the newborn during the critical phase**	• **To maintain body hygiene**
• **Clean the cord with chlorhexidine 4% daily**	• **To prevent sepsis**
• **Change the newborn's linen whenever they are soiled**	• **To protect delicate skin from sores, rashes and for baby comfort**
• **Turn the newborn's position 2 hourly**	• **To prevent orthostatic pneumonitis and decubitus ulcer formation**
• **Perform daily examination for head to toe**	• **To identify problems, and institute interventions**
• **Weigh the newborn if condition allows and record in the newborn's note**	• **To monitor growth and development**
• **Ensure medications are administered as prescribed and recorded in the treatment sheet**	• **To prevent medications errors and resistance due to missed doses**
• **Ensure a high standard of environmental hygiene**	• **To prevent nosocomial infections**
• **Encourage the parents/guardian to participate in the care of the newborn**	• **To reduce anxiety, promote cooperation and for continuum of care**
• **Clear the trolley and decontaminate used equipment and linen**	• **For infection prevention and control**
Kangaroo Care	
• **Wash and dry hands**	• **For infection prevention and control**
• **Explain the procedure to the client**	• **To alley anxiety, gain cooperation and involvement of care**
• **Prepare the environment**	• **To ascertain the suitability of kangaroo care**
• **Assess the general condition of the baby**	• **For warmth, safety, and comfort**
• **Instruct the parent/guardian to wear a loose fitting, open chest outfit**	• **To facilitate Kangaroo Care to the baby**

• **Dress the baby in only a diaper, socks and hat**	• **For ease of access and comfort**
• **Encourage the parent/guardian to take a warm drink**	• **To prevent extremities from extreme temperatures**
• **Place the baby in a vertical frog position, skin to skin on a parent's chest**	• **To maximize skin contact**
• **Position the baby's head slightly extended and turned to one side**	• **To maintain the patency of airway**

• **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**
  • **Maintain kangaroo care for at least 18 hours a day**
  • **Avoid frequent interruptions; a session should not last less than 60 minutes**
Figure 0.1
Figure 0.1
 
Figure 3.21 Steps for Kangaroo Care
*Adapted from Kenyan Guidelines For KMC (2012)**Figure 3.21 Steps for Kangaroo Care*
Adapted from Kenyan Guidelines For KMC (2012)
	• **To secure, support the baby and enhance contact**

D. Evaluation

Evaluate	Rationale
• **Intervention**	• **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

Subtitle: 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 200-215μmol/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:
  - 255μmol/l (15mg/dl) for preterm of <1500gms
  - 300-400μmol/l (17-23 mg/dl) for sick and preterm babies >1500gms and those experiencing haemolysis
  - 400-500 μmol/l (23-29mg/dl) for healthy term babies

A. Assessment

Assess	Rationale
• **Availability of the required equipment**	• For ease of access and efficiency
• **General condition of the newborn**	• To ascertain wellbeing of the newborn

• **Availability of radiant warmer bed with a temperature probe**	• To maintain appropriate temperature
• **Knowledge of the client about the procedure**	• To alley anxiety, promote cooperation and continuity of care
• **Environment**	• 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
• **Wash and dry hands**	• **Infection prevention and control**
• **Assemble and arrange equipment and supplies then take equipment and supplies to the treatment room**	• **For ease of access and efficiency**
• **Ensure the room is warm**	• **To protect the newborn from hypothermia**
• **Place the newborn on the blood exchange surface (crucifix) and ensure there is a heater for the newborn**	• **To ensure the newborn is placed in the most comfortable position while undergoing exchange transfusion**
• **Assist in bandaging the newborn to a cross splint**	• **To ensure the newborn is still; protects the newborn from injury that would arise from the newborn's movements**
• **Strap the stethoscope to the left chest wall of the newborn**	• **To allow for frequent access to the apex beat with minimal disturbance to the newborn**
• **Sit beside the newborn, take and record heart rate and respirations every 10-15 minutes**	• **To detect any deviations from normal and institute appropriate action**

• **Take pre-exchange bilirubin and haemoglobin levels**	• **For baseline data for appropriate intervention**
• **Record all the blood injected in and withdrawn from the newborn**	• **For accurate records to avoid circulatory overload**
• **Record all the doses, time and type of drugs given**	• **To ensures drugs are not given at too close intervals that may cause cumulated toxicity**
• **Provide the newborn with stuffed teat soaked in dextrose to suck in case of restlessness**	• **To promote source of comfort and prevents the newborn from experiencing dry lips**
• **Monitor IV fluids by maintaining fluid input and output chart**	• **To detect signs of fluid and electrolyte imbalance against daily output**
• **Take post exchange bilirubin and haemoglobin levels**	• **For evaluation and appropriate interventions**
• **Continue to monitor vital signs of the newborn quarter hourly for the next six hours post exchange transfusion**	• **To monitor progress and observe changes that would require urgent intervention**

D. Evaluation

Evaluate	Rationale
• **The newborns condition**	• **To institute appropriate interventions**
• **Interventions**	• **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

Title: 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
• **The mental state of the patient**	• To determine if the patient is violent and type of room, emergency interventions and assistance required
• **The physiological state of the patient**	• To determine if the patient can tolerate the complete procedure of admission
• **The environment**	• To provide safety and comfort required for the patient and companion
• **Number of companions for social support**	• 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
• **Greet, Welcome and introduce self to the patient and his/her companion(s)**	• **To enhance comfort, relaxation**
• **Identify the patient through the accompanying nurse/companion(s)**	• **To ensure right interventions to the right patient**
• **Receive the report of the patient from the accompanying nurse/companion(s)**	• **For commencement or continuity of care and planning interventions**
• **Check validity of the admission legal documents**	• **To ensure the patient is legally admitted in the hospital and to ensure the patient's protection**
• **Release the accompanying nurse (if applicable)**	• **To avail time for attending to the patient in the ward**
• **Take the history from the patient and/or companion *(Refer to procedure on Mental Health History Taking)***	• **To establish a database, and understand the patient**
• **Perform mental state assessment *(Refer to procedure 4.2-1, Mental State Examination/ Assessment (MSE/A))***	• **To make a plan of care**
• **Perform physical examination *(Refer to procedure 4.2-3, Physical Examination)* and take vital signs observations *(Refer to procedure 1.1-3, Measuring Vital Signs)***	• **To detect other co-morbid medical conditions; establish presence of any injuries sustained; and establish baseline data**
• **Explain the possible modes of treatment and obtain consent**	• **To protect the patient's right of autonomy, obtain cooperation and ensure compliance with treatment**
• **Develop a nursing care plan**	• **To plan for quality care**
• **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**	• **To rule out other medical conditions that might contribute to the current episode**
• **Inspect all the valuables and identify items to be taken home by relatives**	• **To ensure safety of the patient's and property**
• **Label, make a list and appropriately store items that must be left in the ward**	• **To ease identification of the patient's property and avoid loss**
• **Orientate the patient to staff, other in- patients, ward annexes and activities**	• **To promote quick adjustment to hospital environment, relieve anxiety and promote security**
• **Ensure the patient takes a bath (if necessary) and changes into hospital uniform**	• **To improve the patient's image and hygiene status**

• **Administer/ start treatment**	• **To calm the patient**
• **Keep the patient's file in the file cabinet**	• **To ensure safe custody of legal documents for reference**
• **Keep emergency trays in the respective cupboards**	• **To ensure safe custody and in readiness for subsequent use**
• **Store the equipment for observations of vital signs in the cupboard**	• **To ensure safe custody and in readiness for subsequent use**
• **Dispose the used supplies, clear equipment according to existing guidelines, and wash hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Rapport was established**	• To determine the effectiveness of interaction
• **If the patient can locate the various ward premises**	• To determine effectiveness of orientation
• **If data obtained can inform formulation of nursing interventions**	• To identify if more information is required
• **The views of relatives about the patient's admission**	• 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

Title: Comprehensive Mental Health Assessment

Subtitle: 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
• **If the environment provides for safety**	• To prevent injury to themselves, staff, companions and other patients
• **If the environment provides for privacy**	• To ensure maintenance of the patient's dignity and comfort thereby promoting cooperation for the patient and companion(s)
• **The client's general physical and mental state**	• To determine the need to validate data from an alternative source (informant) or defer the procedure until history taking is possible
• **The patient's and companion/guardians understanding of the procedure**	• To determine the explanation needed for allaying anxiety and promoting cooperation
• **Determine requirements**	• 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
Introductory Phase	
• **Assume a relaxed sitting position that demonstrates availability and acceptance**	• **To ensure relaxation and promote disclosure**
• **Explain to the patient or the companion the approximate time history taking is likely to take and what is required of them**	• **To promote cooperation**
• **Inquire from the companion(s) the relationship with the patient**	• **To establish the family support, and determine quality of data that the nurse is likely to obtain from a secondary source**
• **Establish rapport**	• **To promote dignity and create trust**
Working Phase	
• **Observe principles of interviewing techniques**	• **To promote effectiveness of obtaining information**
• **Observe the patient for non-verbal communication and validate them**	• **This reveals information the patient may not express verbally**
• **Ask open ended questions and use simple language**	• **To encourage free self-expression and promote disclosure**

• **Obtain, interpret and record complete information on the following;**
  • **Identifying data/Biodata**
  • Mode of admission: **take into consideration the legal issues concerning each mode of admission**
  • Reason for referral: **state in everyday language why the patient has been referred**
  • Chief complaint: **(allegations and the patient's response)**
  • **History of present illness**
  • **History of past illness (mental, medical, surgical, obstetric for women)**
  • Personal history:
  • **Prenatal, intrapartum, post-partum, infancy, childhood, adolescence, adulthood, education, religious, occupation/work record, forensic and socio-cultural background**
  • Psychosexual:
  • **Begin sexual history by tactfully asking how the client acquired information about sexual matters**
  • **Ask whether the patient's sexual life is satisfying or not**
  • **Enquire about methods of contraception**
  • **Family history to include family tree or genogram**
  • Habits: **tobacco, alcohol and other substances of abuse**
  • Premorbid personality
  • **Leisure activities**
  • **Mood**
  • **Character**
  • **Attitudes and standards towards the body, health, illness, religious and moral standards**
  • **Early childhood signs of emotional disorders (sleep walking, stammering)**
	• **To determine the actual, and potential problems, identify support systems, precipitating factors and plan appropriate interventions**

Termination Phase	
• **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**	• **To prepare the patient and companion for end of history taking**

• **Ask the atient and companion(s) if they have questions to ask**	• **To encourage the patient/companion to clarify their issues of concern**
	  • To signal the end of the working session while still maintaining a therapeutic relationship.
	  • Allows clarification of matters and response to concerns

• **Thank the patient and companion(s) and release them**	• **To make the patient and companion feel important to the whole process**
• **Keep the patient's notes and files in respective cabinet and store unused stationary in the store**	• **To ensure safe custody and confidentiality of the patient's notes**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Adequacy of history obtained**	• To determine if further history is required
• **Adequacy of history in planning interventions**	• To help plan interventions
• **The client's reaction during the interview**	• • To reveal the relationship between the patient, staff and companions • To help evaluate effectiveness and preparation for the procedure
• **Consistency of verbal and non-verbal communication with findings of physical examination and diagnostic investigations**	• To validate data for accurate diagnosis and intervention

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

Subtitle: 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 behavior.

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
• **Environment for quietness, safety and privacy**	• • To prevent excessive stimuli • To ensures maintenance of the patient's dignity and promote cooperation
• **The client's general physical state**	• To determine if the patient is likely to turn violent
• **The client's/patient's companion(s) understanding of the examination**	• To promote cooperation

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
• **Assume a relaxed sitting position in full view of the patient**	• **To enhance the patient's concentration**
• **Maintain adequate space as tolerated by the patient**	• **To enhance appropriate perception may interpret being too close as intruding into his/her personal space and this can precipitate irritability**
• **Explain to the patient and companion(s) the approximate duration of assessment and what is required of him/ her**	• **To prepare the patient for concentration and cooperation**
• **Establish rapport**	• **To allow for relaxation and encourages the patient to answer questions without feelings of interrogation**
• **Observe principles of interviewing techniques**	• **To promote effectiveness in obtaining information**
• **Observe the patient for non-verbal communication and validate them**	• **To reveal information and mental processes that the patient may not express verbally**
• **Ask open ended questions and use simple language**	• **To facilitate understanding and enhance self-expression**

• **Obtain, interpret and record complete information on the following;**
  • Appearance:
  Physical restrains; Dressing (whether appropriate, symbolic), grooming (kempt or unkempt), eye contact held, facial expression, posture and gait, body built, indication of recent weight loss
  • Behaviour and psycho-motor activity:
  Restlessness, agitated, lethargic, mannerisms, tics, echopraxia, echolalia, waxy flexibility, Parkinson like symptoms including, akathisia and dyskinesia
  • Attitude: **bodily state of readiness to respond in a characteristic way to a stimuli**
  • **Whether established and maintained or not (friendliness, cooperation, or hostility and defensive)**
  • Speech: **expression of thought in spoken word**
  • **Normal flow rate, pressure of speech, volubility (soft or high), spontaneous or non-spontaneous, poverty of speech, mute, monosyllabic**
  • Mood: **subjective expression of emotion**
  • **Depressed, irritable, anxious, angry, expansive, euphoric, elation, diurnal variation, labile.**
  • Affect: **visible manifestation of facial**	

expression • **Appropriate, constricted, flat, blunted** • Form of Thought: • Thought process: • **Logical, coherent, understandable** • **Neologisms** • **Word salad** • **Circumstantialities and tangentialities** • **Confabulation** • **Loosening of association** • **Flight of ideas** • **Clanging (rhyming)** • Thought content**:** • **What is contained in the thought including overvalued ideas** • **Delusions, obsessions, compulsions, phobias and suicidal ideas** • Perception: • **Awareness of the elements of the environment through physical sensation** • **Illusions, hallucinations, View of self (self-concept)** • Sensorium and cognition: • **Including abstract reasoning, consciousness, orientation, memory, alertness, concentration and attention** • Judgement: • **The ability to identify the consequences of actions** • Insight: **power or act of seeing into a situation** • **Whether present, partly or absent** • Vegetative Symptoms: • **Appetite increased or decreased** • **Insomnia or Hypersomnia** • **Loss of interest or energy in everyday activities**	• **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**
• **Explain to the patient that the information required for the time being has been obtained**	• **To prepare the patient for the end of mental state examination so that the patient does not feel he/she is being rejected**
• **Ask the patient if he/she has any questions to ask**	• **To encourage the patient to clarify his/her issues of concern**
• **Thank the patient, give feedback on findings and plan of action where possible, and release him/ her**	• **To demonstrate appreciation and promotes cooperation**
• **Keep the patient's notes and files in respective cabinet**	• **To ensure safe custody and confidentiality of the patient's notes**
• **Store unused stationary appropriately**	• **To ensure safe custody for subsequent use**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Adequacy of information obtained**	• 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

Subtitle: 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
• **Environment for safety**	• To prevent harm to staff, the patient and others
• **Environment for privacy**	• To promote confidence and ensure co-operation from the client and provision of information by the client
• **The client's present general condition**	• To determine if assistance from other members of staff is required
• **The patient/companion's understanding of the procedure**	• To determine the client's receptiveness to the physical examination process
• **The client/patient's experience and data from previous physical assessment**	• To help plan ways of reducing anxiety and improving cooperation during examination
• **Determine the required equipment**	• 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 coach with drapes

Requirements

- A well-lit room with a couch and running water
- Ensure all equipment are clean, assembled

C. Implementation

Steps	Rationale
• **Wash and dry hands**	• **For infection prevention and control**
• **Place equipment and instruments within easy reach**	• **To promote efficiency**

