



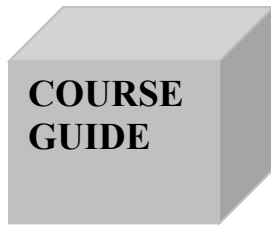
**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**SCHOOL OF SCIENCE AND TECHNOLOGY**

**COURSE CODE:NSS222**

**COURSE TITLE:PRACTICUM/CLINICAL ATTACHMENT I**





**NSS222**  
**PRACTICUM/CLINICAL ATTACHMENT I**

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## **Introduction**

Nursing as a practice-related profession, involves both theory and clinical practice. It involves the cognitive (knowledge), affective (attitudes, values) and psychomotor (skills and competencies) domains.

**NSS222: Practicum and Clinical Attachment** is a two credit course for nursing students designed to provide a layout for the appropriate, effective and qualitative nursing care which the nurse is expected to provide for his/her clients and patients.

The course is broken into 7 study units for the first part of the clinical posting. The knowledge gained in this course will enable you to carefully and professionally implement relevant nursing care interventions based on the needs of the individuals, families and communities.

## **What You Will Learn in this Course**

The overall aim of this course **NSS222 Practicum and Clinical Attachment** is to introduce students to the clinical and practical sessions expected of them as professional nurses.

## **Course Aim**

The aim of this course is to:

- Prepare you to be a polyvalent nurse provider at every level of health care
- Acquaint you with practical work in nursing practice
- Provide you with the needed skills for effective practice
- Understand the basic requirements for efficient management of clients/patients.
- Provide opportunities for individual care which nursing process clearly represents.
- Enable you to utilize the nursing process for patients' care.

## **Course Objectives**

Note that each unit has specific objectives. Students should read them carefully before going through the unit. You may want to refer to them during your study of the unit to check on your progress. You should always look at the unit objectives after completing a unit. In this way, you can be sure that you have done what is required of you by the unit.

## **Working through this Course**

For you to complete this course successfully and be a professional nurse licensed by the Nursing and Midwifery Council of Nigeria to practice, ensure that you attend the practical/clinical sessions at designated points, meet with your receptors and be guided in the carrying out of various procedures.

## **Course Materials**

The major components of the course are:

8. Course Guide
9. Study Units
10. Textbooks
11. Assignment File
12. Presentation Schedule

## **Study Units**

There are 6 study units in this clinical course with an appendix on nursing process. These include:

### **Module 1**

- |        |                    |
|--------|--------------------|
| Unit 1 | Ward Organisation  |
| Unit 2 | Basic Patient Care |

## Unit 3            Body Mechanics: Moving and Lifting Techniques

### Module 2

Unit 1            Hygiene and Comfort Measures

Unit 2            Nutrition and Nasogastric Procedures

Unit 3            Parenteral Procedures Including Blood Transfusions

Each unit contains Learners Performance Evaluation Guide which you are required to attempt. It is believed that this will assist you to achieve the learning objectives of the units.

### Textbooks and References

These texts will be of immense benefit to this course:

Aiken, L.H. Patrician PA. (2000). *Measuring Organisational Traits of Hospitals: the Revised Nursing Work Index*. *Nurs Res*; 49:146–53. [\[CrossRef\]](#) [\[Medline\]](#)

Coulter, A. & Cleary, P.D. (2001). *Patients' Experiences with hospital care in Five Countries*. *Health Aff (Millwood)*; 20:244–52. [\[Abstract/Free Full Text\]](#)

Shamian J. & Lightstone EY. (1993). *Hospital Restructuring Initiatives in Canada*. *Med Care* 1997; 35:62–9.

Shortell, S.M.; Gillies, R.R.; Anderson DA, *et al*. *Creating Organised Delivery Systems: The Barriers and Facilitators*. *Hosp Health Serv Admin*; 38:447–66. [\[Medline\]](#).

Sitzia, J. & Wood, N. (1997). *Patient Satisfaction: A Review of Issues and Concepts*. *Soc Sci Med*; 45:1829–43.

Veenstra, M.; Hofoss, D. (2003). *Patient Experiences with Information in a Hospital Setting: A Multilevel Approach*. *Med Care*; 41:490–9. [\[CrossRef\]](#) [\[Medline\]](#).

### Presentation Schedule

The presentation schedule included in this course guide provides you with important dates for completion of each Tutor-Marked Assignment. You should therefore try to meet the deadlines.

### Assessment

There are two aspects to the assessment of this course. First, there is the Learners Performance Evaluation Guide and practical. You are thus expected to apply knowledge, comprehension, information and problem solving skills gathered during the course.

### **Tutor-Marked Assignments**

This is represented in this course as the Learners Performance Evaluation Guide. You will find it useful in achieving the overall objective of the practical session.

### **Final Examination and Grading**

The final examination of NSS222 will be a one hour practical examination which has a value of 70% of the total course grade. The examination will consist of questions on the Self Assessment Exercise, practice exercises and Tutor-Marked Assignments that you have previously encountered. All areas of the course will be assessed.

### **Course Marking Scheme**

The following table shows the course marking scheme

**Table 1 Course Marking Scheme**

<b>Assessment</b>	<b>Marks</b>
Practical/Clinical sessions	70%
Care Study	20%
Vival/Oral	10%
<b>Total</b>	<b>100% of Course Marks</b>

### **Course Overview**

This table indicates the units, the number of weeks required to complete them and the assignments.

**Table 2: Course Organizer**

<b>Unit</b>	<b>Title of Work</b>	<b>Weeks Activity</b>	<b>Assessment (End of Unit)</b>
	Course Guide	Week 1	
<b>Module 1</b>			
1	Ward Organisation	Weeks 1 & 2	Learners



			Performance Evaluation Guide
2	Basic Patient Care	Weeks 3 & 4	As above
3	Body Mechanics: Moving and Lifting Techniques	Weeks 5 & 6	As above
<b>Module 2</b>			
1	Hygiene and Comfort Measures	Weeks 7 & 8	As above
2	Nutrition and Nasogastric Procedures	Weeks 9 & 10	As above
3	Parenteral Procedures: Blood transfusion, Intake and Output and Monitoring of Intake and Output	Weeks 11 & 12	As above

## How to Get the Most Out of this Course

In distance learning, the study units replace the university lecturer. This is one of the huge advantages of distance learning mode; you can read and work through specially designed study materials at your own pace and at a time and place that suit you best. Think of it as reading the teacher, the study guide tells you what to read, when to read and the relevant texts to consult. You are provided exercises at appropriate points, just as a lecturer might give you an in-class exercise.

Each of the study units follows a common format. The first item is an introduction to the subject matter of the unit and how a particular unit is integrated with the other units and the course as a whole. Next to this is a set of learning objectives. These learning objectives are meant to guide your studies. The moment you complete a unit, you must go back and check whether you have achieved the objectives. If this is made a habit, then you will significantly improve your chances of passing the course. The main body of the units also guides you through the required readings from other sources. This will usually be either from a textbook or from other sources.

Self Assessment Exercises are provided throughout the unit to aid personal studies. Working through these Self Tests will help you to achieve the objectives of the unit

**The following are practical strategies for working through this course**

- Read the course guide thoroughly
- Organize a study schedule. Refer to the course overview for more details. Note the time you are expected to spend on each unit and how the assignment relates to the units. Important details, e.g. details of your tutorials and the date of the first day of the semester are available. You need to gather all these information in one place such as a diary, a wall chart, calendar or an organizer. Whatever method you choose, you should decide on, and write in, your own dates for working on each unit.
- Once you have created your own study schedule, do everything you can to stick to it. The major reason why students fail is that they get behind with their course work. If you get into difficulties with your schedule, please let your tutor know before it is too late for help.
- Turn to Unit 1 and read the introduction and the objectives for the unit.
- Assemble the study materials. Information about what you need for a unit is given in the table of content at the beginning of each unit. You will almost always need both the study unit you are working on and one of the materials recommended for further readings, on your desk at the same time.
- Work through the unit, the content of the unit itself has been arranged to provide a sequence for you to follow. As you work through the unit, you will be encouraged to read from your set books (Further reading).
- Keep in mind that you will learn a lot by doing all your assignments carefully. They have been designed to help you meet the objectives of the course and will help you pass the examination.
- Review the objectives of each study unit to confirm that you have achieved them. If you are not certain about any of the objectives, review the study material and consult your tutor.
- When you are confident that you have achieved a unit's objectives, you can start on the next unit. Proceed unit by unit through the

course and try to pace your study so that you can keep yourself on schedule.