• **Review the client's history** ***(Refer to procedure 4.2-1, Mental Health History Taking and procedure 4.2-2, Mental State Examination/Assessment (MSE/A))***	• **To provide important clues on areas of focus or follow up during physical examination**
• **Take vital signs**	• **To establish baseline data for which further references shall be based upon**
• **Position the patient on the couch**	• **To ensure the patient's comfort and easy accessibility of the areas to be examined**
• **Depending on the MSE, Start systematic examination using the techniques of inspection, palpation, auscultation and percussion**	• **To ensure that no body systems are overlooked and that time is used efficiently**
• **Analyse data collected**	• **To make meaning of the data collected and facilitate planning of quality care**
• **Formulate a nursing care plan**	• **To facilitate provision of quality and evidence based individualized nursing care**
• **Clean, replace and discard equipment according to the institution's waste disposal and decontamination protocols**	• **To promote safety for clients, patient and staff**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **The quality of data obtained from the physical examination**	• To determine if data is adequate for formulating accurate nursing diagnoses
• **If the client's needs have been identified**	• To enhance planning of quality care
• **The client's behaviour during examination**	• To determines preparedness for examination
• **Give feedback and discuss appropriate interventions**	• 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

Title: 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**
• **The language best understood by the client/ patient**	• To establish the language the client/patient understands best
• **Perception and thought**	• To ensure interpretation of facts
• **Cultural background**	• To establish presence of cultural factors that affect the client's/patient's verbal and non-verbal interaction patterns
• **Utilization of physical space in non-verbal communication**	• To ensure safety of the patient and others
• **Any speaking or communication disabilities**	• 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 behaviors 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 arrangement
- 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
• **Welcome the client/patient to the seat**	• **To facilitates relaxation and co-operation**
• **During therapeutic meeting the sitting arrangement should allow the nurse to have full view of the client/patient with similar seats**	• **To allow for observations and eye contact without intimidation**
• **Maintain eye contact with the client**	• **To conveys one's interest in the client/patient**
• **Speak with the client/patient using appropriate language**	• **To enhance understanding and participation**
• **Give full concentration to the client/patient and avoid interruptions during the interaction**	• **To build trust that promotes concentration and disclosure**
• **Start the interaction with general topics**	• **To put the client/patient at ease and allow for the patient to give information that allays anxiety**
• **Speak slowly and distinctly using appropriate tone variations**	• **To sustain the client/patient's interest and concentration**
• **Use open ended questions when asking the client/patient what his/her concerns are**	• **To allow the client/patient open up and actively participate in the interaction process**
• **Give the patient time to respond, exercise tolerance and patience**	• **To promote self-esteem and convey respect**
• **Observe facial expressions**	• **To identify any conflicting messages conveyed**
• **Establish regular meeting times and observe punctuality**	• **For consistency and confidence that promotes a trusting relationship**
Introduction Phase	
• **For new patients, introduce a summary of the need for interaction sessions**	**12 - 13. To orientate the client/patient and encourage participation**
• **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**	•
• **Observe the client/patient's behavior during this phase**	• **To determine the client's mood and provide direction for further interaction**
• **Help the client/patient identify his/her needs and challenges**	• **To promote the client/patient's insight and perception**
• **Discuss the details of expectations and responsibilities of both the patient and the nurse**	• **To outline each person's roles and responsibilities in the formulation of the relationship**
• **Gather more data from the client/patient and Identify the patient's strength's and limitations**	• **To build strong data base and reduce the possibility of the client/patient being frustrated**
• **Formulate nursing diagnosis, set goals that are agreeable to both the patient and nurse**	• **To provide bases for implementation and evaluating effectiveness of the relationship**
• **Develop a plan of action that is realistic for meeting established goals**	• **To mitigate the already identified patient's actual and potential health needs**
• **Explore feelings for discomfort and anxiety**	• **To prepare for appropriate interventions if need be**
Working Phase	

• **Guide the client/patient along topics of discussion**	• **To prevent deviation and circumstantiality**
• **Discuss the client/patient's problems and reality orientation**	• **To promote the client/patient's insight and perception**
• **Observe the client/patient for signs of anxiety that may arise in response to the discussion of painful experiences**	• **To provide data for planning interventions**
• **Continuously observe if the client/patient is ready for termination phase**	• **To give time for expression of emotions**
• **Ask open ended questions**	• **To facilitate understanding and enhance self-expression**
• **Offer silence and other appropriate therapeutic techniques of communication and deal with needs that may require immediate attention**	• **To promote and allow self-expression fully**
• **Evaluate and set goals from time to time and change them where necessary**	• **To obtain more information from the client/ patient**
Termination Phase	
• **Recognize and explore feelings of the client/ patient about termination**	• **To determine what goals are realized and the benefits to the client/patient**
• **Encourage the client/patient to discuss the identified feelings**	• **To promote direction and growth process during termination**
• **Continuously evaluate the outcome of the set objectives during each session**	• **To ensure that planned activities are done**
• **Summarize what has been discussed with the client/patient and allow him/her to ask questions**	• **To clarify any factors that may hinder interaction**
• **Refer the client/patient depending on the outcome of the objectives**	• **To ensure maximum benefit to the client/patient**
• **Thank the patient for being tolerant and release as appropriate**	• **To convey appreciation and respect**
• **If the interaction sessions are to continue, then set the next time and date of meeting with the client/patient**	• **To ensure continuity**
• **Explain to the client/patient that the meetings are over**	• **To allay the client/patient's anxiety**
• **Give room for consultation as necessary**	• **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**
• **If the patient was satisfied with the interaction sessions**	• To determine the effectiveness of the relationship
• **The extent to which the patient is able to solve or cope with similar situations in the future**	• To confirm that the patient's emotional growth was effective
• **If the patient verbalized his/her problems**	• To confirm that trust was achieved in orientation phase

• **Whether the patient is comfortable with termination**	• 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

Title: 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 behavior that may have been unrecognized previously.

Indications:

- Any person with an emotional problem or mental disorder

A. Assessment

Assess	Rationale
• **Self-understanding**	• To identify some of the self needs/behaviour that may affect the therapeutic process
• **General condition of the client/patient and their understanding of the procedure**	• To help determine the preparation required

• **Environment for:**
  • **Privacy**
 	
  • **Safety**
	•
	  • To ensure cooperation and confidentiality
	  • To prevent the patient from causing harm to self and the therapist

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
- *Figure 4.1 An Individual Psychotherapy Session*

Figure 4.1 An Individual Psychotherapy Session

C. Implementation

Steps	Rationale
Introductory (Orientation) Phase	
• **Create a conducive environment for the procedure**	• **To establish trust and rapport**
• **Explain the procedure to the client/patient, obtain a consent and sign a working contract**	• **To observe the patient's right of autonomy and promote cooperation**
• **Review the client's history together with client and identify his/her needs**	• **To enhance adequate data collection and promote active participation in the process**
• **Together with the client / patient, set goals that are comfortable for the client and therapist**	• **To enhance the patient's participation in their own care**
• **Draw a working schedule of the therapeutic process**	• **To ensure systematic intervention that facilitates efficiency and effectiveness**
Working Phase	
• **Begin the therapeutic scheduled sessions on time**	• **To promote confidence and compliance; enhance established relationship**
• **Win and maintain the client's trust and rapport that was established earlier on**	• **To ensure effective interactions**
• **By use of appropriate psychotherapeutic techniques, help the client to bring out gradually the suppressed experiences/ emotions in the subconscious mind**	• **To allow working out on the expressed feelings/ emotions**
• **Assist the patient in pointing out on the expressed emotions**	• **To foster therapeutic participation in the recovery process**
• **Interpret both the verbal and non-verbal communication during the sessions**	• **To identify the client's reaction**
Termination Phase	
• **Prepare the client/patient for termination of the sessions**	• **To allay anxiety associated with separation**
• **Review the set therapeutic goals**	• **To determine the extent that goals were met**
• **Discuss openly own and the patient's feelings of termination**	• **To allow emotional evaluation for both the patient and the therapist**
• **Inform the client/patient that therapeutic sessions are over**	• **To allow the patient attend to other activities**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **If the set goals were achieved**	• To determine effectiveness of the therapeutic process
• **Open expression of feelings and reactions**	• To ensure painful experiences were resolved
• **Readiness of the patient to end the therapeutic sessions**	• To ensure emotional growth was achieved
• **Feeling of independence and development of effective problem-solving techniques**	• 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

Title: 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
• **The mental state of each patient involved**	• To determine ability to participate
• **The scheduled group activities**	• To determine appropriateness of the environment
• **Each client's behaviour**	• To ensures adherence to therapeutic process
• **Selection criteria for the group members**	• To cater for differences that might negatively affect interaction sessions
• **Qualifications, experience and number of staff available**	• 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

Figure 4.2 Group Psychotherapy Session

C. Implementation

Steps	Rationale
• **Assemble the selected patients to the prepared venue**	• **To make the patients ready to start the activity**
• **Offer the patients seats in a circle (if necessary)**	• **To allow for full view of one another**
Introductory Phase	
• **Greet all patients, introduce self, colleagues and explain the reason for the activity**	• **To allay anxiety and promotes readiness and willingness for participation**
• **Invite every group member to do a self-introduction session**	• **To promote feeling of acceptance and being part of the group**
• **Facilitate group members to select group chairman and secretary from among themselves**	• **To reduce feelings of intimidation and facilitates coordination of group's activity**
• **Identify group norms and sign a working contract**	• **To promote responsibility by each member while observing patient's autonomy and rights**
• **Facilitate the group to schedule meeting times and duration**	• **To ensure consistency and continuation**
• **Facilitate patients to sit at a comfortable space**	• **To promote feeling of belonging and acceptance without feeling of intrusions into one's space**
• **Facilitate group members to plan with the therapist the time frame**	• **To promote working towards achieving objectives within specified time limits**
• **Facilitate the group to identify goal and objectives of the group**	• **To allow evaluation of effectiveness of activities**
• **Observe for signs of establishment of acceptance, respect and trust**	• **To ascertain the progress made and facilitates disclosure**
• **Guide members in their interaction and allow them to proceed at their own pace**	• **To help the group to remain focused while at the same time reducing feeling of intimidation**

• **Facilitate self-disclosure**	• **To allow for expression of repressed material which can then be dealt with**
Working Phase	
• **Observe the extent to which members show willingness to become involved with one another**	• **To promote evidence of mutual trust and success of working phase**
• **Use the group pressure in facilitating behaviour change**	• **To modify behaviour in response to group pressure**
• **Facilitate interaction between members by reflecting each member's questions and answers back to the group for discussion**	• **To facilitate development of problem-solving skills**
• **Show positive attitude to member's contribution however irrelevant they may appear**	• **To convey respect and encourage disclosure**
• **Interpret the various tasks and roles members assign to themselves and to other members**	• **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**
• **Determine if objective for each session are being met**	• **To detect factors that may hinder achievement of goals and plan appropriate interventions**
Termination Phase	
• **Provide members with opportunity to express feelings of separation from other members**	• **To enable the nurse plan for appropriate interventions**
• **Allow members to discuss any achievements made as a feedback mechanism**	• **To evaluate effectiveness of therapeutic activity**
• **Set the date for next session**	• **To ensure consistency and continuity**
• **Allow members to disperse to their respective activities**	• **To prepare for the next session**
• **Discuss with co-therapist observations and experiences during the session**	• **To identify areas of corrections before next sessions**
• **Return seats, stationary and group file to their respective areas**	• **For safe custody**

D. Evaluation

Evaluate	**Rationale**
• **Ability to address one another by name**	• To demonstrate the clients' ability to show respect and establish an interpersonal relationship
• **Ability to self-disclosure**	• To demonstrate the client's ability to express their experiences
• **Ability of each patient to discuss with group members challenges and develop strategies he/ she plans to apply**	• To demonstrate achievements made in developing problem solving and coping skills
• **Ability to deal positively with feelings of loss and separation**	• 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

Title: Electroconvulsive Therapy (ECT)

Subtitle: 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
• **The patient's or companion(s) attitudes and values towards the ECT**	• To facilitate identification of interventions
• **The patient's perception of previous ECT experience (if applicable)**	• To ensure appropriate planning of care
• **The patient's knowledge about ECT**	• 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

• **Educate the patient on basic concepts of ECT**
  • **Benefits**
  • **Side effects**
	• **To ensure that the patient gets factual information about ECT**

• **Take vital signs**	• **To detect any physiological abnormalities and set a baseline data for comparison**
• **Establish baseline memory for short- and long-term events**	• **To detect any memory loss after the procedure**
• **Urinalysis**	• **To detect any renal and/or diabetic conditions that may complicate the procedure**
• **Ensure the patient has observed nil by mouth for six hours before the procedure**	• **To prevent regurgitation during the procedure and reduce risk of aspiration pneumonia post the procedure**
• **Ensure a good night sleep**	• **To provide rest in readiness for ECT**
• **Ensure the patient has taken a bath**	• **To maintain hygiene and prevent infection**
• **Ensure the patient has emptied the bladder/ bowel**	• **To facilitate the patient's comfort and prevention of release of urine/faeces during fits**
• **Check the patient for dentures, jewellery**	• **To prevent risk for electrocutions and injury during the procedure**
• **Change the patient into a theatre gown**	• **To minimize transfer of micro-organisms to the operative room**
• **Administer prescribed premeditation 30 minutes before the procedure**	• **To calm down the patient and to dry secretions**

• **Assemble the patient's documents (file, nursing notes, treatment sheet)**	• **To identify the patient, accurate handing over and documentation of procedure**
• **Accompany the patient to ECT room**	• **To provide safety to the patient and presence of the nurse reassures the patient**

D. Evaluation

Evaluate	Rationale
• **The level of anxiety during pre ECT period**	• To determine the need for clarifications and intervention of pre-ECT preparation
• **Interpret the vital signs**	• To determine the physiological status of the patient and if he/she can withstand the procedure
• **The patient's readiness for ECT procedure**	• 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

Subtitle: 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
• **The patient's preparation for ECT**	• To promote and ensure all preparations pertaining to the procedure have been fulfilled
• **Requirements for ECT procedure**	• To determine whether they have been achieved
• **Appropriateness of the room**	• To determine its preparedness
• **Assistance required from other staff**	• 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 50%
    - 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
    - *Figure 4.3 An ECT Room*

Figure 4.3 An ECT Room

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C. Implementation

Steps	**Rationale**
• **Greet the patient by name**	• **To identify the patient positively and helps the patient feel appreciated**
• **Introduce self and other staff to the patient**	• **To allay the patient's anxiety and promotes comfort**
• **Assist the patient on to the ECT table**	• **To ensure safety and allay anxiety**
• **Place the patient on supine position with hyperextension of the neck**	• **To allow for the intubation and fixing of ECT, EEG, ECG and oxygenation machines**
• **Explain to the patient in simple language steps of the procedure /activities being performed on him/her while still conscious**	• **To allay anxiety and promote cooperation**
• **Ensure EEG machine and pulse oximeter are accurately placed**	• **To allow for accurate measurements and readings of brain activity and oxygenation status of the patient during ECT**
• **Ensure all other ECG apparatus are appropriately applied on the patient**	• **To maintain patent airway and prevent aspiration**
• **Provide suctioning if needed**	• **To detect signs of acidosis and other abnormalities indicative of homeostatic imbalance in electrical activity of the brain and cardiovascular systems**
• **Monitor the vital signs, cardiac activity, oxygenation, electrical activity of the brain**	• **To prevent possible fractures and dislocation**
• **Provide gentle and firm support to the patient's arms, legs and joints when Electroconvulsive current is administered until seizures are over**	• **To determine the need for intervention and injuries during the process**
• **Observe the nature and duration of seizures, body parts affected and intensity**	• **To ensure a patients safety**
• **After the procedure place the patient in the recovery position in bed and transfer the patient to recovery room if SaO^2 is ≥ 95%**	• **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**
• **Dispose off the used supplies and prepare the equipment for next use**	• **To enhance preparations for subsequent procedures**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**

• **If vital signs and pulse oximeter level remained within normal levels during ECT procedure and before returning to the ward**	• To evaluate status of the patient prior to transfer
• **Observe any crackling sounds and abnormal joints movement**	• To determine if the patient sustained injury during seizures
• **If EEG machine indicated expected alteration in brain activity**	• For confirmation of brain pathology and need for further interventions
• **If interventions were appropriate**	• 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 SaO2 readings
- Nature and duration of seizures during the procedure
- Any adverse observations and intervention measures taken during the procedure
- Date and time

Subtitle: 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
• **Observation instruments and resuscitation equipment**	• To determine availability and working condition
• **Seizure levels achieved**	• To determine effectiveness of ECT
• **Level of consciousness**	• Helps establish the effects of anaesthesia and any other neurological changes
• **Signs of brain and musculoskeletal injury**	• 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
• **¼ - ½ hourly observations of respirations, pulse and blood pressure**	• **To detect adverse changes in the physiological state of the patient**
• **Maintain the patient in recovery position**	• **To facilitate the flow of secretion, prevent tongue from falling back and ensure patent airway**
• **When awake explain to the patient his/her whereabouts**	• **To promote orientation, allays anxiety and facilitates cooperation**
• **Assess the level of memory**	• **To determine memory loss associated with ECT**
• **Stay with the patient until he is fully awake and oriented**	**5 – 6. To ensure the patient's safety**
• **Escort the patient back to the ward**	•
• **Receive report /give report from the recovery nurse**	• **Facilitates effective handing over of the patient for continuity of care**
• **Allow the patient to verbalize experiences, fears and anxiety related to ECT**	• **To help the patient cope with ECT experiences and promote recovery and compliance with care**
• **Assist the patient to a quiet place or low bed**	• **To allow adequate rest and promote comfort and safety**
• **Take vital signs observation every 4 hours and reduce to once a day as appropriate**	• **To monitor progress on recovery from the effects of anaesthesia and ECT**
• **Provide the patient with highly structured schedules of routine activities**	• **To promote recovery and minimize confusion**

• **Observe the patient for the following:**
  • **Ability to perform self-care activities**
  • **Ability to remember ward routines**
  • **Ability to remember staff and other patients**
	• **To detect signs of confusion and loss of memory which are common post ECT**

• **Observe gait of the client/patient when walking**	• **To detect signs of fracture post ECT**
• **Perform mental state examination regularly**	• **To establish if patient has achieved full orientation and determine whether the patient benefited from ECT**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Mental state of the client/patient**	• To determine success of ECT
• **If the patient's level of anxiety was maintained at manageable levels**	• To determine if the patient's psychological preparation was achieved pre-ECT
• **If the patient/family can verbalize understanding of the procedure**	• To determine if the patient/family learning needs were met
• **If the patient recovered from effects of ECT within expected time and without/minimal complications**	• 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

Title: Care in Mental Illness Emergency Situations

Subtitle: 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
• **Own ability as a therapist to deal with the situation**	• To determine if assistance is required
• **Own knowledge of the condition/patient**	• To ensure effective planning of care
• **The general condition of the patient**	• To ascertain the wellbeing of the patient
• **Physical, Emotional/psychological needs of the patient**	• To plan for appropriate interventions
• **The number, qualifications and experiences of nursing staff on duty**	• To assign appropriately a nurse to closely monitor the client/patient
• **Appropriateness of the environment for therapy**	• To determine if the environment is safe and allows for quick response
• **Understanding and willingness of the relatives to participate in the care of the patient**	• 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
• **Give and receive report about the client/patient to include; findings of suicide assessment. (the adapted SAD persons scale)**	• **To assess the level of suicidal risk**
• **Allocate specific nurse(s) to attend the client/ patient during the crisis period until the patient gains self-control**	• **To ensure close monitoring, provision of security and support**
• **Search the patient and his room mates' belongings and remove all items considered unsafe**	• **To prevent self-harm/suicide**
• **Encourage the client/ patient to verbalize and explore feelings**	• **To promote feelings of acceptance, improves self-esteem with subsequent ability to evaluate options and develop problem solving skills**
• **Secure a "no suicide contract" from the patient**	• **To demonstrate the client's/patient's commitment to abide by therapeutic decisions**
• **Discuss with the client/patient and give a message of hope, that life is worth living**	• **To allow the client/patient an opportunity to reflect on their insight**

• **Assign the client/patient's recreational activities such as volley balls**	• **To help the patient release tension/feelings of inward aggression**
• **Ensure the client/patient is always within view of the nurse at all times**	• **To promote close observation and ensure the client/patient's safety**
• Do not seclude **nor allow the patient to sleep alone**	• **To reduce the possibility of attempting suicide**
• **Maintain suicide caution card observations and recording including 15-minute visual check on the client/patient; carefully observe and record mood and suicide indicators**	• **To recognize any suicidal attempts early and take appropriate interventions promptly**
• **Physically hand over the client/patient at the end of every shift**	• **To monitor the safety of the client/patient**

D. Evaluation

Evaluate	Rationale
• **The patient's self-concept**	• To reduce contemplation of suicide
• **The patient's plan to cope with suicide and other challenges in future**	• To develop effective coping and problem-solving skills
• **The patients' ability to interact with other people**	• 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

Subtitle: 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
• **Own feelings, fears and anxiety related to handling the situation**	• To promote readiness and enhances ability to carry out effective interventions
• **Procedure on emergency management of acute alcohol withdrawal delirium (Delirium Tremens)**	• To promote efficiency and effectiveness
• **The patients' understanding of his/her current experiences**	• To identify and plan for the clients/ patient's learning needs
• **Presenting physical, psychological/emotional social and spiritual needs**	• To plan for appropriate interventions and determine assistance required
• **The safety of the environment**	• To prevent risk of injury
• **The amount of light in the room**	• 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
• **Assist the patient to the prepared room and settle him in bed**	• **To control the patient's anxiety to minimal levels**
• **Remove any dangerous objects with the patient or in the environment**	• **To ensure safety of patient, staff and others**
• **Administer prescribed anxiolytics / antipsychotics**	• **To control hallucinations through their dopamine antagonist effects**
• **Ensure close monitoring of the patient**	• **To promote the patient's safety**
• **Conduct and record mental status examination and vital signs observations four hourly**	• **To monitor hyperactivity of the Autonomic Nervous system and plan of care**
• **Explain to the patient the experiences he had and the interventions carried out**	• **To promote participation**
• **Obtain an informed consent from the patient once they can understand what is expected of them**	• **To prevent feelings of self-blame and facilitate compliance/cooperation; observe the client's rights of autonomy**
• **Wash, dry, prepare and store equipment for subsequent use**	• **To ensure safety**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **Outcome of interventions: any injuries sustained during the management**	• To determine effectiveness of the management
• **Preparedness of the patient to continue with the care**	• To reduce the risk of non-adherence to therapy
• **Whether an informed consent was obtained**	• 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

Subtitle: 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
• **The patient's mental state**	• To determine the intervention required
• **The environment**	• To ensure the patient and staff's safety
• **Availability of vital signs measuring equipment**	• 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 β-adrenergic receptor antagonists.
  - Intravenous medication administration equipment
  - Vital signs observation equipment

C. Implementation

Steps	Rationale
• **Wash and dry hands**	• **For infection prevention and control**
• **Take the patient to a quiet room with minimum stimulation and explain to him/her all actions being taken**	• **To minimize levels of anxiety**
• **Remove any dangerous items within the environment**	• **To ensure safety to both the patient and the nurse/staff**
• **Stay with the patient and encourage him/her to discuss his/ her experiences**	• **To reduce feelings of abandonment**
• **Maintain calmness and patience when attending to the patient**	• **To prevent escalation of anxiety in the patient**
• **Take vital signs observations 2 hourly and reduce to 4-hourly as appropriate**	• **To provide data for assessing progress of the patient**
• **Administer the prescribed anxiolytics and β-adrenergic receptor antagonists**	• **To reduce sympathetic stimulation**
• **Assess the patient's mental status every 4 hours**	• **To monitor the progress of the cognitive functions**
• **Use simple brief words and messages spoken calmly and clearly**	• **To reduce anxiety and comprehend elementary communication**
• **Reinforce reality if distortions occur**	• **To stress awareness of physical needs**
• **Attend to physical needs as necessary**	• **To prevent manifestation of anxiety as physical needs**
• **When levels of anxiety are reduced, explore reasons of occurrence**	• **To help in planning interventions**
• **Teach the patient signs of escalating anxiety and how to interrupt them**	• **To identify signs of anxiety that interrupt progression to panic state**

• **Dispose syringes and used needles according to infection control measures**	• **To promote the patient and staff's safety**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **If vital signs were maintained within the normal parameters**	• To determine effectiveness of medications
• **The patient's ability to control the anxiety levels**	• To validate happenings in the environment; Prevents future re-occurrence
• **The patient's feelings about his/her care**	• 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

Subtitle: 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
• **Previous violent and aggressive behaviours**	• To predict outcome of current behaviour and plan for appropriate interventions
• **The number, gender and level of preparation of staff to deal with such emergencies**	• To determine need for more staff
• **The environment for dangerous items that can be used by the patient e.g. stones, sharp objects and broken wood**	• To safeguard the patient, other patients and staff from injury
• **The level of motor agitation and verbal aggression**	• To determine when to exercise restraint measures and the type of restraint technique to apply
• **Mental health nursing interventions that may be antecedent to aggression**	• To minimize further provocation
• **Adequacy of resources to take care of the patients e.g. beddings, food and utensils**	• To ensure the patient's comfort

• **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:**
  • **Long fingernails**
  • **Long hair left hanging**
  • **Pens, labels, bangles and ear rings**
	• To determine the need to remove them so as to minimize risk of injury to self, other staff and the patient

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
• **Approach the patient carefully keeping at arm's length**	• **To ensure safety**
• **Address the patient by name**	• **To help orientate the patient and demonstrate respect**
• **Request other patients to leave the room**	• **To maintain a safe environment**
• **Keep verbal communication briefs when talking with the patient; don't fold arms and maintain an open posture**	• **To demonstrate acceptance and encourages verbalization**
• **Talk calmly, clearly and firmly keeping the voice neutral; ask open questions using "how" and "where" to help clarify the problem**	• **To give opportunity to the patient to express anger verbally**
• **Slowly show the patient that there is nothing in your hands**	• **To help the patient feel that he/she is not being pursued**
• **Adopt an attentive expression but do not stare at the patient**	• **To enable the nurse to gauge the patient's level of frustration**
• **Call for assistance by shouting, using any signaling system or request another patient to summon help**	• **To manage the situation**
• **Ask colleagues to lead other patients away when the patient is being restrained**	• **To prevent distressing other patients**
• **Organize staff and identify a leader who gives direction on how to contain the situation**	• **To ensure coordination and efficiency**
• **One mental health nurse to prepare and administer prescribed parental antipsychotic or benzodiazepines**	• **To help calm down the patient**
• **Give clear instructions on how to restrain the patient**	• **To promote coordination and efficiency**
• **Explain to each staff what part of the patient to hold and from where to approach the patient**	• **To facilitate efficiency in full immobilization of the patient**
• **Allocate one member of the group whom the patient is more familiar with to talk with him/her throughout the procedure**	• **To sustain a therapeutic communication and convey to the patient that restraint is not punitive**
• **Minimize force used for restraint to be appropriate to the degree of resistant**	• **To avoid risk of injury to the patient**

• **Take the patient to a comfortable and isolated room**	• **To provide safe environment and facilitate recovery**
• **Ensure that the restraint is released gradually one limb at a time**	• **To minimize the possibility of the patient striking the staff**

• **Observe the patient's respiration rate half hourly and change gradually until the condition improves**	• **To determine progress of the patient**
	  • To allow for observation of mood and behaviour
	  • To monitor the effectiveness of sedatives/ anxiolytics

• **Withdraw staff from the patient gradually**	• **To facilitate recovery and reduce anxiety**
• **Withdraw the patient from isolation as soon as he is no longer violent**	• **To observe the patient's rights of associations**
• **When the patient calms down discuss the incident with the patient**	• **To allow the patient to verbalize experiences and identify provoking factors**
• **Dispose used needles and syringes as per protocol**	• **To provide safety to the patient and staff**
• **Wash, dry and prepare equipment**	• **For subsequent use**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **Determine if the patient suffered any injuries during the restraint**	• To plan for appropriate interventions
• **Staff safety status**	• To allow for correction of any negative perceptions
• **Determine the reason for violence and aggression**	• To determine effectiveness of the restraint methods used
• **The RESPONSE of the patient towards the restraint**	• To identify areas of future improvement
• **View of the staff towards the management of the incident**	• 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

Subtitle: 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 occulogyric crisis, torticolis, trismus, tongue protrusions and extra pyramidal side effects of antipsychotic medications

A. Assessment

Assess	**Rationale**
• **The patency of airway and breathing patterns**	• To determine the need for oxygen since spasms of the larynx and pharynx affect air way
• **Level of pain**	• To determine the type of analgesia needed
• **Level of anxiety**	• To reduce fear and anxiety
• **Intensity of spasms**	• To determine type of muscle relaxants and anticholinergics required
• **The presence of dangerous equipment in the patient's surrounding**	• 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
• **Wash and dry hands**	• **For infection prevention and control**
• **Quickly and gently move the patient to the prepared room**	• **To manage life threatening situations**
• **Lower side rails and gently place the patient on the bed**	• **To ensure safety of the patient**
• **Assess the airway patency and breathing pattern of the patient**	• **To prevent hypoxia**
• **Administer oxygen if necessary *(Refer to procedure 2.2-1, Administration of Oxygen)***	• **To ensure SaO^2 level is maintained at ≥95%.**
• **Administer I.V benzodiazepine and anticholinergics as appropriate**	• **To facilitate muscle relaxation; counteract extra pyramidal effects of antipsychotic thus releasing the acute dystonia**
• **Perform vein puncture and administer IV fluids**	• **To rehydrate the patient since pharyngeal muscle spasms may interfere with feeding**
• **Return the bed rails in place and leave the patient comfortable**	• **To prevent the patient from falling off the bed**
• **Take vital observations half hourly, gradually changing to one hourly until dystonia is over and vital signs are normal**	• **To determine the degree of physiologic functioning and plan for further intervention**
• **When the patient recovers from the dystonia, perform mental status examination *(Refer to procedure 4.2-2, Mental Status Examination/ Assessment (MSE/A))***	• **To assess the psychological status of the patient; Helps to monitor the patients' recovery from neuropsychiatric symptoms**
• **Discuss with the patient his/her experience**	• **To improve the patient's knowledge on his/her medications and related side effects**
• **Explain to the patient that acute dystonia is a side effect of antipsychotic medications**	• **To allay anxiety**
• **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**	• **To reduce the patient's anxiety and enhance compliance with treatment**

• **Clear all the equipment used during the procedure**
  • **Store the equipment in accordance with hospital policy**
  • **Dispose waste materials according to the infection prevention and control procedure**
	• **To improve ward hygiene and promote safety of the equipment, patient and staff**

• **Wash and dry hands**	• **To minimize transfer of infections**

D. Evaluation

Evaluate	Rationale
• **The patient's level of consciousness**	• To establish the seriousness of the side effects and the need for further neurological evaluation
• **Effectiveness of the treatments given**	• To ensure similar use in future experiences
• **The patient's response to care**	• To determine the effectiveness of interventions
• **Areas of intervention identified**	• 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 out comes: 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

Title: 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
• **Information on the clients'/patients' and their problems**	• To anticipate the type of clients'/patients' being managed
• **Own level of knowledge in relation to the current management of the clients'/patients' conditions**	• To plan appropriate care
• **The number, qualifications and experience of nurses on duty**	• To determine whether assistance is needed • To determine the learning needs and anticipated quality of contribution from the other mental health nurses
• **The number and type of patients to be reviewed**	• To adequately allocate time
• **Preparedness of the patients for the procedure**	• To encourage the cooperation and contribution to care