- When you have submitted an assignment to your tutor for marking, do not wait for its return before starting on the next unit. Keep to your schedule. When the assignment is returned, pay particular attention to your tutor's comments, both on the Tutor-Marked Assignment form and also written on the assignment. Consult your tutor as soon as possible if you have any questions or problems.
- After completing the last unit, review the course and prepare yourself for the final examination. Check that you have achieved the unit objectives (listed at the beginning of each unit) and the course objectives (listed in this course guide).

## **Clinical and Practical Sessions**

There are 6- 8 weeks of practical session for this course in the designated clinical centres closest to you. You will be notified of the dates, time and location together with the name and phone number of your preceptors as soon as you are allocated a group by the Centre Manager. Your preceptor will provide the needed guidance and instructions for effective clinical skills acquisition. Records and reports will be made to the Centre Manager as part of your overall evaluation. At least two hours in any of the working days of the week is required for this purpose.

Do not hesitate to contact your tutor by telephone, e-mail or discussion board if you need help. The following might be circumstances in which you would find help necessary. Contact your tutor if:

1. You do not understand any part of the study units or the assigned readings.
2. You have difficulty with the self test or exercise.
3. You have questions or problems with an assignment, with your tutor's comments on an assignment, or with the grading of an assignment.

You should try your best to attend the tutorials. This is the only chance to have face to face contact with your tutor and ask questions which are answered instantly. You can raise any problem encountered in the course of your study. To gain the maximum benefit from the course tutorials, prepare a question list before attempting them. You will learn a lot from participating in discussion actively.

*Best of Luck*

Course Code           NSS222  
Course Title           Practicum/Clinical Attachment I

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## **MODULE 1**

Unit 1	Ward Organisation
Unit 2	Basic Patient Care
Unit 3	Body Mechanics: Moving and Lifting Techniques

### **UNIT 1     WARD ORGANISATION**

#### **CONTENTS**

1.0	Introduction
2.0	Objectives
3.0	Main Content
3.1	Organisation and Care of Patient's Unit
3.2	Patient Care Environment and Safety Measures
3.3	Hospital Electrical Safety and Fire Safety Measures
3.4	Use, Storage and Care of Ward Equipment
3.5	Ward Management
3.6	Supervision of Ancillary Staff
3.7	Communication
3.7.1	What is Communication?
3.7.2	Purpose of Communication
3.7.3	Guidelines for Communication with Patient and Their Family
3.7.4	SBAR Technique. What is it?
3.8	Handing and Taking over of Patients and the Ward Unit
4.0	Conclusion
5.0	Summary
6.0	Tutor-Marked Assignment
7.0	References/Further Reading

#### **1.0     INTRODUCTION**

The patient care unit is the area of the hospital in which the patient receives medical and nursing care and treatment as well as the place in which he/she lives during his/her hospital stays. It must be maintained as a safe, pleasant, clean, and orderly environment for the patient's physical and mental well being. Constant effort is needed to achieve and maintain the necessary high level of order and sanitation that is a sine-qua-non to patient safety ([http://64.78.42.182/sweethaven /MedTech](http://64.78.42.182/sweethaven/MedTech)). This cannot be of more relevance than in this era of expanded role of the nurse. In McGibbon (1997) words, the traditional role of ward sister/charge nurse has been redefined as ward manager with the evolving of many new responsibilities, including acting as 'on site' manager out of hours. This

development calls for a reorientation in the training of nurses as the custodian of care for optimal performance.

## **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- identify articles/equipment required in the patient care area
- identify and apply the hospital fire, electrical and general safety measures when providing care for patients
- identify guidelines for cleaning the patient care unit
- recognize rules for the use of disposable and non-disposable items
- demonstrate correct sequence of activities during handing and taking over of patients and the ward unit.

## **3.0 MAIN CONTENT**

### **3.1 Organisation and Care of Patient's Unit**

#### **Rules of General Cleaning**

1. Collect all articles required before commencing work.
2. Brooms, dusters, polishers and clean water.
3. Sweep first, except for high dusting, with a proper brush, of walls, ledges and blinds.
4. Dusting should be done with a damp duster, polished surfaces dried afterwards with a soft dry duster. Dust from top to bottom of article using firm even strokes.
5. All rubbish must be removed from tables and lockers with patient's permission.
6. Furniture including locker tops and bed tables should be polished once weekly using furniture cream sparingly.
7. Glossy paintwork should be washed with soapy water. Scouring powder should be used to remove marks only.
8. Use all cleaning materials with care and economy.

#### **Requirements**

- Cleaning cloth or dusters
- Scouring powder e.g. Vim
- Bowl of warm water
- Disinfectant

## Procedure

### Required Steps

### Scientific Rationale

- |  |   |
|--|---|
| ▪ Assemble all requirements on a trolley or portable table.  | Promotes organisation and time management.  |
| ▪ Check and inspect ward equipment.  | Aids in detecting and repairing defects.  |
| ▪ Open windows.  | Ensure proper ventilation at all times.   |
| ▪ Keep window blind even and window sills free from all particles.                                 | Promotes a sense of aesthetics and at the same time reduces microbial population.             |
| ▪ Remove all articles from tabletops.  | Facilitates cleaning.   |
| ▪ With wet cloth, soaked in disinfectant water, dust tabletops, side lockers and bed frames daily. | This prevents raising dusts and ensure thorough cleaning.                                     |
| ▪ With scouring powder such as Vim, weekly wash tables and side lockers inside and outside.        | Helps in removing stubborn stains and promotes medical asepsis.                               |
| ▪ Obtain patient's permission before discarding newspapers, magazines e.t.c.                       | Demonstrates concern for patient's property and facilitates cooperation.                      |
| ▪ See that beds are well arranged in an even line.   | Shows orderliness and promotes aesthetics.  |
| ▪ Arrange articles needed by patient neatly and within easy reach for the patient.                 | Demonstrates organisation and enhances housekeeping.  |
| ▪ Heads of beds should be turned in, castors facing each other.                                    | Reduces accidental falls and possible injuries to patient, relatives and even health workers. |
| ▪ Always ensure that bedside locker is at the right hand side of the patient.                      | For uniformity and easy reach of patients.  |
| ▪ Clean and return equipment used for cleaning to proper place.                                    | Enhances housekeeping and get equipment ready for another use.                                |

**Note** – General ward cleaning is usually done by ward orderlies but the nurse must know how it should be done so that one may supervise cleaning and be able to correct when necessary.

### **3.2 Patient Care Environment and Safety Measures**

One of the most important aspects of patient care is to ensure safety for each patient throughout the day. It may be impossible to prevent accidents completely. However, there are ways to limit the potential for accidents that may cause injury to the patient or health care personnel and the unnecessary loss of equipment. Maslow, states that, our safety and security needs are second only to the need for food, air, and water. The daily responsibility for protecting the patient from additional injury or illness rests with the nursing team. The skillful and knowledgeable nurse can be just as dangerous as the incompetent one if safety measures are not applied in the health care environment (<http://64.78.42.182/sweethaven/MedTech>).

#### **1. Identify Patients at Risk for Injury**

Those at special risk include:

- a. Elderly or confused patients.
- b. Patients with impaired vision or hearing.
- c. Patients with impaired mobility (wheelchairs, walkers, and partial paralysis).
- d. Patients with a history of falls.
- e. Patients with a history of substance abuse.
- f. Patients receiving medication that interferes with reasoning or motor functions.

#### **2. Protect the patients at risk from injury.**

#### **3. Prevent falls**

- a. Place the bed in the low position.
- b. Keep the side rails up when the patient is not receiving bedside care.
- c. Advise the patient to wear low-heeled shoes that fit well when walking.
- d. Ensure that nonskid strips or mats are affixed to the bottom of bathtubs and shower floors.

- e. Ensure that bathtubs have sturdy handrails and shower stools are in place when needed.
- f. Warn patients and visitors when floors are wet and slippery. Also see that signs are posted.

#### **4. Use protective restraints cautiously:**

- a. Use restraints when careful assessment indicates that these are needed. (Some facilities require a doctor's order for restraints).
- b. Movement is essential to the patient's well being. Use the least restrictive type of restraint, which will protect the patient.
- c. Apply the restraint for the shortest period necessary. The vest restraint may only be necessary while a patient is sitting in a wheelchair.
- d. Provide for as much movement as possible. The waist restraint protects the patient from falling out of bed but still allows the patient to change position independently.
- e. Restrain the fewest limbs or body parts possible. However, if leg restraints are necessary, use wrist restraints also. If this is not done, the patient may remove the leg restraints or he may accidentally hang by his heels in the restraints.
- f. Tie the restraint with a knot that is not likely to come loose, yet can be released easily by the nurse in an emergency. A half-bow knot (figure 6-4) meets these criteria.
- g. Explain to the patient the reason for the restraint. Position him comfortably and change his position every 2 hours. Feed the patient who must remain restrained during meals. Help him use the toilet, bedpan, or urinal at regular intervals.