• **Patients' needs**
  • **Physical**
  • **Emotional/psychological**
  • **Social**
  • **Spiritual**
	• To ensure individualized response
	  • To determine physiological and personal hygiene state
	  • To allay anxiety and enhance cooperation
	  • To gain support of family members in care
	  • To enhance the wellbeing of the patient

• **The patient's understanding of his/her condition**	• To determine teaching needs of the patient during the round
• **The state and the quality of the environment**	• To ensure privacy and encourages the patient's participation
• **Required equipment and supplies**	• 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 coach
- 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
• **Prepare the room and welcome the patient, offer a seat, introduce self and staff and establish rapport**	• **To allay anxiety and promote cooperation**
• **Explain to the patient that a report about him will be given and discussed and that he/she is free to ask questions and give suggestions concerning his/her care.**	• **To encourage participation from patient**

• **Allow the primary nurse to give full report on the progress of the patient including:**
  • **Mental health nursing assessment and findings**
  • **Both medical/nursing diagnoses**
  • **Objectives set for management**
  • **Interventions**
  • **Evaluations**
	• **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**

• **Allow time for response from the rest of the staff and students while maintaining the patient's privacy and confidentiality**	• **To promote discussion on management and evaluation of effectiveness of interventions**
• **Allow the patient to verbalize any concern about his/her care.**	• **To encourage the patient's participation in care; Clarifies misconceptions and promotes compliance**
• **Explain to the patient respectfully that his turn is over and release him from the room**	• **To prepare the room for the next patient**
• **Clear the room and equipment and store them in accordance with the institutional protocol after all patients have been reviewed.**	• **For safety, infection prevention and control**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	Rationale
• **The patients' reaction during the ward round**	• To determine if the patients benefited from the round
• **Any outstanding interventions that had been planned for**	• To identify cause and prevent future repeats that delay recovery
• **If the patient, staff and students benefited from the round**	• To determine if teaching objectives of the round were met and subsequent adjustments required
• **Any areas of improvement identified during the round**	• 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

Title: 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
• **Own knowledge of the client's/patient's diagnosis and the current management**	• To ensure inclusion of accurate information on report
• **The mental state of the patient**	• 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
• **The current care of the patient**	• To determine the nature of the report and continuity of care
• **The activities taking place in the environment**	• 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
• **Move to the first patient and ensure that information is given in a logical, organized and conscious manner**	• **To facilitate understanding of the report and reduce chances of skipping other patients**

• **Give the following information about each patient:**
  • **The room number, the bed number/ cubicle number, Identification data**
  • **The mental health nursing /medical diagnoses, Primary mental health nurse and psychiatrist of the patient**
  • **Investigations done and findings, Investigations due and preparations required**
  • **Treatments given during the last 24 hours and the patient's response**
	• **To provide necessary information**
	  • To identify information for accuracy
	  • For comparing the relevance of the interventions being implemented
	  • For planning appropriate interventions
	  • To determine if the patient is improving or if change in treatment is required

• **Give the following information about patients on special instructions and requirements including:**
  • **Input/output measurements**
  • **Changing position; when last changed.**
  • **Blood transfusions**
  • **Suicidal alert**
  • **Seclusion**
	• **To enable planning**

• **Current needs of each patient:**
  • **Any severe pain**
  • **Assistance needed with activities of daily living**
  • **Mental state requiring immediate interventions**
  • **Scheduled treatment**
  • **Need for change in treatments**
  • **Any visitors for the patient and the type of relationship**
  • **Any significant changes in the patient's behaviour after the visit**
  • **Significant changes in the client's condition during the shift, intervention measures taken and outcomes**
  • **Current prescribed orders**
	•
	  • To enable the nurse to prioritize care for these patients;
	  • To allocate a nurse to assist
	  • To ensure new treatment are not overlooked
	  • To facilitate quick recovery
	  • To helps identify significant others useful in the patient's rehabilitation
	  • To evaluate effectiveness of the visit/family therapy
	  • To facilitate planning for patient oriented goals and interventions
	  • For continuity of care

• **For newly admitted patients, give the following additional information:**
  • **Referring agent**
  • **Legal admission requirements**
  • **Mode of admission**
  • **Reasons for transfer/discharge**
  • **The destination**
	• **To facilitate planning for quality nursing care**
	  • To give reasons for some patients' absence from the ward
	  • To explain addition of patients in the ward

• **Do not elaborate on routine background data. Give the report for each patient within 2-3 minutes**	• **To avoid wasting time**
• **Ensure the report is given in low tones**	• **For confidentiality**

D. Evaluation

Evaluate	**Rationale**
• **Comprehensive report of the round**	• To determine the quality of the report and helps to identify gaps for inclusion
• **Area of concern during the report giving**	• For correction and improvement in subsequent reports

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

Title: 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
• **The type of admission**	• To determine legal requirements for the discharge
• **The level of readiness of the patient**	• To determine mental health care needs of the patient and plan for follow up care
• **The level of preparedness of the patient's guardian**	• To determine teaching needs for the guardian and plan for the client's follow up care
• **The psychological, physical, spiritual and social needs of the patient**	• To determine and plan for appropriate holistic interventions
• **The mode of travel and residence**	• To confirm transport arrangements in place and if assistance is required
• **The patient's perception of previous discharge experience (if any).**	• To identify and apply positive experiences that facilitate recovery
• **Resources availability**	• 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
• **Provide the patient with a comfortable place to sit on**	• **To promote concentration and readiness to receive information**
• **Explain the discharge procedure to the patient/ guardian**	• **To allay anxiety and facilitate understanding of the patient's / guardian's role in follow up care**

• **Discuss with the patient his/her experiences from previous discharge**	• **To identify strategies that are successful and can be reinforced and those likely to precipitate relapse**
• **Carry out physical and mental state examination**	• **To identify suitability for discharge**
• **Share information with the patient on his/her mental disorder including treatment and follow up care**	• **To promote compliance to treatment while promoting healthy behaviour**
• **Give instructions on how to take and store drugs**	• **To ensure compliance, drug safety**
• **Educate the patient on the expected side effects and how to manage them**	• **To promote adherence and compliance**
• **Give return date**	• **To ensure follow up**

D. Evaluation

Evaluate	**Rationale**
• **The patients understanding of his/her role in the treatment at home**	• To establish his/her roles in compliance to regimen while at home
• **The extent to which the patient was ready for discharge**	• To determine the need for immediate assessment of the home environment and plan intervention for prevention of relapse
• **Contents of discharge notes, medication and follow up schedules**	• 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

Title: 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**
• **Own knowledge about the patient, his/her condition, fears and related anxiety**	• To determine appropriate preparation
• **The patient's notes and identify his/her needs**	• For planning of care
• **The community resources**	• To identify resources that enhance care of the patient
• **The type of equipment /supplies to be used**	• To ascertain their status and availability
• **The scheduled time of the follow up visit**	• To determine the availability of the patient/family members
• **Distance to cover during the follow up visit**	• For organization of means of transport
• **Availability of the client's relatives**	• 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
• **Review the patient's records**	• **To determine appropriate intervention**
• **Attend to self-identified needs**	• **For effective therapeutic relationship**
• **Confirm that the patient/relatives are waiting for you**	• **For acceptance and cooperation**
• **Carry the required equipment/supplies to be used**	• **To enhance completion of planned activities**
• **On arrival, wait to be received**	• **To show respect for the family**
• **As you meet the family members introduce self and explain your mission if not done before**	• **To gain acceptance and recognition**
• **Identify the head of the family**	• **To determine the center of power/decision maker in the family**
• **Observe the relationship between the client/ patient and the family members**	• **To identify the patient's acceptance or rejection in the family**
• **Once settled, interact with the family members and observe reactions from all participants**	• **To have a broader understanding of the family and identify nonverbal communication**
• **If it is a revisit, give the health message and evaluate the outcome of the previous visit**	• **To determine the impact of the previous visit; To determine the care to be given to the patient/ family**
• **Encourage the patient and family members to ask questions**	• **To correct /clarify misconceptions and allay their fears**
• **Plan with the patient/family the next visit and leave them satisfied with the session**	• **To schedule for continued care**
• **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**	• **For reference, continued care and legal purposes**
• **Plan for any other necessary intervention that may need other expertise**	• **To determine need for further referral management**
• **Thank the patient and family members**	• **To enhance their cooperation and participation**

D. Evaluation

Evaluate	Rationale
• **If the objectives of the home visit were achieved**	• To determine effectiveness of the visit
• **Readiness of the family for follow up visit**	• To determine appreciation for the services offered and understanding of the previous discussion on the importance of follow up visit
• **The patient's compliance with medication**	• To determine participation in his/her care
• **Strategies used in dealing with challenges**	• 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

Title: Immunizations

Subtitle: 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
• **Functional status of all the cold chain equipment**	• To ensure maintenance of cold chain and potency of the vaccines is maintained
• **The capacity of cold chain equipment**	• To facilitate planning for safe and adequate storage of vaccines
• **The status of vaccine chain monitor**	• 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
Refrigerator	
• **Connect refrigerator to the power source**	• **To initiate the cooling process and maintain the right temperature**
• **Set the thermostat**	• **To regulate the temperature**
• **Place vaccine fridge thermometer/fridge tag in the refrigerator**	• **To monitor the temperature of the fridge**

• **Four hours after connecting the refrigerator to the power source, check the temperature (The recommended temperature is +2°C to +8°C)**	• **To ensure that temperature is within the recommended storage ranges**

• **Arrange vaccines in the fridge according to sensitivity i.e.**
  • Top shelf **– Keep polio and measles vaccines**
  • Second shelf **– Store Bacillus Calmette-Guérin (BCG), pentavalent and Tetanus toxoid (TT) and all diluents**
  • Bottom shelf **– Store spare ice packs**
	• **To maintain vaccine potency according to the required specification for each vaccine**

For RCW 42 EG Fridge	

• **Vaccines arranged from the bottom as follows:**
  • First tray **– Polio**
  • Second tray **– Measles and BCG**
  • Third tray **– Rota virus**
  • Fourth tray **– TT and Inactivated Polio Vaccine (IPV)**
  • Fifth tray **– Pentavalent**
  • Sixth tray **– Pneumococcal vaccine**
 	
NB: **For other types of refrigerators, follow the manufacturer's instructions**
	• **To maintain vaccine potency**

Cold Boxes	
• **Place frozen ice packs side by side against the inside walls of the cold box**	• **To maintain cold temperatures within the cold box**
• **Place polio, BCG and measles vaccines directly on the ice packs**	• **To maintain vaccine potency**
• **Wrap packing material around TT and Pentavalent vaccines**	• **To prevent the vaccines from freezing**
• **Place ice packs on top of the vaccines and diluents**	• **To maintain the recommended temperatures (+2°C to +8°C)**
• **Place thermometer on top of the ice packs**	• **To monitor temperature**
• **Secure the lid tightly**	• **To avoid air from getting into the cold box thus interfering with the temperature**
Vaccine Carriers	
• **Place four frozen ice packs inside the vaccine carrier**	• **To maintain cold temperatures within the vaccine carrier**
• **Place vaccines and diluents carefully into the carrier**	• **To facilitate safety and maintain vaccine potency**
• **Place plastic foam or packaging material around Tetanus Toxoid and pentavalent**	• **To prevent vaccines from freezing**
• **Place a dial thermometer inside the vaccine carrier**	• **To monitor the temperatures**
• **Secure the lid tightly**	• **To prevent warm air from entering the vaccine carrier and interfering with temperatures**
Ice Packs	
• **Fill ice pack with water and freeze in the refrigerator**	• **To attain the prescribed temperatures for maintaining cold chain**
• **Place frozen ice pack on the immunization table**	• **Vaccines are placed on the ice packs to maintain potency**
• **Remove the vaccines being used during the immunization session**	• **To facilitate efficiency of immunization while limiting unnecessary exposure to light and interference of the temperature for the other vaccines**
• **Wrap the vaccines with emery paper and place them on the frozen ice packs**	• **To protect vaccines from lights and maintain them within the right temperature**
• **Change the ice pack as soon as it melts**	• **To maintain the right temperatures for the vaccines**

D. Evaluation

Evaluate	Rationale
• **Maintenance of cold chain between +2°C to +8°C was attained from the manufacturer to the client**	• To ensure that the vaccines administered are potent
• **Maintenance of temperature charts was undertaken in the morning and evening as required**	• To confirm that the vaccines administered are potent
• **Refrigerators and other cold chain equipment were maintained in line with cold chain management principles**	• 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

Subtitle: 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
• **Current immunization status of the client**	• To determine if the client needs the vaccination
• **Health status of the client**	• To detect any contraindication to the BCG vaccine
• **Equipment/stationery/vaccine**	• 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
• **Prepare the vaccination session indoors or under a shade**	• **To avoid interference with the potency of the vaccines**
• **Welcome the caretaker and the client**	• **To make the client comfortable and allay anxiety**
• **Confirm whether the client is due for the vaccine**	• **To determine whether the vaccine is required**
• **Read the manufacturer's instruction**	• **To comply with the manufacturer's instructions**
• **Record the color of the vaccine vial monitor (VVM) and expiry date of both the diluent and the vaccine**	• **To confirm the potency of the vaccine**
• **Record the batch number**	• **For follow up in case of adverse reaction**
• **Wash and dry hands**	• **For infection prevention and control**
• **Mix the vaccine and diluents in sterile condition (the diluents should be the same temperature with the vaccines)**	• **To reconstitute and make vaccine ready for administration**
• **Record time of reconstitution**	• **To note the time of reconstitution since BCG's potency lasts for 6 hours after reconstitution**
• **Keep the reconstituted vaccine in a sponge with a slit in a vaccine carrier**	• **In readiness for administrations and to preserve potency**
• **Allow ampoule/vial to stand upright on the sponge in the vaccine carrier for about 1 min**	• **To let bubbles settle**
• **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**	• **To ensure that the client receives the right dose**
• **With the left hand, gently but firmly hold the left forearm of the child to be immunized**	• **To restrain the child, immobilize injection site and avoid injury to the nurse and the child**
• **Stretch the skin over the site between the left index finger and the thumb**	• **For ease of access to the skin**
• **Introduce the needle into the skin at 15º on the outer (dorsal) aspect of the left forearm at the junction of the upper and middle thirds *(intradermal)***	• **To ensure that the needle is in the intradermal tissues to deposit the vaccine in the right place.** N.B: **The left arm is recommended for standardization in the Kenya National Immunization Schedule**
• *Figure 5.1 BCG Injection Administered Slowly on the Dorsal Aspect Intradermally* *Figure 5.1 BCG Injection Administered Slowly on the Dorsal Aspect Intradermally*	• **To avoid interfering with the process of the absorption of the vaccine**
• **Remove the needle gently and** DO NOT RUB **the injection site**	• **To avoid interference with the injection site**
• **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**
• **Provide appropriate advice on the vaccine**	•
• **Thank the caretaker/ client and give a return date as appropriate**	• **To appreciate and promote cooperation and ensure timely follow up**
• **Discard all the un-used vaccine after 6 hours according to policy guidelines**	• **Potency of BCG expires after 6 hours of reconstitution**
• **Clear the table, empty the vaccine carrier and return the ice packs to the fridge**	• **To ensure safety of clients and staff, and facilitate preparation for subsequent immunization sessions**

D. Evaluation

Evaluate	Rationale
• **The procedure was done as per the standard guidelines**	• To ensure that the client receives potent vaccine in a sterile environment
• **The caretaker/ client understood the expected side effects of the vaccine and the need for return date**	• To identify further educative needs and plan for interventions
• **All records were appropriately filled in the mother - child booklet, tally sheets and permanent registers**	• 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