#### **5. Prevent scalds and burns**

- a. Place coffee, tea, pap, and other hot liquids where the patient can reach them easily and safely.
- b. Assist the patient if there is any doubt about whether he can safely regulate the temperature of water in tubs or showers.
- c. Carefully follow policy when using hot-water bags or heating pads. Because of the danger of burning patients, many health care facilities do not allow their use.

## **6. Prevent the spread of infection**

A health care facility may adopt its own infection control policies and practices. However, the procedures generally follow the recommendations from the Centers for Disease Control (CDC). This is a Federal agency that studies pathogens, outbreaks of contagious diseases, and methods used to control these outbreaks.

- a. Preventing disease, including infections, is a high priority in health care. Nurses should use techniques that prevent microorganisms from living, growing, and spreading.
- b. Two methods are used to reduce or eliminate the presence of microorganisms and thus prevent infections. These two methods are called surgical asepsis and medical asepsis.
  - Surgical asepsis refers to the practice that eliminates the presence of all microorganisms (bacteria, viruses, fungi, yeasts, molds, rickettsia, and protozoa). This practice is sterilization.
  - Medical asepsis refers to practices that help reduce the number and inhibit the growth of microorganisms, especially pathogens (those that cause infections or contagious diseases). Medical asepsis, also called clean technique includes use of antimicrobial agents, hand washing, cleaning supplies and equipment, and disinfection.
- c. It is equally important that the nurse teach patients facts and practices about surgical and medical asepsis. When teaching a patient you should:
  - Observe the patient to identify areas where instruction would be helpful in controlling the spread of infection.
  - Act as a model by using sound practices of asepsis when giving care.
  - Provide guidance to the patient for selfcare at home in the proper way to handle sterile equipment and supplies and in how to sterilize reusable items.

## **7. Report Infections**

Health care workers must report any infection that occurs. The Infection Control Committee will investigate any case of infection to determine

the cause. If a break in nursing technique is identified, the committee will propose different procedures to eliminate the problem.

### **3.3 Hospital Electrical and Fire Safety Measures**

#### **Hospital Electrical Safety Measures**

1. Use electrical equipment for the intended purpose only.
2. Keep television sets, telephones, radios, hair dryers, electric shavers, and all other electrical equipment and appliances away from bathtubs and washbasins.
3. Test all small appliances before use to see that they are in good working order. Ensure periodic service checks of all electrical equipment.
4. Remove a plug from a wall socket by grasping the plug, not the cord.
5. Use plugs and outlets with a ground when possible. Do not overload an electrical outlet.
6. Do not kink electric cords; this may cause the fine wires inside the cord to break.
7. Never use faulty equipment. If an appliance overheats, produces a shock or gives off an odour while being used, remove the appliance from the area. Follow procedures to have the appliance evaluated by medical maintenance.

***Warning** – An electric spark near a high concentration of oxygen or certain anaesthetics gases may cause an instant and serious fire.*

#### **Hospital Fire Safety Measures**

1. Despite the use of fire retardant material, and compliance with fire regulations, fires still occur. As such health care facilities should have regular fire drills so that all personnel know exactly what to do. Besides health care personnel should be trained and drilled in:
  - a. Fire prevention.
  - b. Location and use of fire alarms.
  - c. Location and use of fire extinguishers.
  - d. Location of emergency exits.
  - e. Evacuation procedures.

2. Oxygen supports combustion. Post signs to show that oxygen is in use where applicable.

If a patient is receiving oxygen as part of his treatment, be sure that the patient, his roommates, and visitors know that smoking is prohibited. **Note:** Smoking is prohibited in treatment areas of most health care facilities.

3. If a fire occurs, follow these steps:
  - a. Activate the fire alarm procedures.
  - b. Turn off oxygen, lights, and any electrical equipment in the vicinity of the fire.
  - c. Remove the patients who are in immediate danger.
  - d. Notify the hospital "switchboard" of the location of the fire.
  - e. Using the fire extinguisher, attempt to extinguish the fire.
  - f. Close windows and doors to reduce ventilation.
  - g. Return patients who are not endangered to their rooms.
  - h. Post a guard to direct the fire department.

### **3.4 Use, Storage and Care of Ward Equipment**

#### **Rules for Use of Disposable or Non-Reusable Items**

1. Do not attempt to reuse (for another patient) or resterilize disposables.
2. Sterile disposables are considered sterile provided the wrapper is not broken or torn or the expiration date has not elapsed.
3. Sterile disposables with torn or broken wrappers must be discarded.
4. Use disposables for the specific purpose(s) for which they were designed.
5. Follow manufacturer's directions when using disposables.

#### **List of Reusable Equipment/Articles Necessary for Providing Basic Nursing Care**

- a. ***Linens***
  - Bed linens.
  - Towels.



- Washcloths.
- Blankets.

b. ***Toilet Equipment***

- Wash basin.
- Soap dish.
- Emesis bowl.
- Bedpan.
- Urinal.
- Toilet paper.

c. ***Other Articles***

- Water pitcher.
- Glass.
- Call button.
- Disposable facial tissues.

Note: The list is inexhaustible but below is an excerpt of how to care for some of these hospital equipments/articles.

**1. Trolleys and Screens**

- Clean all trolleys daily before commencing work in the morning.
- Dust metal frames of screens before commencing work.
- Remove dirt from wheels of screens and trolleys on a weekly basis.
- Oil wheels weekly to prevent stiffness.

**2. Cupboards and Tables including Patient's Bedside Lockers**

- Clean patient's bedside locker and table on a daily basis.
- Clean patient's bedside locker and table before admission of a new patient.
- Clean linen cupboard and other cupboards weekly and rearrange.
- Re-label where necessary.

**3. Urine Testing Room**

- Tidy up the room daily.
- Replenish the reagents as necessary.
- Discard specimen not needed again and wash test-tubes after use.

**4. Rubber Goods**

- **Rubber Sheets or Mackintoshes**

- Remove traces of blood or other body discharges with cold water.
- Spread on a flat surface Wash with soap and water. Rinse well and dry away from direct heat. When dry, dust lightly with powder. Roll or hang over a rod to avoid creases from folding.

- **Rubber Gloves**

- Wash in cold water, turning so that both sides are washed.
- Wash with soap and water.
- Rinse well.
- Hang to dry with cuffs down.
- If used for infectious patient, soak in carbolic lotion or izal for 30 mins.
- Pack dry powdered gloves in drums for autoclaving.

- **Hot Water, Bottles, Ice Bags, Air Cushions, etc**

- Remove traces of blood or body discharges with cold water
- Wash with soap and water
- Rinse and dry outside of bag
- Hang with neck end down to dry inside
- Inflate with air to avoid sticking together
- Keep washers in screw tops
- Hang up in proper place

**Special Points to Note**

- (1) Avoid sticking pins into rubber.
- (2) Oils, grease and acids destroy rubber, so prevent contact with these.
- (3) Rubber deteriorates when not used – occasionally soak them in cold water to prevent cracking.
- (4) Rub talcum powder into rubber goods before storage to keep them soft and from sticking together.
- (5) Store rubber goods in dark, cool and dry atmosphere.

- **Care of Stainless Steel, Forceps, Bowls, Gallipots Receivers etc**

- Wash with soap and water after use, and then allow drying.
- Return back to proper places.
- If needed for a sterile procedure, put into an already boiling sterilizer to boil for 5 minutes.

- **Stitch and Surgical Scissors**

- Wash with soap and water, using brush under running tap
- Immerse in hibatane-in-spirit, methylated spirit, or Ethicon fluid in a receiver lined within gauze, with blades open.
- Change solution weekly.

- **Care of Oxygen Apparatus**

- Dust cylinder daily
- Check the gauge and flowmeter daily to ensure that they are functioning
- Change water in humidifier weekly
- Ensure that the key is available all the time
- Ensure always that cylinder is not empty

- **Care of Suction Machine**

- Dust daily
- Wash glass bottles daily and change lotion
- Make sure that the washers around bottles are intact
- If manually operated, oil the hinges on the pedals weekly.

- **Care of Drainage Bottles**

- Empty content
- Wash with soapy water and rinse
- Soak with disinfectant
- Send for autoclaving if need be.

### **3.5 Ward Management**

Today, hospital has become more of a complex institution oriented not only towards public service and customers' satisfaction but towards efficiency and maximization of profit. Consequently, good and efficient management of every unit of the hospital has become the order of the day. Really, the term management means different things to different people but the traditional view of management as the process of working with others and capital to achieve Organisational goals holds true to the present day. Management has also been described as a creative problem solving approach. Creative problem solving is broader than problem finding, choice making or decision making.

It extends from analysis of the environment within which the business is functioning to evaluation of the outcomes from the alternative implemented. This creative problem solving is accomplished through the five functions of Management: Planning, organising, leading, coordinating, and controlling.

The intended outcome is: using the Organisational resources in such a way to achieve its mission and goals.

It is important to remind ourselves that irrespective of the setting we find ourselves, management is management. Management is generic and management principles are general rather than specific to a type of firm or organisation. However, management is universal only if the manager has become familiar with the specific situation in which it is applied. Production technology, customer characteristics and the culture of the industry are examples of specifics that managers need to learn to be effective in applying their generic management skills. As the ward manager, nurses therefore need to be equipped with basic management skills: technical, human and conceptual.

A technical skill is the ability to use tools, techniques, and specialized knowledge to carry out a method, process, or procedure. Human skills are used to build positive interpersonal relationships, solve human relations problems, build acceptance of one's co-workers, and relate to them in a way that their behavior is consistent with the needs of the organisation. Conceptual skills involve the ability to see the organisation as a whole and to solve problems in a way that benefits the entire organisation. Analytical, creative and intuitive talents make up the manager's conceptual skills. This said what a ward manager does and how he/she does it can be subsumed under the five traditional tasks of management. Through these functions, the nurse manager can be a catalyst for change or by definition, a change agent.

## **Planning**

The difference between a successful and unsuccessful manager lies within the planning procedure. Planning is the first step in management and is essential as it facilitates control, is valuable in decision making and in the avoidance of business ruin. It is the ongoing process of developing the business' mission and objectives and determining how they will be accomplished. Stated differently, planning is the logical thinking through goals and making the decision as to what needs to be accomplished in order to reach the organisations' objectives. Planning should be futuristic, comprehensive and perspective. However, creating a plan of action is the most difficult of the five tasks and requires the active participation of the entire organisation. Managers use this process to plan for the future, like a blueprint to foresee problems, decide on the actions to evade difficult issues and to beat the competition. (Bateman, Snell, 2007).

The nurse manager's first work is to decide what s/he wants to accomplish and to set short, medium or long range goals for the ward. The nurse draws up duty roster and nursing care plan that takes cognisance of the clients' condition, peculiarity of the ward situation, resources available within the ward setting, type and significance of work and future trends. This requires sensing the need of the clients and the health team as a whole, forecasting the economic, socio-political environment and of course selecting resources available. Planning also involves budgeting for the resources and evaluation of performance.

## **Organising**

In order to reach the objective outlined in the planning process, structuring the work of the organisation is a vital concern. So organising has to do with establishing the internal organisational structure of the organisation. The focus is on division, coordination, and control of tasks and the flow of information within the organisation. It is in this function that managers distribute authority to job holders i.e. appointing individuals to assignments or responsibilities that blend together to develop one purpose, to accomplish the goals. These goals will be reached in accordance with the institutional values and procedures.

There are four (4) steps in organising:

1. Organising the structure of the department
2. Organising the procedure measure of the department
3. Determination of requirements of the department
4. Allocation of resources viz: (a) Materials and (b) Personnel.

In the health system and nursing in particular, organising start soon after the nurses determined nursing action designed to achieve a desired nursing objective. The nurse manager must then go over the plans with the team, break the assignments into units that one person can complete, link related jobs together in an understandable well-organised style and appoint the jobs to individuals (Allen, 1998). Furthermore, the method of acquiring and distributing resources must be well defined, the type of activities to be performed and the line of responsibility must be clearly spelt out, and of course the mode of control and coordination must be in place. This facilitates the accomplishment of tasks in a logical sequence e.g. medications and treatments, diets served on time, tests completed in accordance with schedules of other departments e.t.c. Therefore for a successful performance of this function, it becomes imperative for the manager to know his/her subordinates and what they are capable of in order to organize the most valuable resources the institution has, its employees. (Bateman, Snell, 2007).

## **Directing/Leading**

Organisational success is determined by the quality of leadership that is exhibited. "A leader can be a manager, but a manager is not necessarily a leader," says Gemmy Allen (1998). Leadership is the power of persuasion of one person over others to inspire actions towards achieving the goals of the company. Besides, people, not things, are directed and this implies that managers must act to get people do as he would like them to. Thus directing could be defined as influencing people's behavior through motivation, communication, group dynamics, leadership and discipline. Consequently the purpose of directing is to channel the behavior of all personnel to accomplish the organisation's mission and objectives while simultaneously helping them accomplish their own career objectives; optimizing return from all employees in the interest of the entire enterprise.

Directing others however involves knowing what they should do, and assisting them to do it. Assisting may involve improving morale of the worker. The ward manager must therefore be able to influence/motivate other health team members to an elevated goal and direct themselves to the duties or responsibilities assigned during the planning process. S/he must possess interpersonal skills, communicate clearly and base his or her judgments on regular audits. Their thorough knowledge of personnel creates unity, energy, initiative and loyalty and eliminates incompetence. Authorizing staff to have the capability to deal with situations is also a significant part of leading (Allen, 1998).

## **Coordinating**

A good coordinating system is vital to effective organisation, directing and good practice. Coordinating entails unifying and harmonizing activities and efforts to maintain the balance between the activities of the various units/segments of the organisation. Coordinating takes place when common superiors are provided for workers whose works are related. Coordinating is achieved through good interaction and communication.

## **Controlling**

By controlling, we mean, the method of ensuring that all our plans succeed. Control is concerned with proper execution of the plan and measuring of performances of the employee. According to Allen (1998) 'Controlling is the final link in the functional chain of management activities and brings the functions of management cycle full circle'. It allows for the performance standard within the group to be set and communicated. Control also allows for ease of delegating tasks to team

members but as managers may be held accountable for the performance of subordinates, they may be wise to extend timely feedback of employee accomplishments. Controlling can therefore be construed as a four-step process of:

1. Establishing performance standards based on the organisation's/firm's objectives.
2. Measuring and reporting actual performance.
3. Comparing the two, and taking corrective or preventive action as necessary.
4. Identifying weaknesses and errors by controlling feedback, and conforming activities to plans, policies and instructions.

In synopsis, the process that guarantees plans are being implemented properly is the controlling process.

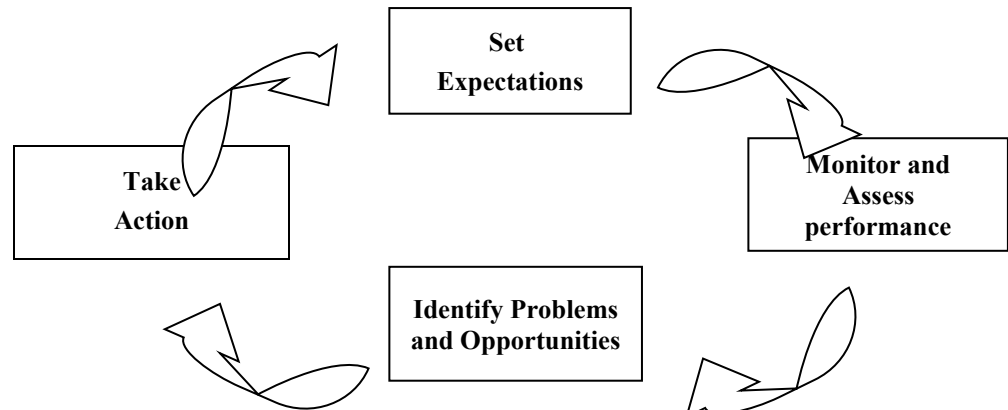
Effective ward management therefore entails planning, organising, directing, coordinating and controlling. In simple sentences, it involves:

1. Planning and organising work efficiently.
2. Effective allocation of human and material resources.
3. Recognizing priorities and ensuring efficient time management.
4. Teaching and motivating team members towards the attainment of corporate goals.
5. Appropriate delegation and supervision of subordinates.
6. Maintaining consistencies and taking initiatives to help others.
7. Demonstrating readiness to accept responsibility.
8. Counselling patients and relatives.
9. Resolving conflicts among staff, patients and relatives.
10. Exhibiting good professional conduct (ethics, firmness, gentleness and self discipline).

### **3.6 Supervision of Ancillary Staff**

The extract below from MAQ paper number 4, 2002 flow chart and subsequent summary perfectly outlines the process of supervision that can be adopted at any level of ward organisation and management. Therefore at whatever level it occurs, the process of supervision may be thought of as consisting of four basic tasks as shown in figure 1. These tasks are consistent with a wide variety of approaches, tools, and methods used for supervision and quality improvement interventions. To emphasize the ongoing nature of the process, the diagram shows an action loop with no starting or end points.