Subtitle: 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
• **The current immunization status of the child**	• To determine the need for immunization
• **Health status of the child**	• To detect any contraindication to the vaccine
• **Equipment/stationery/vaccine required for the immunization session**	• 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
• **Prepare the vaccination session indoors or under a shade**	• **To avoid interference with the potency of the vaccines**
• **Welcome the caretaker and the child**	• **To make them comfortable and allay anxiety**
• **Confirm whether the child is due for the vaccine**	• **To determine whether the vaccine is required**
• **Wash and dry hands**	• **For infection prevention and control**
• **Record the batch number, the color of Vaccine Vial Monitor (VVM) and expiry date of the vaccine**	• **For follow-up in case of an adverse reaction**
• **Keep OPV in a vaccine carrier throughout the immunization session between +2°C to +8°C**	• **To maintain potency of the vaccine**
• **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)** *Figure 5.2 Administration of OPV* *Figure 5.2 Administration of OPV*	• **To ensure accurate administration of the recommended dose**
• **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**	• **To avoid cross infection to other children**
• **Confirm that the child has swallowed the vaccine. If the child spits/ vomits the vaccine out within 30 minutes, repeat the dosage**	• **To ensure that the child has had the right dose**
• **Provide appropriate advice on the vaccine**	• **To allay anxiety and ensure that the caretaker monitors for any side effects and takes appropriate action**
• **Thank the caretaker, give the date for the next dose and give the necessary advice**	• **To appreciate the caregiver, promote compliance, avoid drop out and missed opportunity**
• **Clear the tables, empty the vaccine carrier and return the ice packs and remaining vaccines to the fridge**	• **To promote safety for clients and staff and allow for preparation for subsequent immunization sessions**

D. Evaluation

Evaluate	Rationale

• **If the procedure was done as per the standard guidelines**	• To ensure the client receives a potent vaccine
• **The caretaker understood the expected side effects of the vaccine and the need for return date**	• To identify further education needs and plan for interventions
• **All the records are appropriately filled in mother - child booklet, tally sheets and permanent register**	• For reference and planning for adequate vaccine requirements and facilitate 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

Subtitle: 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 epiglotitis 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
• **The current immunization status of the child**	• To make decision whether the child needs to be vaccinated
• **The health status of the child**	• To detect any contraindication to the vaccine
• **The equipment/stationery /vaccine required for the immunization session**	• 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
• **Prepare the vaccination session indoors or under a shade**	• **To avoid interference with the potency of the vaccines**
• **Welcome the caretaker and the baby**	• **To make them comfortable and allay anxiety**
• **Confirm whether the child is due for the vaccine**	• **To determine whether the vaccine is required**
• **Record the batch number and expiry date of the Pentavalent**	• **For follow up in case of adverse reactions and also to ensure potency**
• **Wash and dry hands**	• **For infection prevention and control**
• **Clean the injection site with a fresh swab prepared in plain clean water**	• **To reduce the presence of microorganisms**
• **Divide the thigh into three equal parts and select the middle third (vastus lateralis muscle) as the injection site**	• **To avoid injury to the nerves and the major blood vessels**
• **Place your thumb and index finger on the site and stretch the skin slightly**	• **To ensure vaccine is injected in the muscles with minimal discomfort**
• ***Refer to procedure 1.4.2.1, Administering Intramuscular Injections* and inject into the muscle at 90^0**	• **To facilitate needle entry into the tissues**
• **Withdraw the needle and immediately discard it into the safety box**	• **To promote safety to the client and staff**
• **If the injection site is bleeding apply slight pressure with a dry swab**	• **To stop further bleeding and to enhance absorption of the administered vaccine**
• **Discard all used swabs into a waste disposal bin and clear the table**	• **To prevent cross infection**
• **Educate the caretaker on care of the injection site and possible side effects**	• **To avoid interference with the injection site and to take appropriate action**
• **Provide appropriate advice on the vaccine**	• **To allay anxiety, promote compliance and ensure that the caretaker monitors and takes appropriate action for any side effects**
• **Thank the caretaker and give a return date**	• **To indicate appreciation of the caregiver, promote compliance, avoid drop out and missed opportunity**
• **Clear the table, empty the vaccine carrier and return the ice packs to the fridge**	• **To promote safety for clients and staff and allow for preparation for subsequent immunization sessions**

D. Evaluation

Evaluate	Rationale
• **Immunization sessions are conducted as per the standard guidelines**	• To ensure the client receives a potent vaccine
• **The caretaker understood the expected effects of the vaccine and the return date**	• To identify further education needs and plan for interventions
• **All records are filled in mother - child booklets, tally sheets and permanent register**	• 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

Subtitle: 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
• **The current immunization status of the child**	• To decide on whether the child needs the vaccine
• **Health status of the child**	• To detect any contraindication to the specified vaccine
• **Equipment/ stationery / vaccine required for the immunization session**	• 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
• **Prepare the vaccination session indoors or under a shade**	• **To avoid interference with the potency of the vaccines**

• **Wash and dry hands**	• **For infection prevention and control**
• **Welcome the caretaker and the child**	• **To make them comfortable and allay anxiety**
• **Confirm whether the child is due for the vaccine**	• **To determine whether the vaccine is required**
• **Record the batch number, the color of VVM and expiry date of both diluents and vaccine**	• **For follow up in case of adverse reactions and also to ensure potency of the vaccine**
• **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**	• **To access the vaccine and avoid contamination of the vaccine**
• **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)**	• **To transform the vaccine into a liquid state that can be administered**
• **Gently turn the bottle up and down until the vaccine is thoroughly mixed before withdrawal. Withdraw the required amount (0.5mls)**	• **To ensure that the vaccine is homogenous and to allow for withdrawal of the right dose**
• **Keep the remaining vaccine in a sponge in the vaccine carrier**	• **To maintain potency of the vaccine**
• **Keep the lid clean by swabbing with a clean cotton swab soaked in water**	• **To ensures safety of the vaccine and avoids contamination**
• **Demonstrate to the caretaker how to hold the child, see below**	• **To restrain the child so as to avoid unnecessary injuries to the child and the nurse during the procedure**
• **Swab the injection site with cotton wool soaked in water**	• **To clean the injection site**
• **Administer measles vaccine on the outer side of the right upper arm, in the deltoid muscle at 45° subcutaneously**	• **To ensure the vaccine is injected in the subcutaneous muscles**
• **Remove the needle and discard into the safety box immediately**	• **To promote safety for the client and the nurse**
• **Educate the caretaker on care of injection site and possible side effects**	• **To avoid interference with the injection site and to take appropriate action**
• **Provide appropriate advice on the vaccine**	• **To allay anxiety, promote compliance and ensure that the caretaker monitors and takes appropriate action for any side effects**
• **Thank the caretaker**	• **To indicate appreciation and avoid drop outs and missed opportunities**
• **Clear the table, empty the vaccine carrier and return the ice packs and remaining vaccines to the fridge**	• **Ensures safety of the clients and staff, and facilitates preparation for subsequent sessions**

D. Evaluation

Evaluate	**Rationale**
• **Immunization sessions conducted as per the standard guidelines**	• To ensure the client receives a potent vaccine
• **The caretaker understood the expected effects of the vaccine and the return date**	• To identify further education needs and plan for interventions
• **All records are filled in mother - child booklets, tally sheets and permanent register**	• 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

Subtitle: 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
• **The TT immunization status of the client**	• To determine if the client needs the vaccine
• **The equipment/ stationery/ vaccine required for the immunization session**	• 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 $+2^{0}$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
• **Prepare the vaccination session indoors or under a shade**	• **To avoid interference with the potency of the vaccines**
• **Welcome the client**	• **To make the client comfortable and allay anxiety**
• **Confirm whether the client is due for the vaccine**	• **To determine whether the vaccine is required**

• **Wash and dry hands**	• **For infection prevention and control**
• **Record the batch number, color of the VVM and expiry date**	• **For follow up in case of adverse reaction and to ensure potency**
• **Clean the rubber cap gently, shake the vaccine and draw 0.5mls of vaccine into the AD sterile syringe**	• **To prevent contamination and to have a smooth homogeneous suspension for administration**
• **Clean the injection site with cotton wool soaked in plain water**	• **For infection prevention and control**
• ***Refer to procedure 1.4.2.1, Administering Intramuscular Injections* and inject at the deltoid muscle stretching the skin slightly**	• **To ensure the vaccine is injected into the deltoid muscles**
• **Provide appropriate advice on the vaccine**	• **To allay anxiety, promote compliance and ensure that the client monitors for any side effects and takes appropriate action**
• **Thank the client and give the return date**	• **To indicate appreciation and ensure compliance**
• **Return all unused vaccine to the refrigerator at the end of the day**	• **TT potency is maintained when kept under recommended temperatures**
• **Empty the vaccine carrier, return ice packs to the fridge and clear the table**	• **To ensure the safety of clients and staff and facilitate preparation for subsequent sessions**

D. Evaluation

Evaluate	Rationale
• **The procedure was done as per standard guidelines**	• To ensure the client receives a potent vaccine
• **The client understood expected side effects of the vaccine and need for return visit**	• To identify further education needs and plan for interventions
• **All records were appropriately filled in the ANC card, tally sheet and daily activity register**	• 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

Subtitle: 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
• **The current immunization status of the child/ client**	• To determine if the client needs the vaccine
• **The health status of the child/client**	• To detect any contraindication to the vaccine
• **The equipment/stationery/vaccine required for the immunization session**	• 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
• **Prepare the vaccination session indoors or under a shade**	• **To avoid interference with the potency of the vaccines**
• **Welcome the client**	• **To make the client comfortable and allay anxiety**
• **Confirm whether the client is due for the vaccine**	• **To determine whether the vaccine is required**
• **Wash and dry hands**	• **For infection prevention and control**
• **Record the batch number, the color of VVM and expiry date of both diluents and vaccine**	• **For follow up in case of adverse reaction and to ensure the vaccine potency**
• **Using a sterile syringe, withdraw 5 ml of diluent and then introduce it to the vaccine**	• **To dilute the vaccine and make the right concentration**
• **Gently turn the bottle up and down before withdrawing vaccine. Withdraw the required amount (0.5mls). Keep the remaining vaccine in a sponge in the vaccine carrier**	• **To attain homogenous mixture of the vaccine; obtain accurate dose and maintain vaccine safety**
• **If the client is a child , demonstrate to the caretaker how to hold the child**	• **To restrain the child and to avoid injury**
• **Swab the skin with a cotton wool soaked in plain water**	• **To clean the site of injection**
• **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 45^0)**	• **Ensures delivery of the vaccine in the right tissues**
• **Remove the needle and discard into the safety box immediately**	• **To avoid needle prick injury and environment contamination**
• **Educate the caretaker/ client on care of injection site and possible side effects**	• **To avoid interference with the injection site and to take appropriate action**

• **Provide appropriate advice on the vaccine**	• **To allay anxiety and ensure that the client monitors and takes appropriate action for any side effects**
• **Thank the care taker/client**	• **To indicate appreciation and avoid drop outs and missed opportunities**
• **Clear the tables, empty the vaccine carrier and return the remaining vaccines to the fridge**	• **To promote the client's and staff's safety and facilitate preparation for subsequent immunization sessions**

D. Evaluation

Evaluate	Rationale
• **The procedure was done as per the standard guidelines**	• To ensure the client receives a potent vaccine
• **The caretaker understood the expected side effects of the vaccine and the need for return date**	• To identify further education needs and plan for interventions
• **All the records were appropriately filled in mother - child booklets, tally sheets and permanent register**	• 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 travelers, issue and stamp the immunization travel booklet

NB: For international travelers, administer a single dose prior to traveling (4 weeks in advance)

Subtitle: 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
• **The current immunization status of the child**	• To decide on whether the child the needs vaccine
• **The health status of the child**	• To detect any contraindication to the specified vaccine
• **Equipment/stationery/ vaccine required for the immunization session**	• 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
• **Prepare the vaccination session indoors or under a shade**	• **To avoid interference with the potency of the vaccines since the vaccine is sensitive to heat and light**
• **Welcome the caretaker and the baby**	• **To make them comfortable and allay anxiety**
• **Confirm whether the child is due for the vaccine**	• **To determine whether the vaccine is required**
• **Wash and dry hands**	• **For infection prevention and control**
• **Note the batch number, the color of Vaccine Vial Monitor (VVM) and expiry date of both diluents and vaccine (depending on the dosage form)**	• **For follow up in case of adverse reaction and to ensure vaccine potency**
• **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**	• **To access the vaccine and avoid contamination of the vaccine**
• **Reconstitute according to the manufacturer's instructions**	• **To transform the vaccine into a liquid form that can be easily administered**
• **Gently turn the bottle up and down to mix the contents thoroughly**	• **To ensure that the vaccine is homogenous**
• **Keep the Rota Virus Vaccine in a vaccine carrier throughout the immunization session**	• **To maintain potency of the vaccine**
• **Administer the dose slowly or as prescribed by the manufacturer into the child's mouth along the child's cheek**	• **To ensure accurate administration of the recommended dose**
• **Confirm that the child has swallowed the vaccine. If the child spits/ vomits within 30 minutes, repeat the dosage**	• **To ensure that the child has had the right dose**
• **Provide appropriate advice on the vaccine**	• **To allay anxiety, promote compliance and ensure that the care taker monitors for any side effects and takes appropriate action**
• **Thank the caretaker and give the date for the next dose**	• **To indicate appreciation of the caregiver, promote compliance, avoid drop out and missed opportunity**
• **Clear the working area, empty the vaccine carrier and return the ice packs and remaining vaccines to the fridge**	• **To promote safety for clients and staff and allow for preparation for subsequent immunization sessions**

D. Evaluation

Evaluate	Rationale
• **If the procedure was done as per the standard guidelines**	• To ensure the client receives a potent vaccine
• **The caretaker understood the expected side effects of the vaccine and the need for return date**	• To identify further education needs and plan for interventions

• **All the records are appropriately filled in the mother - child booklet, tally sheets and permanent register**	• 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

Subtitle: 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
• **The current immunization status of the child**	• To make decision on whether the child needs vaccine
• **Health status of the child**	• To detect any contraindication to the specified vaccine
• **Equipment/stationery/vaccine required for the immunization session**	• 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

• **Prepare the vaccination session indoors or under a shade**	• **To avoid interference with the potency of the vaccines since the vaccine is sensitive to heat and light**
• **Welcome the caretaker and the baby**	• **To make them comfortable and allay anxiety**
• **Confirm whether the child is due for the vaccine**	• **To determine whether the vaccine is required**
• **Wash and dry hands**	• **For infection prevention and control**
• **Note the batch number, the color of vaccine Vial Monitor (VVM) and expiry date of the vaccine**	• **For follow-up in case of an adverse reaction and to ensure vaccine potency**
• **Keep Pneumococcal vaccine in a vaccine carrier throughout the immunization session**	• **To maintain potency of the vaccine**
• **Withdraw 0.5mls of PCV 10 in a sterile AD syringe**	• **To ensure accurate administration of the recommended dose**
• **Clean the site with a fresh swab prepared in plain water**	• **To clean the site of injection**
• **Divide the thigh into three equal (see under pentavalent adm. above) parts and select the middle third (vastus lateralis muscle) as the injection site**	• **To avoid injury to the nerves and major blood vessels**
• **Place your thumb and index finger on the injection site and stretch the skin slightly, if the child is emaciated, you need to pull the skin folds together**	• **To facilitate needle entry into the tissues**
• **Push the needle carefully into the space between your fingers deep into the muscle at 90^0**	• **To ensure that the vaccine is injected into the muscles with minimal discomfort**
• **Withdraw the needle and immediately discard it into the safety box**	• **To promote safety to the client and staff**
• **If the site is bleeding apply slight pressure with a dry swab**	• **To stop further bleeding and enhance absorption of the administered vaccine**
• **Discard all used swabs into a waste disposal bin**	• **To promote safety to the client and staff**
• **Provide appropriate advice on the vaccine**	• **To allay anxiety, promote compliance and ensure that the care taker monitors for any side effects and takes appropriate action**
• **Thank the caretaker and give the date for the next visit**	• **To indicate appreciation of the caregiver, promote compliance, avoid drop out and missed opportunity**
• **Clear the working area, empty the vaccine carrier and return the ice packs and remaining vaccines to the fridge**	• **To promote safety for clients and staff and allow for preparation for subsequent immunization sessions**