**Figure 1: The Process of Supervision**



Adapted from Supplement on Population Report Volume XXX, No 4, 2002

The supervisor facilitates this process by communicating about, assessing, and facilitating the work of others. The supervisor's activities include the following:

### 1. **Set Expectations**

A prerequisite for effective supervision is the existence of clear expectations or standards against which performance and results can be measured. Where these do not exist, the supervisor helps define and implement them.

### 2. **Monitor and assess Performance**

Once the standard or guidelines are set, the task of gauging the extent to which they are met becomes an ongoing activity that occurs at all levels of the system: for individual health care providers, within and among facilities, and at the district (regional) and national (central) levels.

### 3. **Identify Problems and Opportunities**

Where there are gaps between expectations and results, the supervisor facilitates a team process for examining potential causes and possible solutions. By facilitating open communication and teamwork, the supervisor can help spot opportunities to improve the overall quality of care.

### 4. **Take Action**

The supervisor helps marshal the resources necessary (human, financial, material, political, institutional) and motivates and supports providers to implement interventions and activities to address performance gaps or opportunities for improvement. The process continues as new activities begin, with the establishment of expectations for results.



### **3.7 Communication**

Communication is an important and integral part of our daily activities and social interactions. It is the foundation upon which interpersonal relationships are built. Effective communication is the corner stone to good nursing care. This is true regardless of the setting in which one is working.

The basic aim of communication is to establish and maintain harmonious and productive relationship with the clients and other people. Besides, the quality of care you can provide is, in many ways, dependent on the quality of communication that exists between you and your patient. It is essential that you develop and maintain an understanding of the methods and skills of communication in order to meet the needs of the patient.

#### **3.7.1 What is Communication?**

Communication has been defined as a meaningful exchange of ideas, statistical data, opinion, attitudes / emotions from a source to a receiver to produce intelligent, desirable actions that will accomplish Organisational objectives. Scott (1967), believed that it is a dynamic process and involves the process of transmitting and accurate reception of ideas accompanied by a feedback to foster expected outcomes. Stated differently, communication is the giving, receiving and interpreting of information directed to any of the five senses (sight, hearing, touch, taste, or smell) by two or more interacting people. Implicit in the above statement is that communication embraces all modes of behaviour that an individual employs consciously or unconsciously to influence another, not only the spoken and written but also gesture, body movements, semantics and symbolism in arts. Communication does not take place if the message being sent was not accurately received. Therefore, the success or otherwise of communication process is evaluated from the point of view of how closely the elicited actions compare to the expected actions.

#### **3.7.2 Purpose of Communication**

People communicate for many reasons. We communicate to inform, instruct, command, comment, change, seek opinion, persuade, influence, educate, entertain, guide and to control other people's view as well as changing their opinions. More importantly, communication is the KEY to Patient Safety Goals and a standardized approach provides effective message relay. In addition most errors in healthcare institutions can be directly linked to failure of communication between various disciplines such as physician to nurse, physician to pharmacy, nurse to nurse.

#### **Characteristics / Quality of a Good Communication**

A good communication process must be candid, complete, concise, clear, concrete, cautious and correct (7Cs).

### **3.7.3 Guidelines for Communicating with Patients and their Families**

1. Convey to the patient and family that they are important to you and that you want to help them. There are many ways to do this; you must do what is comfortable and natural for you. However, there are some things everyone can do.
2. Convey honesty and trustworthiness.
  - Try not to overwhelm the patient with embarrassing or personal questions. When it is necessary to ask personal questions, explain why and keep it short and matter-of-fact.
  - Don't make promises you can't keep. If you say you are going to do something, make every effort to do it or see that it gets done.
  - Try to be there when you say you will. If you are late, explain why.
3. Communicate with each patient as an individual. (This is especially important in a hospital setting, where patients often experience a loss of identity.) In order to do so, you must try to get to know the patient. Listen to him. Put yourself in his place.
4. Accept and respect the patient despite the symptoms of his illness.

### **Techniques for Communicating with Patients**

#### **1. Establishing the Setting**

- Provide a comfortable environment (lighting, temperature, furnishings).
- Establish a relaxed, unhurried setting.
- Sit down when speaking to the patient. Although you probably have dozens of things you need to be doing at that moment, try to relax. Don't stand at the doorway or sit on the edge of your seat, as if you are preparing to jump and run as soon as you can get away.

- Face the speaker and maintain eye contact.
- Provide for privacy.
- Avoid interruptions and other distracting influences.

## **2. Verbal Communication Skills**

- Let the patient do the talking.
- Keep questions brief and simple.
- Use language that is understandable to the patient. Avoid acronyms and medical/nursing jargon if the patient is nonmedical.
- Ask one question at a time. Give the patient time to answer.
- Clarify patient responses to questions, not just for your own use, but also to let the patient know that you are listening (be sure you really are) and that you understand.
- Avoid leading questions. You want the patient to tell you what he is feeling, not what he thinks you want to hear. So avoid putting words in his mouth. For example, it might be better to ask, "How are you feeling?" rather than "I suppose you're feeling rested after your nap."
- Avoid how or why questions; they tend to be intimidating.
- Avoid the use of cliché statements like, "Don't worry; it'll be all right." or "Your doctor knows best."
- Avoid questions, which require only a simple "yes" or "no" response. You want to encourage the patient to talk to you.
- Avoid interrupting the patient. If you need to ask a question, wait until he has completed his thought.

### **3.7.4 SBAR Technique – What is it?**

SBAR is an acronym for situation, background, assessment, and recommendation. The technique was developed by the US Navy. SBAR is useful in everyday conversation but its strength is when there is critical situation. The technique provides a framework for communication between members of the health care team about a

patient's condition. SBAR is an easy to remember, concrete mnemonic useful for framing any conversation, especially critical ones, requiring a clinician's immediate attention and action.

Nurses are trained to be narrative and descriptive in their charting and verbiage i.e. SOAPE charting, nursing narrative/comments and care planning. We often get so into the details that we really don't clearly communicate the need of the patient. Physicians on the other hand often want the "bottom line". So when we fail to communicate the issue at stake and the urgency of the situation we fail to get the kind of response we desire for the patient. SBAR therefore allows for an easy and focused way to set expectations for what will be communicated and how between members of the team; which is essential for developing teamwork and fostering a culture of patient safety.

### **SBAR- Why use it?**

1. Standardizes communication to help everyone
2. Places every clinical person on the same communication level
3. Creates a safe, respectful, organised way to communicate
4. Prevents sentinel or untoward events by improving communication
5. Provides an appropriate way for clinical staff to be assertive
6. Staff are often trained to be narrative and descriptive

### **The SBAR Process**

#### **1. S – Situation**

- What is the situation (problem) or what is the matter at hand?
- Identify
  - Self
  - Unit
  - Patient
  - Code status if applicable
- Briefly state the problem
  - What is it?
  - When did it happen or start?
  - How severe is it?

- Pertinent background information relating to the situation; could include the following:
  - Admitting diagnosis, date of admission
  - Pertinent medical history: age, allergies, weight, height, etc...
  - Current orders: medications, IV fluids, labs, etc...
  - Most recent vital signs
  - Test results:
- Name, date and time test was done and results
- Previous test results for comparison
- Other pertinent clinical information

## **2. B” Give the Background**

- Briefly state the information that matters to the problem.
- This could include some, most or all of the above. Please give only the most important information.

## **3. A – Assessment**

- First, what this is NOT: This is NOT a head to toe patient assessment! It is an assessment of the Problem list under “S” – Situation. It is an opportunity for you to communicate what you think the problem is.
- What is your assessment of the problem or situation?
- I think the problem is: (state in your own words)

Examples:

- The problem seems to be: cardiac, infection, respiratory, pain, etc...
- I am not sure what the problem is, but the patient is deteriorating.
- The patient is increasingly unstable and we need to do something.

## **4. R - Recommendation/Request**

This is the recommendation /request or what is it that you want regarding the situation or problem.

What is your recommendation or request?

- I suggest you or would like to. .
- Transfer the patient
- Come and see the patient at this time

- Talk to the patient or family about code status
- Have an order for . . . .?
- A consult for . . .
- Other suggestion

**When to use SBAR communication:**

- MD – MD
- RN – MD
- RN – RN
- Pharmacy – MD or RN
- Ancillary clinical staff – RN or MD
- RN-PCA or Tech
- Staff to patient
- Hand-off between licensed professionals
- Rapid Response Team
- Anytime it is useful

**Practical useful Tips to Effective Communication**

- Prior to calling the Physician:
- Ask yourself these KEY questions:
- Have I seen and assessed the patient recently?
- Should I discuss this with my preceptor or supervisor?
- Have I reviewed the chart?
- Am I calling the correct MD?
- Do I have the admitting Diagnosis and Date of admission?
- Have I read the most recent progress notes and current shift notes?

- Gather patient's medical record, including hard chart, LLUCIS info, any other pertinent documentation prior to calling the physician
- Plan out what you need to say
- Remember always, that the more critical your communication needs is, the more carefully you need to plan your communication
- Have available the following information:
  - Patient's hard chart
  - Patient's Power Chart & flow sheet - open
  - List of current medications, allergies, IV fluids and labs
  - Most recent vital signs
  - If reporting test results:
    - Name, date, time and result of the test
    - Results of previous tests if applicable
    - Code status or Limitations of Treatment

### **Completing the Loop of Communication**

- Document change in patient's condition
- Physician/Nurse Practitioner notification, interventions and follow-up.
- Be sure to document in the chart who you talked to, when, why and the response or lack of response.
- If there was no response, you need to document your next steps

**Source: Loma Linda University Medical Centre.**

## **3.8 Handing and Taking Over the Care of a Patient**

## Overview

From the dawn of civilization to the present, evidence prevails that nurses are the only set of health professionals who stay longest with the patients. In a bid to provide a 24hours coverage, the works of nurses are organised into shift and call duties in many hospitals. And many times patients are transferred from one unit of the hospital to another as their condition demands. Therefore to provide a smooth transition of care and ensure continuity, there is need to hand over patients' care from one shift to the other and from one unit to another. However for smooth and efficient transfer of care, the handover report must be detailed and systematic. Although studies have shown that about 20 % of information is lost during handing over the care of a patient, but a good handover report is essential to ensure efficient patient care. It should be added also that many systems of handing over the care exist, but the body systems approach is the most commonly used method in the hospital setting. Other approaches include the head to toe, chronological, acuity, and procedural.

## Indication

- Provide effective message relay.
- Helps nurses to be conversant with patients' current health status and prevent errors in patients' management.
- Maintain patient safety goals as identified by regulatory agencies.
- Fosters communication between various disciplines such as physician to nurse, orders, physician to pharmacy, nurse to nurse.

## Provides hand-off reports as required.

## When do we need to handover the care of patients?

There are many situations in which the care of a patient is handed over to other nurses. The following are some examples:

- Change in a patient's condition: improvement or deterioration.
- Transfer from one unit to another.
- Transfer from one specialty to another.
- Transferring a patient to a more skilled or less skilled care giver.



- Meal breaks & educational breaks.
- Injury or illness of caregiver.
- End of shift or work scheduled.

### Requirements

- Patient's folder or case note.
- Wheel chair or stretcher depending on patient's condition.

### Procedure

#### Suggested Action

#### Rationale

#### Assessment

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>▪ Caring of patients is a legal and moral responsibility of the Registered Nurse in the Hospital setting.</li> </ul>  | <p>Only duly qualified persons can care for patients.</p>          |
| <ul style="list-style-type: none"> <li>▪ Therefore before you handover the care of a patient, ensure that the person you are handing over to is authorized and duly qualified to receive the information and care for the patient. Most of the time it is a colleague whom you already know, therefore this should not be a major difficulty. However when in new surroundings establish the qualification and role of the person in that environment before you handover the patient's information and care.</li> </ul> | <p>This is necessary to protect the patient and the community.</p> |

### Planning

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Obtain the name, admitting diagnosis, condition of the patient, and the ward/room to which the patient has been assigned.</li> </ul> | <p>Provides preliminary data from which to plan the activities that may be involved in admitting the patient.</p> |
|---|---|

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Assemble all needed equipments as outlined above.</li> </ul>   | <p>Enhances organisation and efficient time management.</p>                                       |
| <ul style="list-style-type: none"> <li>▪ Obtain special equipment, like an IV stand or oxygen that may be needed according to the unique needs of the patient.</li> </ul> | <p>Facilitates immediate care of the patient without causing unnecessary delay or discomfort.</p> |

### **Intervention/Implementation**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>▪ Identify the patient by name, date of birth, bed number and diagnosis. If there are two or more patients with the same name, state this to the nurse receiving the report. In this situation it is important to identify the patient by patient's file number.</li> </ul> | <p>This will prevent major errors.</p>   |
| <ul style="list-style-type: none"> <li>▪ Mention the time, date and circumstances which led to this admission. Give a brief description of medical and surgical histories including allergies (if any). State all the medications the patient is taking or has taken.</li> </ul>                                   | <p>Facilitates smooth transition and continuity of care.</p>   |
| <ul style="list-style-type: none"> <li>▪ When using the body systems, the person handing over the care of a patient, gives as much information about each system as is known to him or is considered necessary to care for the patient. The following systems are usually discussed.</li> </ul>                    | <p>Clear, factual, accurate, current, complete and orderly information is needed in delivering health care because it helps the person taking over to be conversant with patient's current health status and prevent errors in patient's management.</p> |
- 
- Central Nervous System
  - Cardiovascular System.
  - Respiratory System
  - Gastrointestinal System

- Renal System
  - Integumentary system
  - Skeletal system
  - Lymphatic System
  - Metabolic system
- 
- Psychological status: Assess the patient's Affect. State how the patient is coping with the disease / condition. Are other people involved in decision making? Is patient compliant / non-compliant? Is the patient agitated? e.t.c. If the patient is quiet and not eating it may be first sign of depression. Helps to nip in bud any psychosocial problem that patient may develop.
  - Social status: Describe the social, cultural, political and religious connections of the patient e.g. Patient is Jehovah witness, a community leader e.t.c.
  - Report Treatment and Discharge plans: These are short term and long term plans of care for the patient e.g. Patient was seen by the Urology team, for probable surgery on Tuesday and Discharge home on Friday. Discharge planning actually begins when the patient is admitted. This not only enhances collaboration but also assist in effective implementation of care plan.
  - Also update the person taking over about special circumstances e.g. social worker needs to be contacted; the next of kin has requested that no visitors are to be allowed to visit the patient because ..... ; the patient knows of the prognosis which is Every little detail is important in matters of safety and speedy recovery of the client.

guarded; Do Not Disturb order  
in place e.t.c.

- Make appropriate documentation. Essential to ensure efficient patient care and for medico-legal purposes.

**Source** – Adapted from [http://www.brooksidepress.org/Products/Nursing\\_Fundamentals](http://www.brooksidepress.org/Products/Nursing_Fundamentals)

## **Example of how to Report findings using the System Approach**

### **Central Nervous System**

Alert, conscious and orientated to time, person, place & situation. Moves all limbs, describe if there is equal strength bilaterally. If there is limb weakness then give details. Assess level of consciousness (LOC) using Glasgow Coma Scale. Do pupil reaction: Document and report. Strength: Patient has strong grip, push, pull etc. (Subjective) Weak: able to raise lift limbs against gravity. Very weak: able to move extremities but unable to raise limbs against gravity. Dermatome tests: must be included for spinal anaesthesia/injury. Neurovascular observation of affected area: Motion, colour, sensation. The patient's sleep pattern can be included here or in the psychological section.

### **Cardiovascular System**

Give TPR & BP, do these observations more frequently if patient is unstable. State if the patient is well perfused, capillary refill time, warm or cool to touch. Diaphoresis (sweating), if any. Comment on ankle oedema. Describe the presence or absence of pedal and radial pulses. If absent use doppler. Indicate who has been notified. State if Bloods have been sent and what tests have been ordered. ECG: if done, routinely done for patients over forty years old. Chest pain: Describe when, where, duration, how relieved. Cardiac Medications, if any. Mention abnormal results and who has been notified. Planned interventions.

**Respiratory System**

State the patient's respiratory rate and pattern. State if the patient is on oxygen and how it is being administered. Be sure to mention if the saturation is on room air or on supplemental oxygen. State if the patient is able to maintain clear airway and has a cough reflex / SOB on exertion. Report your observations: auscultation, percussion, palpation, any sign of circulatory overload? Comment on cough, sputum, crackles and wheezes. Underwater seal drain etc.

**Gastrointestinal System**

Begin by describing the patient's nutritional status: mucosa of the mouth, size of abdomen, weight, body mass index (BMI), bowel action etc. Describe nausea and vomiting if present. Mention any medications if given and its effectiveness. If no abdominal sounds, then notify physician & describe actions. If tenderness present then describe the area. If guarding present, describe. Rebound tenderness, describe. Nasogastric Tube / Drainage: amount and describe what it looks like. Stool: Frequency and type.