D. Evaluation

Evaluate	Rationale
• **If the procedure was done as per the standard guidelines**	• To ensure the client receives a potent vaccine
• **The caretaker understood the expected side effects of the vaccine and the need for return date**	• Identifies further education needs and plan for interventions
• **All the records are appropriately filled in mother - child booklet, tally sheets and permanent register**	• 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

Subtitle: 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
• **The current immunization status of the child**	• To decide on whether the child needs the vaccine
• **Health status of the child**	• To detect any contraindication to the specified vaccine
• **Equipment/stationery/ vaccine required for the immunization session**	• 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
• **Prepare the vaccination session indoors or under a shade**	• **To avoid interference with the potency of the vaccines since the vaccine is sensitive to heat and light**
• **Welcome the caretaker and the baby**	• **To make them comfortable and allay anxiety**
• **Confirm whether the child is due for the vaccine**	• **To determine whether the vaccine is required**
• **Wash and dry hands**	• **For infection prevention and control**
• **Note the batch number, the color of Vaccine Vial Monitor (VVM) and expiry date of the vaccine**	• **For follow-up in case of an adverse reaction and to ensure vaccine potency**
• **Keep inactivated polio vaccine in a vaccine carrier throughout the immunization session**	• **To maintain potency of the vaccine**
• **Withdraw 0.5mls of IPV in a sterile AD syringe**	• **To ensure accurate administration of the recommended dose**
• **Clean or swab the site with a fresh swab prepared in plain water**	• **To clean the injection site**

• **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**	• **To avoid injury to the nerves and major blood vessels**
• **Place your thumb and index finger on the injection site and stretch the skin slightly**	• **To facilitate needle entry into the tissues**
• **Push the needle carefully into the space between your fingers deep into the muscle at 90^0**	• **To ensure that the vaccine is injected into the muscles with minimal discomfort**
• **Withdraw the needle and immediately discard it into the safety box**	• **To promote safety to the client and staff**
• **If the site is bleeding, apply slight pressure with a dry swab**	• **To stop further bleeding and enhance absorption of the administered vaccine**
• **Discard all used swabs into a waste disposal bin**	• **To promote safety to the client and staff**
• **Provide appropriate advice on the vaccine**	• **To allay anxiety, promote compliance and ensure that the care taker monitors for any side effects and takes appropriate action**
• **Thank the caretaker and give the date for the next visit**	• **To indicate appreciation of the caregiver, promote compliance, avoid drop out and missed opportunity**
• **Clear the working area, empty the vaccine carrier and return the ice packs and remaining vaccines to the fridge**	• **To promote safety for clients and staff and allow for preparation for subsequent immunization sessions**

D. Evaluation

Evaluate	**Rationale**
• **If the procedure was done as per the standard guidelines**	• To ensure the client receives a potent vaccine
• **The caretaker understood the expected side effects of the vaccine and the need for return date**	• To identify level of understanding of the client
• **All the records are appropriately filled in Mother - child booklet, tally sheets and permanent register**	• 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

Title: Family Planning Preparations

Subtitle: 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**
• **The client's readiness for counseling**	• To facilitate clinical decision on whether to provide family planning method and type of information required
• **The client's suitability for family planning**	• 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
• **Welcome the client(s)**	• **To indicate appreciation, promote the client's self-esteem and allay anxiety**
• **Greet the client, introduce self and offer the client a seat**	• **To promote relaxation and facilitates creation of rapport**
• **Discuss with the client what to expect during the counseling session, show interest and concern. If first visit, take medical and social history**	• **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**
• **Perform physical examination to the client; follow steps as outlined in chapter 1 of this manual; include breast examination and pelvic examination**	• **To establish baseline data for the client and rule out conditions that would contraindicate the method chosen by the client**

• **During the visit, tell the client about all the available family planning methods and explain each method:**
  • **How the method works**
  • **Advantages, disadvantages, side effects and adverse effects**
	• **To help the client make an informed choice**

• **Guide the client to choose appropriate methods to start their family planning**	• **To ensure effective family planning using the client's preferred method with minimum health risks**
• **Give instruction clearly noting any possible side effects and warning signs**	• **To facilitate ability to cope with mild side effects, make decision on when to seek provider's help and prevent complications**
• **Ask the client selected questions on the preferred method**	• **To confirm if the client understood the information about the method and allow for identification of further education needs**
• **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**	• **To guide the client on making informed choice and discourage limiting him/ her/them to methods only available at the current facility**
• **Thank the client(s) for listening and cooperating during the session**	• **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
• **The client's knowledge on family planning method**	• To confirm that the client made an informed choice
• **The client(s) has made the right choice of family planning method**	• 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

Subtitle: 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

Subtitle: 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
• **Availability of the required equipment**	• For efficiency during the procedure
• **General condition of the client**	• To determine the suitability of the patient for the procedure
• **Environment**	• 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
• **Greet and welcome the client**	• **To indicate appreciation; promotes the client's self-esteem and allays anxiety**
• **Explain the procedure to the client and seek verbal consent**	• **To allay anxiety and gain cooperation**
• **Ask the patient to empty bladder and help her to change into a gown**	• **To ensure comfort during the procedure**
• **Screen the couch, close the nearby windows**	• **To guarantee privacy and maintain the client's dignity**
• **Assist the client to assume lithotomy position**	• **For easy access to the pelvic organs**
• **Wash, dry hands and put on sterile gloves**	• **For infection prevention and control**
• **Expose the genitalia and drape the client**	• **To maintain client's dignity**
• **Start by inspecting the external genitalia**	• **To detect any infection and abnormalities**
• **Swab the vulva *(Refer procedure 3.2.2, Vaginal Examination)***	• **To avoid introducing infection to the internal organs**
• **Alert the client that you want to insert the speculum**	• **To reduce discomfort during the insertion of the speculum**
• **Lubricate the speculum with the water-based lubricant**	• **To avoid trauma and discomfort to the patient**
• **Part the labia minora with the non-dominant hand**	• **To visualize the cervix and vaginal walls**
• **Insert the speculum horizontally and gently rotate upwards**	• **To detect signs of infection abnormality and obtain data on clinical judgement for appropriate contraceptive method**
• **Inspect the cervix and the vaginal walls**	• **To avoid trauma and terminate the procedure**
• **Remove the speculum gently while still in the horizontal position**	• **To inform the client on the examination findings**
• **Explain to the client that you now want to do digital examination using your two fingers**	• **To allay anxiety**

• **Lubricate the middle and index fingers with water-based lubricant, part the labia and insert the fingers gently into the vagina**	• **To avoid trauma and discomfort to the client**

• **Examination**
  • **Assess the walls of the vagina for rugae and any abnormalities.**
  • **Locate the cervix and check for:**
  • **Position**
  • **Masses**
  • **Consistency**
  • **Whether the os is open or closed**
  • **Excite the cervix and observe the client's reaction**
  • **Assess the uterus for:**
  • **Position (anteverted, mid or retroverted)**
  • **Masses**
  • **Assess the adnexia for any masses and signs of infection**
  • **Tap the trigone muscle**
  • **Rule out cystocele then rectocele**
  • **Palpate the Bartholin's glands**
  • **Milk the Skene's glands**
  • **Palpate the inguinal glands using the non-dominant hand**
	• **To detect any abnormalities**

• **Teach Kegel's exercises – Ask the client to tighten the pelvic floor muscles while your fingers are still in the vagina**	• **To tighten the pelvic floor muscles**
• **Remove your fingers and assess for odour and colour of the vaginal discharge on the examining finger**	• **To detect any abnormalities**
• **Remove the drapes and assist the client to a comfortable position**	• **To terminate the procedure**
• **Give feedback on the findings**	• **To allay anxiety from the client created during the examination process**
• **Clean the couch, clear the trolley and decontaminate the used instruments**	• **To prevent cross infection and for safe handling of the instruments**
• **Wash and dry hands**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **Steps followed during pelvic examination**	• To ensure the standard guidelines were followed during the procedure
• **Any abnormalities detected**	• To provide the necessary interventions

E. Documentation

Record:

- The findings
- The interventions instituted
- Advice given to the client

Title: Methods of Family Planning (FP)

NB: Breast examination **MUST** be performed to all family planning clients before provision of the family planning method.

Subtitle: 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
• **The client's knowledge regarding contraceptives**	• To determine education needs of the client
• **The various injectable hormonal contraceptives available**	• To ensure the client accesses all FP methods from which to choose
• **Requirements for injectable hormonal contraceptives**	• 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
• **Greet and welcome the client/couple, offer a seat and introduce self**	• **To establish rapport**
• **Ask the client's/couples' birth spacing plan**	• **To guide on the most appropriate method of contraception**
• **Take reproductive and basic medical history from the client including any medical conditions**	• **To identify any contraindications to the method selected**
• **Take the weight and the blood pressure of the client**	• **To establish baseline data and adhere to limits of weight and blood pressure which are permissible for injectable contraception**
• **Ask the client/couple what they already know about injectable contraceptives**	• **To identify and correct any misinformation that the client may have**
• **Briefly give health education on the injectable contraceptives emphasizing on the mode of action, merits and demerits, and warning signs of adverse effects and return to fertility**	• **To make the client understand the method and to monitor the progress of the client while on the method**
• **Emphasize to the client that she may discontinue the method anytime she wants to for any reason**	• **To give the client freedom of choice**
• **While observing injection safety protocol, inject the contraceptive on the upper outer quadrant of the gluteal muscle of the client**	• **To avoid injury to the major nerves and blood vessels**

• **Discard the needle in the safety box and the swabs appropriately**	• **To ensure safety of the staff/client**
• **Ask the client/couple if she/they have any questions or concerns**	• **To clarify issues of concern that may cause non-compliance**
• **Discuss return visits with the client for follow up visits or in case of any concerns**	• **To ensure that there is compliance and follow up**
• **Thank the client/couple**	• **To appreciate her/them**

D. Evaluation

Evaluate	Rationale
• **The right procedure and technique were used in the injection**	• To determine quality of care
• **The knowledge of the client on hormonal injectable contraception and side effects**	• 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

Subtitle: 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
• **The various oral hormonal contraception in use**	• To have a variety of methods to choose from
• **The process of counseling the clients**	• 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
• **Greet and welcome the client/couple, offer a seat and introduce self**	• **To establish rapport**

• **Ask the client's/couples' birth spacing plan**	• **To guide on the most appropriate method of contraception**
• **Take reproductive and basic medical history from the client including any medical conditions**	• **To identify any contraindications to the method selected**
• **Take the weight and the blood pressure of the client**	• **To establish baseline data and adhere to limits of weight and blood pressure which are permissible for oral contraception**
• **Ask the client/couple what they already know about oral contraceptives**	• **To identify and correct any misinformation that the client may have**
• **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**	• **To make the client understand the method and to monitor the progress of the client while on the method**
• **Emphasize to the client that she may discontinue the method anytime she wants to for any reason**	• **To give the client freedom of choice**
• **Provide oral contraception to the client and give the instruction on how to take the oral contraception**	• **To ensure compliance**
• **Allow the client/ couple to repeat the instructions**	• **To ensure that she/ they have understood**
• **Ask the client/couple if she/they have any questions or concerns**	• **To clarify issues or concerns**
• **Discuss return visits and follow up in case of any concerns**	• **To ensure that there is compliance and follow up**
• **Thank the client/couple**	• **To appreciate her/them**

D. Evaluation

Evaluate	Rationale
• **The client's understanding of the method and possible side effects**	• To determine quality of care
• **The knowledge of the client on hormonal oral contraception and side effects**	• To the 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

Subtitle: 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
• **The types of implants used or available**	• To identify the type available for proper client counseling
• **Process used to insert the implants**	• To ensure that implants are inserted as per standard guidelines
• **Instruments and equipment required for insertion and removal of implants**	• 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**
• **Greet and welcome the client/couple, offer a seat and introduce self**	• **To establish rapport**
• **Prepare the couch and screen it**	• **For the client's comfort and privacy**
• **Instruct the client to lie on the couch in supine position and position the hand (in 90^0)**	• **For ease of access to the insertion site**
• **Wash hands with soap and running water and dry them**	• **To prevent cross infection**
• **Put on a sterile pair of gloves (free of talc)**	• **To prevent cross infection**
• **Locate insertion site (8-10cm from the medial epicondyle of the humerus)**	• **To ensure that the implant is inserted at the right site**
• **Clean the insertion site with the antiseptic and drape**	• **To prevent cross infection**
• **Open the sterile implant pouch and drop the rods in the sterile gallipot**	• **In readiness for insertion**
• **Administer the local anesthetic (1% lignocaine without epinephrine) injection under the skin**	• **To prevent pain in the arm where the procedure is carried out**
Insertion of one rod (Implanon)	
• **Prepare the trocar by removing the transparent protection cap.** Do not touch the slider	• To avoid contamination
• **Check for anesthetic effect using the blunt end of the blade**	• To ensure the client is free of pain and is comfortable during the procedure

• **Stretch the skin around the insertion site. Use the tip of the trocar to puncture the skin**	• For ease of access to the insertion site
• **Lower the applicator to horizontal position. Use the tip of the needle to lift the skin then slide the needle to the marked area**	• To ensure the implant is correctly inserted
• **Press the slider downwards, release and remove the applicator/ trocar** *Figure 5.3 Insertion of Jadelle (Adapted from Family Planning Global Handbook for Providers)* *Figure 5.3 Insertion of Jadelle (Adapted from Family Planning Global Handbook for Providers)*	• *Figure 5.4 Insertion of Implanon* *Figure 5.4 Insertion of Implanon*
Insertion of two rods (Jadelle)	
• **Prepare the trocar and the rods/ capsules**	• To prepare for insertion of the implant
• **Check for anesthetic effect using the blunt end of the blade**	• To ensure the client is free from pain and is comfortable during the procedure
• **Introduce the trocar and cannula at the incision site**	• To ease the process of insertion
• **Remove the cannula and insert the first implant**	• To create room for the rods in the trocar
• **Change the position of the trocar and insert the second implant. Aim to make a "V" shape with the rods**	• To avoid unnecessary injury to the patient during removal and ease the process of removal
• **Remove the trocar and the cannula**	• To terminate the insertion process
• **Discard the sharps in the safety box and any other waste appropriately**	• To ensure infection prevention and control
• **Verify the presence of the implant by palpation**	• **To confirm that the rods are instituted**
• **Cover the incision with an adhesive tape**	• **To keep the site clean and dry**
• **Apply pressure bandage and remove the drapes**	• **To prevent the site from bleeding**
• **Remind the client of post-insertion instructions, thank her and give a return date**	• **For compliance and continuity of use of the contraceptive**
• **Immerse the instruments in the appropriate disinfectant**	• **To decontaminate them**
• **Clean the couch and clear the trolley**	• **To make the room tidy and prepare for the next procedure**
• **Wash hands with soap and running water and dry them**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **The technique used during the procedure**	• To determine quality of care
• **The client understands possible side effects and danger signs**	• 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