**Renal System**

Describe if the patient is passing urine or not (Anuric). Patient may be able to stand up and pass urine. Describe the urine: amount, colour, odour, presence of casts, urinalysis. State if specimen sent to lab for microscopy, culture and sensitivity (MC&S). State if patient's bladder is distended, residual urine, nocturia, frequency, hematuria, oliguria, renal calculi. State if the patient has a Foley catheter and if urine is being measured hourly.

**Integumentary (Skin) System**

Start of by describing the patient's skin e.g. clean, dirty, shaved etc. Describe sores, wounds, abrasions, parasites, evidence of IV drug use and mutilation. Describe the natural skin colour of the patient.

**Skeletal System**

Describe the patient's body built and bone structure. Describe bone fractures (if any), pain in joints, swollen joints, malformed bones – indication of malnutrition in early childhood.

## **Metabolic System**

Describe the patient's metabolic status e.g. Diabetes Mellitus, temporary Diabetes due to high doses of steroids. State if insulin dependent or not. State time insulin or BSL due. State if patient able to care for self, presence of complications.

### **4.0 CONCLUSION**

The Hospital environment in which the patient receives medical and nursing care and treatment must be safe, pleasant, clean, and orderly for the patient's physical and mental well being. Nothing could be too much to do so as to achieve and maintain the necessary high level of order and sanitation that is a sine-qua-non to patient safety

### **5.0 SUMMARY**

In this unit, we have been able to present the layout for ward organisation in relation to the care of patients in the ward, his/her environment, safety measures, use, storage and care of the ward equipment, ward management, supervision of ancillary staff, communication as well as handing and taking over of patients and the ward unit.

### **6.0 TUTOR-MARKED ASSIGNMENT**

1. Identify articles/equipment required in the patient care area.
2. Maintain ward cleanliness and tidiness.
3. Maintain and take hospital equipment for repair when necessary.
4. Identify and apply the hospital fire, electrical and general safety measures when providing care for patients.
5. Identify guidelines for terminally cleaning the patient care unit.
5. Recognize rules for the use of disposable and non-disposable items.
6. Organize work efficiently.
7. Delegate/explain duties according to ward routines and responsibilities.
8. Recognize priorities in nursing care.
9. Developed a mastery of communication techniques as evidenced by candid, complete, concise, clear, concrete, cautious and correct communication with clients and other health professionals in a variety of settings.
10. Demonstrate correct sequence of activities during handing and taking over of patients and the ward unit.

### **7.0 REFERENCES/FURTHER READING**

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## **UNIT 2      BASIC PATIENT CARE**

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### **1.0 INTRODUCTION**

Nursing is consistently described as an emphatic and compassionate inter person process that supports dependent needs of patient and promotes independence (Yura and Walsh, 1983). As an art and science directed toward meeting both the health and illness needs of man and his family, the nurse observes, supports, communicates, ministers and teaches. Patients admitted to a hospital not only face many unknown, but strange environment, a new role, and unfamiliar persons must be dealt with at a time when illness may impair the ability to make rapid adjustments (Donnelly, 1980,

Fajemilehin and Fabayo, 1991). The nurse therefore assumes responsibility for facilitating adjustment of the individuals admitted to hospital through special and professional skills designed to increase their understanding of hospitalization and its routines through continuous nurse – patient interaction from the moment of admission through to discharge (Fajemilehin and Fabayo, 1991).



## **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- state the scientific principles underpinning the basic patient care
- identify supplies/equipment and follow procedures that apply to obtaining all kinds of specimen
- demonstrate ability to assist the patient to use the designated equipment to void or defecate in safe and effective manner
- collect specific specimens, be it urine, feaces, vomitus, and sputum in a correct, logical and systematic manner
- conduct simple tests on urine for sugar, protein, acetone, and other abnormalities following prescribed procedure
- follow the correct procedure of admitting patients into hospital wards
- demonstrate mastery of a range of essential nursing skills to meet basic healthcare needs of patients.

## **3.0 MAIN CONTENT**

### **3.1 Admission of Patients**

#### **Definition**

Admission is the process of official acceptance of patients into the hospital for the purpose of receiving care.

#### **Indication:** To

1. Make patient and family feel welcome and facilitate their adjustment to the hospital environment.
2. Obtain pertinent information from patient.
3. Observe and evaluate the patient's condition.
4. Institute primary diagnostic measures.
5. Give pertinent information to patient and family/relatives.
6. Maintain the individuality of the person being admitted.

#### **Types**

**Routine/Scheduled/Planned Admission**

As the name implies, this is a planned admission. Patient is already aware and sometimes on waiting list for admission. Appointment for admission would have been given and a bed would have been booked for the patient.

**Non-Routine/Emergency Admission**

This is sudden or abrupt; no prior notice or preparation.

**Nursing Considerations**

1. Determine the patient's previous experience with hospitalization to anticipate patient's needs.
2. Maintain patient's personal identity.
3. Promote patient's self-esteem/self concept.
4. Secure patient's valuables and clothing.
5. Orient patient to facility, answer questions, anticipate concerns, needs.

[Golub & Keegan, 1988]

**Requirements**

This is a trolley procedure. The admission trolley should have on the:  
Top shelf

1. Top sheet
2. Observation Tray
3. Patients gown
4. Admission assessment form(s)

**Bottom Shelf**

4. Weighing scale
5. Container for urine specimen

**Procedure**

**Suggested Action****Rationale****Assessment**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>▪ Receive information about the need for admission from the outpatient department.</li> <li>▪ Obtain the name, admitting diagnosis, condition of the patient, and the ward/room to which the patient has been assigned.</li> <li>▪ Assess the appearance of the ward and availability of basic supplies.</li> </ul> | <p>This allows necessary preparation to be made.</p> <p>Provides preliminary data from which to plan the activities that may be involved in admitting the patient.</p> <p>Demonstrates concern for cleanliness, orderliness and patient's convenience.</p> |
|--|--|

**Planning**

- |   |   |
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| <ul style="list-style-type: none"> <li>▪ Assemble all needed equipment as outlined above.</li> <li>▪ Obtain special equipment, like an IV stand or oxygen that may be needed according to the unique needs of the patient.</li> <li>▪ Lay the bed and adjust the height to suit patient's condition.</li> </ul> | <p>Enhances organisation and efficient time management.</p> <p>Facilitates immediate care of the patient without causing unnecessary delay or discomfort.</p> <p>Facilitate care and reduces strain to patient.</p> |
|---|---|

**Intervention/Implementation**

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|---|---|
| <ul style="list-style-type: none"> <li>▪ Before diving in, take a minute or so to look at his/her entirety, making your observations, if possible, from an out-of-the way perch.</li> <li>▪ Accord the patient and his</li> </ul> | <p>Gives you not only a quick insight into patient's condition but also a rough idea about the person of the patient.</p> <p>Friendliness and personal regard helps</p> |
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- |   |   |
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| relatives a warm reception.   | to reduce the patient and relatives initial anxiety.  |
| ▪ Introduce yourself to patient and relatives or significant others.  | Helps to develop positive nurse-patient relationship.   |
| ▪ Place patient on bed or on a chair depending on his/her condition.  | Demonstrate concerns for patient's well-being and comfort.  |
| ▪ Observe the patient from head to toe and for signs of acute distress.   | Determines if the admission process requires modification.  |
| ▪ Attend to urgent needs for comfort and breathing.   | Promotes comfort and well-being.  |
| ▪ Carry out prescribed orders.  | Ensures safety and well-being.  |
| ▪ Do a quick but fairly comprehensive history taking, physical examination including vital signs and weight, and collect urine specimen.                                  | Serves as baseline data and assists in detecting any abnormality.   |
| ▪ Give patient hospital gown to wear.   | Facilitates easy identification of patients.  |
| ▪ Offer explanations concerning hospital regulations for valuables, visiting hours, operation of equipment, hospital routines and consent forms to patient and relatives. | Knowing what to expect reduces unnecessary fear and apprehension. Besides it also enhances compliance with care and hospital regulations. |
| ▪ Orient patient and relatives to ward and co-patients.   | Helps to relieve anxiety.   |
| ▪ Answer questions readily and convey confidence by manner and attitude.  | Diffuses tension and aids in building confidence and trust in the health facility.  |
| ▪ If patient is dirty and   | Promotes comfort and contributes to   |

- |   |   |
|---|---|
| <p>condition permits, give a bed bath.</p> <ul style="list-style-type: none"> <li>▪ If patient is a child, reassure the mother and allow her to stay with the child. Where the mother does not stay, the nurse plays the role of the mother.</li> <li>▪ If patient is for surgery, ensure that consent is signed and arrangement made for blood donors if required.</li> <li>▪ In emergency, use your initiative in assessing the patient and prioritise care.</li> <li>▪ Initiate the nursing care plan and record time, date, and mode of admission.</li> </ul> | <p>patient's feeling of emotional well-being.</p> <p>Promotes the psychological and emotional well-being of both child and mother.</p> <p>Enhances organisation and effective management.</p> <p>This ensures that patient's pressing needs are taken care of first thereby enhancing his/her survival.</p> <p>Engenders continuity of care and serves as a vehicle of communication with other members of the health team.</p> |
|---|---|

## Evaluation

- Have the patient's pressing needs been met?
- Has the patient's need for orientation to his role and his new environment been met?
- Does the patient perceive the nurses' understanding of his fears?
- Are the patient's valuables in safe custody?
- Does the patient demonstrate understanding of hospital routines and functions of members of the health team?
- Are the patient's preferences and habit patterns supported whenever possible?