Subtitle: 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
• **Readiness for the removal of the implants**	• To determine the client's readiness for removal
• **Preparedness of the health care provider for the procedure**	• 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
• **Greet and welcome the client/couple, offer a seat and introduce self**	• **To establish rapport**
• **Prepare the couch and screen it**	• **To give comfort and privacy to the client**
• **Instruct the client to lie on the couch in supine position and position the hand in a right angle (90^0) and locate the rods**	• **For ease of access to the insertion site**
• **Wash hands with soap and running water and dry them**	**4 - 6. To prevent cross infection**
• **Put on sterile gloves**	•
• **Swab the injection site with antiseptic and drape**	•
• **Inject 2 - 3mls of local anesthesia (without epinephrine) under the tip of the implant**	• **To prevent pain while removing the implants**
• **Check for anesthetic effect by using the blunt end of the blade before making the incision**	• **To ease pain and make the patient comfortable during the procedure**

• **Make a horizontal incision (2-3mm) at the lower tip of the implant(s) closest to the elbow**	• **To access the actual area where the capsules are**
• **Push the capsules towards the incision site, grasp the rod using a curved mosquito artery forceps and pull it out through the incision. Repeat the procedure for the two rods implant**	• **To expose the rod beneath the surface of the skin to be grasped by the forceps**
• **Show the client the rods after decontaminating them in a gallipot containing disinfectant**	• **For affirmation that they have been removed and reassure the client**
• **Discard the waste appropriately** NB: **If the client wishes to continue using the implant, the new capsule is/are inserted at the same incision site**	• **For infection prevention and control**
• **Clean the client's skin with antiseptic solution**	• **To prevent risks of infection**
• **Apply an adhesive tape and bandage the site with a gauze roll to prevent bleeding**	• **To prevent bleeding and exposure to infection**
• **Provide post-insertion counseling including return to fertility**	• **To ensure that all the family planning needs are met**
• **Thank the client and give a return date**	• **For compliance and continuity of use of the contraceptive**
• **Soak the instruments in the appropriate disinfectant**	• **To decontaminate the instruments**
• **Clean the couch and clear the trolley**	• **To make the room tidy and prepare for the next procedure**
• **Wash hands and dry them**	• **For infection prevention and control**

D. Evaluation

Evaluate	**Rationale**
• **The technique used during the procedure**	• To determine quality of care
• **The client's understanding of possible post-removal complications**	• 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

Subtitle: 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**
• **The client's knowledge of IUCD**	• To determine information to be given to the client
• **Required instruments and equipment**	• 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
- Advice 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
• **Greet and welcome the client/couple, offer a seat and introduce self**	• **To establish rapport**
• **Take brief history**	• **To establish baseline data and identify any contraindications to the method**
• **Explain the procedure to the client**	• **To guarantee cooperation and make the client understand what is going on**
• **Ask the client to empty the bladder**	• **To ensure comfort and avoid injury to the bladder during the procedure**
• **Screen the bed/couch**	• **To ensure privacy**
• **Assist client to lie in supine position**	• **For comfort during physical examination**
• **Wash and dry hands**	• **For infection prevention and control**
• **Carry out head to toe examination**	• **To identify any other abnormalities**
• **Assist the patient into lithotomy position**	• **For easy access to the pelvic cavity**
• **Put on sterile gloves**	• **To prevent introducing infection to the pelvic cavity**

• 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	• Infection and pregnancy are contraindicated in IUCD insertion
• Remove gloves and dispose off as per infection prevention and control guidelines	• To prevent cross infection
• Arrange instruments for IUCD insertion	• To make them accessible for use during the procedure
• Clean the vulva, insert the speculum, and clearly visualize the cervix	• To prevent infection and facilitates location of the cervix
• Using antiseptic solution, swab the cervix at least 3 times	• To decrease the risk of infection being introduced into the uterus
• 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	• To align the uterus, cervical opening, and vaginal canal
• 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)	• Prevent discomfort while aiding access of the uterine sound to the uterus
• Pass the uterine sound only once. Clip the uterine sound at the edge of the cervix with the sponge holding forceps	• To confirm the position of the uterus, rule out uterine canal obstruction and measure the depth of the uterus
• Remove the uterine sound and the sponge holding forceps. Read the graduated marks on the uterine sound	• To measure the depth of the uterine cavity

• 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)
  • Place the pack on a flat surface
  • Partially open the package upto one third and bend back the package flaps
  • Put the white rod inside the inserter tubes
  • Slide the white measurement card underneath the arms of the IUCD
  • Hold the tips of the IUCD arms and push on the inserter tube to assist in bending of the arms
  • When the arms touch the sides of the inserter tube, pull the inserter tube away from the folded arms of the IUCD
  • Elevate the inserter tube and push to insert the tips of the arms in the tube
  • Push the folded arms into the inserter tube to keep them fixed in the tube
	• To prepare the IUCD for insertion

• 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	• To ensure accuracy in the uterine measurements
• 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	• For efficiency of the procedure

• **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**	• **To prevent accidental contaminations and spillage**
• **Remove the loaded inserted tube in a sterile manner**	• **To prevent contamination**
• **Hold the inserter tube with your fingers turned upwards and flange in a horizontal position**	• **To ensure the IUCD is well positioned in the uterus**
• **Grasp the tenaculum and pull firmly to align the uterine cavity and cervical canal with vaginal canal**	• **To stabilize the uterus and minimize the risk of perforation**
• **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**	• **To insert the IUCD in the correct position**
• **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**	• **To release and position the IUCD into the uterus**
• **Trim the strings of the IUCD if they are long but leave 3-5 cm hanging**	• **To reduce the length of strings which can pull the IUCD out easily**
• **Remove the tenaculum and observe if there is bleeding in the cervix. If there is bleeding, apply pressure with a sterile gauze**	• **To evaluate the procedure and stop bleeding if any**
• **Remove the speculum**	• **To end the procedure**
• **Wipe the perineum and allow the woman to rest**	• **For hygiene purposes and make her comfortable**
• **Give her perineal pad and let her dress**	• **To assess in case there will be bleeding and to prevent soiling of the clothes**
• **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**	• **For record keeping, future referencing and to monitor the client's progress**
• **Thank the client and advice on return if there are expected complications**	• **To ensure compliance and continuity of use of contraceptive**
• **Soak all the used instruments in the appropriate disinfectant**	• **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)
Figure 5.5 Copper T 380A Insitu
(Adapted from Family Planning Global Handbook for Providers)

D. Evaluation

Evaluate	Rationale
• **The technique which was used during insertion**	• To determine the quality of care
• **The client understands of the method and side effects**	• 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

Subtitle: 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
• **The client's knowledge of IUCD**	• To determine information to be given to the client
• **Required instruments, and equipment**	• 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**
• INSERTION (COPPER T 380 A)	
Pre insertion tasks	
• **Review the client's records/file that she had chosen IUCD**	• **To establish consent for the method**
• **Greet the client and introduce self**	• **To establish rapport**
• **Take brief history to check that she had been adequately counseled**	• **To establish if informed consent was obtained**
• **Check that there is no delivery condition that preclude insertion: ROM greater than 18 hours; Unresolved PPH; Chorioamnionitis**	• **To ensure eligibility of the client for the method**
• **Explain the procedure to the client**	• **To guarantee cooperation and make the client understand what is going on**
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)	
• **Ask the client to empty the bladder**	• **To ensure comfort**
• **Screen the couch**	• **To ensure privacy**
• **Assist the client to lie in supine position**	• **For ease of access in the pelvic region**
• **Wash and dry hands**	• **For infection prevention and control**
• **Assist the patient into lithotomy position**	• **For ease of access in the perineum region**
• **Put on sterile gloves**	• **The procedure is a sterile procedure**
For the client in the immediate postpartum (within 10minutes) after birth	
• **Perform AMSTL for the client**	• **To prevent PPH**
• **Confirm that the woman is ready to have the IUCD inserted**	• **To rule out change of mind and withdrawal of consent**
• **Screen for delivery related condition that preclude insertion: ROM greater than 18 hours; Unresolved PPH; Chorioamnionitis**	• **To ensure eligibility of the client**
• **Change the gloves to another sterile pair**	• **This is a sterile procedure**
Steps for both immediate and postpartum IUCD insertion	
• **Have the pre packed IUCD kit/tray opened**	• **To access the sterile equipment required for the procedure**
• **Arrange insertion instruments and supplies in the sterile field**	• **To prevent cross infection and to make them accessible for use during the procedure**
• **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**	• **The drape on the client's abdomen will protect the provider's hands from contamination while "elevating the uterus"**
• **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)**	• **To facilitate clear visualization and location of the cervix**
• **Using antiseptic solution, clean the vagina and the cervix at least 3 times using separate swabs each time**	• **To decrease the risk of infection being introduced into the uterus**

• 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	• To align the uterus, cervical opening, and vaginal canal
• Opens the sterile package of IUD from the bottom by pulling back plastic cover approximately one third of the way	• To prevent discomfort while aiding access of the uterine sound to the uterus
• 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	• To maintain sterility of the IUCD
• 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	• The plunger and inserted tube are not needed for the PPIUCD. The card will be needed later
• 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	• The Kelly's forceps is the recommended instrument for postpartum insertion of IUCD
• Gently lift anterior lip of the cervix using ring forceps and adjust to one notch	• To allow ease of access during the insertion
• 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	• To ensure maintenance of sterility during insertion
• 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)	• To prevent dropping the IUCD away from the fundus
• Lower the ringed forceps and gently remove them from the cervix; leave them on sterile field	• To avoid crowding the vaginal canal with instruments and allow ease of access
• 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	• Elevation of the uterus is done to negotiate the vagino-uterine angle until the fundus is reached
• 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	• This move allows smooth passage of the Kelly's forceps to the fundal area
• Keep the Kelly's forceps closed, advance the IUD by: gently moving the IUD upward towards the fundus, in an angle towards umbilicus	• To ensure the IUD is not dropped before reaching the fundus
• 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	• This is to allow the Kelly's forceps can pass easily through the vagino-uterine angle
• 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	• To confirm the IUD has reached the fundus
• While continuing to stabilize the uterus, open the forceps, tilting them slightly towards midline to release the IUD at fundus	• To continue aligning the vagino-uterine angle

• **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**	• **The forceps is returned to the sterile field in case it is needed again**
• **Keep stabilizing the uterus until the forceps are completely withdrawn. Places the forceps aside on sterile field**	• **The Kelly's forceps might be required for re-insertion**
• **Examine the cervix to see if any portion of IUD or strings are visible or protruding from the cervix**	• **IUD strings seen at the cervix is an indication that the procedure was not successful**
• **If IUD or strings are seen protruding from cervix, remove IUD using the same forceps used for first insertion: position same IUD in forceps inside the sterile package and reinsert**	• **To ensure a successful placement of the IUCD at the fundus**
• **Remove all instruments used and place them open in 0.5% chlorine solution so they are totally submerged or any other appropriate de-contaminant**	• **To initiate the process of decontamination and sterilization in preparation for subsequent procedures**
• POST INSERTION TASKS	
• **Allow the woman to rest a few minutes. Support the initiation of routine postpartum care, including immediate breastfeeding as appropriate**	• **To allow for observation of the client after the procedure**
• **Dispose of waste materials appropriately and perform hand hygiene**	• **Maintain infection prevention**
• **Inform the client that IUD has been successfully placed and provide her with post insertion counseling including IUD instructions**	• **For the client to confirm the method of the choice has been provided**
• **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**	• **To ensure compliance and ability to detect danger signs during this period**
Review warning signs for IUD (PAINS)	
• **Period is late, or you have abnormal spotting or severe bleeding**	• To preclude PPH
• **Abdominal pain, severe cramping or abdominal pain with sexual intercourse**	• To rule out infection in the postnatal period
• **Infection with or exposure to a STI or symptoms of a pelvic infection, such as abnormal vaginal discharge**	•
• **Not feeling well or having fever of 100.4^0F (38^0C) 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 IUCD denotes the client is not protected from unintended pregnancy
• **Ensure that the client understands post insertion instructions**	• **To ensure compliance and continuity of use of contraceptive**
• **Chart all the findings including the type of IUCD inserted, whether there were difficulties in insertion, in the Patient file and the mother baby booklet**	• **To maintain accurate records**
• **Thank the client and advice on when to return for postnatal and newborn checkup**	• **To maintain rapport with the clients**

D. Evaluation

Evaluate	Rationale
• **The technique which was used during insertion**	• To determine the quality of care
• **The client understands the method and side effects**	• 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

Subtitle: 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
• **Readiness of the client for removal of IUCD**	• To assess the suitability of the client for the removal of IUCD
• **Preparedness of the health care provider for the procedure**	• 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

• **Greet and welcome the client/couple, offer a seat and introduce self**	• **To establish rapport**
• **Explain the procedure to the client**	• **To guarantee cooperation**
• **Ask the client to empty the bladder**	• **To ease removal, promote the client's comfort and avoid trauma during the procedure**
• **Screen the examination couch**	• **For the client's comfort and privacy**
• **Assist the client to lithotomy position**	• **To ease access to the pelvic cavity**
• **Wash and dry hands and put on sterile gloves**	• **For infection prevention and control**
• **Swab the vulva *(Refer to procedure 3.2-2, Vaginal Examination)***	• **To prevent introducing infection to the internal organs**
• **Insert the lubricated speculum horizontally** *Figure 5.6 Insertion of Speculum* *Figure 5.6 Insertion of Speculum*	• **To visualize the IUCD threads**
• **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**	• **For ease of removal of the IUCD**
• **Show the device to the client**	• **To confirm to the client that the device has been removed**
• **Remove the speculum**	• **To terminate the procedure**
• **Wipe the vulva and leave the client clean and dry. Give her a sanitary pad**	• **To maintain hygiene after the procedure**
• **Offer alternative method (if necessary)**	• **To avoid unplanned pregnancies and for continuity of family planning**
• **Thank the client for her cooperation and give a return date**	• **To appreciate and promote the client's cooperation**
• **Soak all the used instruments in the appropriate disinfectant and follow guidelines on instrument processing**	• **To decontaminate the instruments and prepare for sterilization**

D. Evaluation

Evaluate	**Rationale**
• **The technique used during the procedure**	• To determine quality of care
• **The client's understanding of current and future needs of family planning**	• 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

Subtitle: 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.

Subtitle: 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
• **The client's willingness to use the method**	• **To ensure compliance**
• **Availability of the condoms**	• **For demonstration and issuance**
• **The client's knowledge on the use of condoms**	• **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
• **Greet and welcome the client/couple, offer a seat and introduce self**	• **To establish rapport**
• **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**	• **To ensure effectiveness of the method**
• **Provide health education as per the Medical eligibility criteria *(Refer to WHO MEC).*** **Teach the client that the condom is put on an erect penis before the penis enters the vagina** *Figure 5.7 Penile Model* *Figure 5.7 Penile Model*	**3-4. For proper utilization of the method and compliance**
• **Hold the tip of the condom, place on the penile model and unroll carefully down the base of the scrotum**	•

• **Explain to the client to hold the condom in place and withdraw the penis while it is still erect after ejaculation**	• **To prevent spilling the semen in the vagina**
• **Wrap the used condom in a tissue paper**	• **To facilitate safe disposal and avoid spillage of semen**
• **Dispose the used condom appropriately**	• **To avoid environmental hazard**
• **Ask the client to perform a return demonstration**	• **To confirm that the client has understood the information**
• **Thank the client and explain that he/she can come any time he/she has any problems, questions or wants another method**	• **To ensure compliance and give assurance**

D. Evaluation

Evaluate	Rationale
• **Application has been done appropriately using the standard guidelines**	• **To ensure effectiveness of the method and enhance the client's comfort**
• **The client is able to do a return demonstration**	• **To ensure she/he understood the procedure**

E. Documentation

Record:

- Record the procedure in the family planning register and the client's file

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

Figure 5.8 Female Condom

A. Assessment

Assess	Rationale
• **The client's willingness to use the method**	• **To ensure compliance**
• **Availability of the condoms**	• **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
• **Greet and welcome the client/couple, offer a seat and introduce self**	• **To establish rapport**
• **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**	• **To enhance effective utilization**
• **Explain to the client how to insert the condom using the female genitalia dummy**	• **To ensure the client understands and applies the method effectively**
• **Explain the position for inserting the condom: squat, raise one leg, or lie down**	• **Achieves the right position to introduce the condom into the vagina**
• **Grasp the ring at the closed end and twist it to make a figure of 8**	• **To make it easy to insert the condom into the vagina**
• **With the other hand, separate the labia minora and locate the vaginal introitus**	• **For ease of access into the vagina**
• **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 not twisted. The outer ring should remain on the outside of the vagina**	• **To position the condom properly**
• **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)**	• **To ensure that the condom remains in the right position and avoid spilling of semen into the vagina**
• **Ask the client to support the condom by holding on the outer ring during coitus**	• **To ensure the condom remains in place**
• **If the condom is accidentally pulled out of the vagina or pushed into it during sex, put the condom back in place**	• **To ensure maximum protection**
• **Remove the condom before standing up by twisting the outer ring. If the couple has sex again they should use a new condom**	• **To avoid spilling of the semen and ensure maximum protection.**
• **Wrap the condom in its package and put it in a disposable bag and dispose appropriately**	• **For environmental safety and proper disposal**
• **Request the client to perform a return demonstration**	• **To confirm that the client has understood the information**
• **Thank the client and explain that she can come any time she has any problems, questions or wants another method**	• **To ensure compliance and give assurance**

D. Evaluation

Evaluate	Rationale
• **Insertion has been done properly using the standard guidelines**	• **To ensure the client understands how to use the method**
• **The client has knowledge and skills by performing a return demonstration**	• **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

Title: Cervical Cancer Screening Methods

Subtitle: Taking a Papanicolau 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
• **Required equipment for the collection of the specimen**	• To determine availability and functioning state
• **Emotional state of the client**	• Identifies the client's readiness for the procedure
• **Appropriateness of the environment**	• 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
• **Greet and welcome the client/couple, offer a seat and introduce self**	• **To establish rapport**
• **Explain the procedure to the client**	• **To gain the patient's cooperation and make her relax for the procedure**
• **Ask the client to empty the bladder**	• **To reduce discomfort and avoid trauma to the bladder**
• **Screen the bed/couch**	• **To provide privacy**

• **Label the plain glass slide using the diamond pencil**	• **To ensure correct specimen identification**
• **Wash and dry hands then put on sterile gloves**	• **For infection prevention and control**
• **Constantly reassure the client throughout the procedure**	• **To ensure that she relaxes and cooperates**
• **Assist the client to lie in a lithotomy position**	• **To allow ease of access to the pelvic cavity**
• **Drape the client on both thighs and the perineal area**	• **To prevent cross infection**
• **Introduce the speculum to the vagina and expose the cervix**	• **To expose the cervix in readiness of the procedure**
• **Inspect the cervix**	• **To detect any obvious abnormalities on the cervix**
• **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 (180^0) if using the cytobrush**	• **To scoop the cervical cells**
• **Smear the scrapings evenly on the glass slide and add a drop of fixative solution evenly and allow it to dry. (Speed is essential to prevent drying of cells)**	• **To prevent morphological changes to the cells as well as cell death**
• **Discard the spatula/brush in a waste bin**	• **To prevent cross-infection**
• **Remove the speculum and put in a disinfectant**	• **To decontaminate the speculum**
• **Give a return date to the client**	• **To check for results and any other follow-up care**
• **Make the client comfortable and thank her for her cooperation**	• **To ensure continuity of cooperation and give assurance**
• **Ensure the specimen is taken to the laboratory immediately**	• **For examination and reporting**

D. Evaluation

Evaluate	**Rationale**
• **Pap smear has been taken in accordance with cervical cancer screening guidelines**	• To ensure that the procedure was done as per the set standards
• **Dates for receiving results of the Pap smear have been communicated to the client**	• To keep the client informed
• **Specimen has been obtained, labeled and taken to the laboratory**	• To facilitate getting results which will assist in further management of the client
• **Response of the client to the procedure**	• 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

Subtitle: 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
• **Required equipment for the procedure**	• To ascertain availability and functional state
• **Emotional state of the client**	• To determine the client's readiness for the procedure
• **Appropriateness of the environment**	• 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)
Figure 5.9 Requirements for VIA/VILI
(Adapted from Ministry of Health – Kenya)

C. Implementation

Steps	Rationale
VIA	
• **Greet and welcome the client/couple, offer a seat and introduce self**	• **To establish rapport**
• **Explain the procedure to the client and seek consent**	• **To allay anxiety and gain cooperation**
• **Ask the client to empty bladder and change into examination gown**	• **To avoid injury and discomfort**
• **Assist the client to lie in lithotomy position on the couch**	• **For ease of access of the cervix**
• **Inspect the vulva for any abnormalities** NB: **Do not swab the vulva with an antiseptic solution**	• **To rule out any abnormalities**
• **Insert the speculum**	• **To visualize the cervix and the vaginal walls**
• **Direct the light towards the perineum**	• **Light will assist in visualizing the cervix clearly**

• **Visualize the cervix for evidence of infection, discharge tumours or lesions**	• **To detect any deviation from normal**
• **If there is a lot of discharge, swab the cervix with a dry swab**	• **To allow for clear vision**
• **Identify the cervical os and the squamo-columnar junction and the area surrounding it (transformation zone)**	• **To ensure the procedure is carried out at the right anatomical site**
• **Soak a clean swab in acetic acid and apply it to the transformation zone of the cervix using the orange stick**	• **To observe for any changes in the transformation zone**
• **Wait for at least one minute after the acetic acid application then observe for any changes**	• **To allow for changes in the cervical appearance**

• **Observe the changes on the SCJ:**
  • **A raised and thickened white plagues or aceto-white epithelium near the squamo-columnar junction (SCJ) is a positive test as shown in figure 5.11.**
  • **A smooth, pink, uniform and featureless epithelium the test is negative.**
  • **A clinically visible ulcerative-proliferative growth or oozing and/ bleeding on touch is suspicious for cancer as shown in figure 5.12.**
	• **To detect abnormalities**
	Figure 5.10 Normal Cervix
	(Adapted from Ministry of Health – Kenya)
	Figure 5.10 Normal Cervix
	(Adapted from Ministry of Health – Kenya)

Figure 5.11 VIA Positive Cervix
(Adapted from Ministry of Health – Kenya)
Figure 5.11 VIA Positive Cervix
(Adapted from Ministry of Health – Kenya)
Figure 5.12 Cervix Suspicious of Cancer
(Adapted from Ministry of Health – Kenya)
Figure 5.12 Cervix Suspicious of Cancer
(Adapted from Ministry of Health – Kenya)

Steps	**Rationale**
• **When the visual inspection of the cervix is over, wipe the excess acetic acid**	• **To cleanse the cervix**
• **Thank the client and give the findings for VIA then continue with VILI**	• **To enhance cooperation**
VILI	

The above stated procedure for carrying out VIA applies to VILI except that instead of using acetic acid, Lugol's iodine is used. • VILI Negative **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.** • VILI Positive **Yellow lesions appear on the area next to the squamo-columnar junction and within the transformation zone as shown in Fig 5.13.** NB: **Areas of invasive cancer do not take up iodine but appear as thick mustard or saffron-yellow areas**	*Figure 5.13 VILI Positive Cervix* *(Adapted from: Ministry of Health – Kenya)* *Figure 5.13 VILI Positive Cervix* *(Adapted from: Ministry of Health – Kenya)*
• **Assist the client to dress up**	• **To make the client comfortable**
• **Give the findings, thank her and advice the client according to the results**	• **To interpret the findings and guide appropriately**
• **Soak the used instruments in the appropriate disinfectant**	• **To decontaminate the instruments**

D. Evaluation

Evaluate	**Rationale**
• **Visual inspection of the cervix has been done in accordance with the standard guidelines**	• To confirm accuracy and reliability of the results
• **Results have been communicated to the client**	• To Keep the client informed
• **Results were interpreted correctly**	• For appropriate interventions

E. Documentation

Record:

- Findings of examination and the recommended interventions

Title: Community Nursing Activities

Subtitle: 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**
• **The community's infrastructure**	• To facilitate understanding of the community during the community diagnosis exercise
• **Existing community linkages**	• To identify existing community support
• **The role of opinion leaders**	• 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
• **Establish the what, where, and who in the community**	• **To help in planning for the community diagnosis**
• **Learn more about the what, where, and who in the community**	• **To aid in defining the scope for community diagnosis activities**
• **Identify resources in the community**	• **To assist the investigators, identify the requirements for conducting a successful community diagnosis**
• **Brief the personnel adequately on their roles**	• **For each personnel to know what is expected of them**
• **Develop the required tools**	• **To collect the required information from the Community**
• **Obtain permission from the relevant authorities**	• **For acceptance and access to the community and for ethical purposes**
• **Carry out a pre-test in a population with similar data**	• **To ensure reliability and validity of the data**
• **Sample the population of study**	• **To obtain a representative sample of the Community**
• **Obtain all the required data as per the planned methods**	• **To get information necessary to make the diagnosis**
• **Analyze/synthesize and interpret the information thereof**	• **To quantify the needs of the community in order of priority**
• **Complete a written report of the survey**	• **For documentation of the community needs in order of priority**
• **Give feedback to the relevant authorities, community leaders and local health management team**	• **To engage the community leaders and relevant authorities to get involved in solution finding**
• **Develop an action plan**	• **For intervention purposes**
• **Thank the participants and relevant authorities**	• **For appreciation and cooperation for any further engagements**

D. Evaluation

Evaluate	Rationale
• **The community diagnosis has been done according to laid down procedure**	• To obtain reliable information within legally acceptable standards
• **The community is aware of their health needs and are ready to participate in the interventions**	• To empower the community to participate in their health needs
• **If resources were adequate**	• 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

Subtitle: 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
• **School administration's readiness for school health services**	• For planning and cooperation during the activities
• **The resources needed for school health**	• 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
• **Assemble the Health Team at the venue**	• **For organization purposes**
• **Introduce yourself/team to the teachers and pupils/students**	• **To create rapport**
• **Explain the schedule of activities and services available**	• **To get co-operation from the school administration and children/students**
• **Group pupils/ students according to developmental stages and health needs**	• **To give appropriate service**
• **Give a health talk on an issue of interest to the school administration and children/students**	• **To create awareness**
• **Take history and perform physical examination and make diagnosis if need be**	• **To detect any abnormality for treatment and referral purposes**
• **Confirm immunization status of the pupils/ students**	• **To detect vaccination missed opportunity**
• **Administer relevant vaccine if need be**	• **To ensure that all children are on immunization schedule as per EPI guidelines**
• **Counsel appropriately**	• **To meet the individuals' bio psycho social needs**

• **Carry out supportive supervision on school environment:**
  • **Location**
  • **Classroom**
  • **Play ground**
  • **Furniture**
  • **Sanitation and Waste disposal**
  • **Water**
  • **Kitchen and dining hall hygiene**
	• **To ensure that there are no health hazards in the school environment**

• **Provide feedback to the school authority and plan the next visit**	• **For continuity of service**
• **Discard all used material in line with infection prevention control and injection safety guidelines**	• **To prevent environmental hazards**
• **Thank all the participants**	• **For co-operation and motivation**

D. Evaluation

Evaluate	Rationale
• **The school health program was done as per the standard guidelines**	• To ensure adherence to set standards
• **Health education was given as planned**	• To impart knowledge on healthy living
• **Interventions were implemented**	• To ensure all interventions were instituted accordingly
• **Feedback on the program was given to the school management**	• 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

Subtitle: 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
• **Families with special needs**	• To identify the relevant families to be provided with appropriate interventions
• **The requirements for home visit**	• 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
• **Meet the family member(s) and wait to be received**	• **To avoid intruding in the activities in the family**
• **Introduce yourself to the family member(s) and explain your objective**	• **To facilitate building up of good relationship with the family**
• **Interview the member(s) using a non-directive technique**	• **To obtain information without the family members feeling interrogated**
• **Observe reactions of members as they interact and avoid writing as you interact except when filling personal data in the card**	• **The client may withdraw information if they notice that you are recording the discussion**
• **Identify the need of the family and how they relate with each other**	• **To help in planning intervention**
• **If it is a revisit, review the previous topic taught then deliver the planned health message/ intervention**	• **To assess the impact of the previous visit**
• **Carry out the planned intervention**	• **To fulfill the objectives of the visit**
• **Appraise the family on the areas they have done well**	• **To encourage and create room for motivation**
• **Give them time to ask questions. Do not be in a hurry to answer them**	• **To encourage active participation and compliance**
• **Plan with the family the next visit (if necessary)**	• **To involve them in the follow up visits**
• **Leave them satisfied with the session**	• **To maintain cooperation**
• **Make consultation if there is a plan of action that need other expertise**	• **So that the patients/ clients' needs are taken care of effectively**
• **Thank the family for their welcome**	• **To appreciate them, promote compliance and continuity of care**

D. Evaluation

Evaluate	Rationale
• **The needs of the client/family identified**	• To assist in the plan of care
• **Health talk has been shared to the client/ family**	• To check the client's understanding of the problem at hand
• **Care has been provided according to the plan of the home visit**	• 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

Subtitle: 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
• **The need to share specific health information**	• To create awareness regarding the identified need

• **The method of sharing the health message**	• For effective communication
• **The clients receiving the health message**	• 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
• **Greet the audience, introduce yourself and allow them to introduce themselves (if not a large group)**	• **To create rapport**
• **Set the climate for the health education**	• **To create interest in the audience**
• **Present the information: Introduce the topic, discuss the content**	• **To deliver the intended message**
• **Use visual aids or demonstrate if necessary**	• **To enhance efficiency in delivery of the message**
• **Stimulate the audience to participate by asking questions / sharing experiences**	• **To encourage active participation in the discussions**
• **Give time for asking questions and answer them**	• **To clarify the information given**
• **Ask the audience questions and also for a return demonstration where applicable**	• **To ensure that the audience have captured the information given**
• **Comment on their responses using positive language**	• **To motivate the audience to participate in the discussion**
• **Summarize the topic by recapping the main points and conclude the discussion**	• **To emphasize on important issues/aspects of the topic**
• **Thank the audience and schedule time and place for follow up**	• **To encourage cooperation and motivation in subsequent forums**

D. Evaluation

Evaluate	Rationale
• **Health education has been given according to the laid down guidelines**	• To determine if health education was shared as intended
• **Knowledge was imparted**	• To promote behavior, change

E. Documentation

Record:

- Topic
- Teaching strategies used
- Audience's response to the health talk

Subtitle: 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
• **The health needs of the community**	• To assist in planning for the activities
• **Availability of resources required for the mobile clinic**	• To cater for identified needs according to priority
• **Whether adequate social mobilization was done**	• 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
• **Before going for a mobile clinic, develop a work plan and a list of intervention to be carried out**	• **To guide execution of activities and promote efficiency**
• **Assemble the health team**	• **For organization purposes**
• **Ensure availability of transport**	• **To facilitate movement to the venue**
• **Introduce yourself/team to the clients/patients**	• **To create rapport**
• **Explain schedule of activities and services available**	• **To get cooperation from community members**
• **Offer relevant health services**	• **To meet the health needs of the community**
• **Provide referrals (if necessary)**	• **For continuity of care**
• **Discard all used material in line with infection prevention control and injection safety guidelines**	• **To prevent environmental hazards**
• **Give immediate feedback to the community and their leaders**	• **To help the community to adopt healthy lifestyles and behavior change**
• **Thank the community and their leaders**	• **To motivate and ensure their cooperation in subsequent mobile visits**

D. Evaluation

Evaluate	Rationale
• **The community's response on the services offered**	• For better planning in the subsequent visits

• **Mobile clinic done and documentation available on activities undertaken**	• For purpose of follow-up and verification
• **Safety procedures followed**	• To ensure adherence to standards
• **Referrals' records available**	• 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