## 3.2 Routine Observation

Before delving in, take a minute or so to look at the patient in his entirety, making your observations, if possible, from an out-of-the way perch. Does the patient seem anxious, in pain, upset? What about his dress and hygiene? Remember, the examination begins as soon as you lay eyes on the patient.

### 3.3 History Taking

This is a planned communication or a conversation with a purpose. For example, to get or give information, identify problems of mutual concern, evaluate change, teach, provide support, or provide counseling or therapy (Wilkinson, 2000). During assessment, the purpose of interview is to gather information about client's health history. The goal of history taking is to get from the client an accurate account of his complaint and view this against the background of his life as a whole. How well this is achieved is a factor of the nurse's knowledge and skill at eliciting information from the client using appropriate techniques of communication and observation of nonverbal cues. Effective communication is therefore a key factor in the interview process (Cecere & McCash, 1992).

#### Guidelines for an Effective Interview/History Taking

1. **Be prepared** – The interview is more productive if the nurse has an opportunity to prepare for the interaction. Such preparation includes the review of client's clinical record, conversation with other health care personnel, and literatures about client's health problem (Moffett, 1998, Wilkinson, 2000). This will focus the interview and prevent tiring the client, and save your time.
2. **Appropriate Timing** – Schedule interviews with client at a time when the client is physically comfortable and free of pain, and when interruptions by friends, family, and other health professionals are minimal.
3. **Create a Pleasant Interviewing Atmosphere** – A quiet, well-lighted, well-ventilated and relaxed setting, relatively devoid of noise and interruptions enhances communication. A relaxed atmosphere eases the patient's anxiety, promotes comfort, and conveys your willingness to listen. Ensure privacy, as some clients will not share personal information if they suspect others can overhear. In all instances, the client should be made to feel comfortable and unhurried.
4. **Establish a Good Rapport** – Greet the client by name if possible; sit and chat with the client before the interview. Be sure to explain the purpose of the interview and show concern for the patient's story.
5. **Set the Tone and be Focused** – Encourage the client to talk about his chief complaint. This helps you to focus on his most troublesome symptoms. Keep the interview informal while still being

professional. Speak clearly and simply, avoiding medical jargons and be sure patient understands you.

6. **Choose your Words Carefully** – Ask open-ended questions to encourage the client to provide complete and pertinent information.
7. **Take Notes** – Avoid documenting everything during the interview but make sure you jot down important information such as date, times.

## **Health History and Nursing History**

The primary focus of the data collection interview is the health history and Nursing history. A **health history** is designed to collect data to be used primarily by the physician to diagnose a health problem and it is usually collected by the medical team. Often the admitting nurse also collects this same information during the admission interview. However, there is a growing disapproval of the nurse repeating this process, as credibility is lost when the nurse repeats virtually all the questions that others have already asked. A **nursing history** on the other hand has a different focus – the client's response to the health problems, which assist the nurse more accurately in identifying nursing diagnoses (Cecere, & McCash, 1992). While the health history concentrate on symptoms and progression of disease, the nursing history focuses on client's functional patterns, responses to changes in health status and alterations in lifestyle.

### **Health History**

The components of a health history include:

- Demographic information – encompasses demographic variables such as name, date, age, sex, e.t.c.
- Chief/Presenting complaint – try to define what has motivated the client to seek health care and its duration.
- History of present illness (HPI) – HPI provides detailed data about the chief complaint or reason for entering the health care system.
- Past health history – provides information about the client's prior state of health. Includes questions about childhood and adult illnesses, immunizations, injuries, hospitalizations, surgeries, therapeutic regimens, allergies, travels, habits, and use of supportive devices.

- Family health history (FHH) – FHH notes illnesses that have environmental, genetic, or familial tendency or that are communicable. A genetic chart or family tree of three generations can be developed to illustrate the family health history.
- Social and occupational history – Enquire about what may be grouped as the client's physical and emotional environment, his surroundings both at home and work, his habits and his own mental attitude to life and to his work.
- Review of systems – This is the final portion of health history. It is the systematic collection of specific information about the client's past and present health status related to common problems of body systems. (Swash & Mason, 1986; Cecere, & McCash, 1992).

It is important to mention here as Swash & Mason, (1986) noted, that in taking history, it is neither possible nor desirable to tie a patient down to a particular sequence. The client must be allowed to tell his own story. Besides, a good clinician begins the examination of a patient as the latter walks into the room – his appearance, the way he walks, the way he answers questions and so on – and only finishes taking the history when the consultation is over. Occasionally a vital piece of information may come out just when the patient is leaving. Swash & Mason, (1986) remarked that while the list of headings is formidable, it does take some experience to know in a given case which part of the history is particularly worth pursuing. And following the health history, a **general survey** statement is made, which is a statement of the provider's impression of a client, including behavioral observations.

### **Nursing History**

Numerous nursing history/database formats are available in literatures (Carpenito, 1989; Christensen & Kenney, 1990; Cecere & McCash, 1992). The format in use in most clinical setting is the **11 functional patterns** credited to Majory Gordon. This format (presented below) allows systematic data gathering and facilitates making inferences (nursing diagnosis).

### **Health-Perception-Health-Management Pattern**

Focuses on client's perceived level of health and well-being and on personal practices for maintaining health. It also embraces preventive screening activities such as breast and testicular examination; hypertension and cardiac risk factor screening e.t.c.



**Nutritional-Metabolic Pattern**

Assesses food and fluid intake, food preferences and taboos, cultural factors relating to food and nutrition, e.t.c. Also explores difficulties if any with ingestion, digestion, absorption, transport and metabolism of nutrients.

**Elimination Pattern**

Assesses bowel and bladder functions such as frequency, amount, relationship of output to intake, and any discomfort or difficulty associated with each function.

**Activity-Exercise Pattern**

Explores the client's activities of daily living including client's usual pattern of exercise, leisure and recreation.

**Sleep-Rest Pattern** – This inquires about the client's pattern of sleep, rest and relaxation in a 24hour period, noting any deviation from client's premorbid rest and sleep pattern.

**Cognitive-Perceptual Pattern**

Assessment of this pattern involves a description of all the senses (vision, hearing, taste, touch, smell and pain) and the cognitive functions (such as communication, memory, and decision making).

**Self-Perception-Self-Concept Pattern**

This pattern explores the client's self-concept, which is critical to determining the way the client interacts with others. Attitudes about self, perception of personal abilities and body image, and general sense of worth are also addressed under this pattern.

**Role-Relationship Pattern**

Describes the client's role and relationships including major responsibilities of the individual. It examines person's self-evaluation of the performance of expected behaviors related to these roles.

**Sexuality-Reproductive Pattern**

This pattern describes satisfaction or dissatisfaction with personal sexuality and describes the reproductive pattern.

### **Coping-Stress Tolerance Pattern**

This pattern explores the client's general coping pattern and the effectiveness of the coping mechanisms. It encompasses analyzing the specific stressors or problems that confront the client, the client's perception of the stressor and the person's response to the stressor.

### **Value-Belief Pattern**

Describes the values, goals, and beliefs (including spiritual) that guide health related choices. (Cecere & McCash, 1992).

## **3.4 Assessing Vital Signs (Temperature, Pulse, Respiration and Blood Pressure)**

### **Definition**

Vital signs or cardinal signs, as they are sometimes called, could be defined as signs reflecting the body's physiological state, which are governed by body's vital organs (brain, heart, lungs) and are necessary for sustaining life. They include: Temperature, Pulse, Respiration, Blood pressure, and, where appropriate, blood oxygen saturation, all of which are indicators of vital functions of the body that are necessary to sustain life.

These parameters provide critical information about a patient's state of health and as such must be taken and recorded at least once per shift. Abnormal variations could indicate deterioration in patient's condition or be a pointer to imminent complications.

In simple sentences, they:

1. can identify the existence of an acute medical problem.
2. are means of rapidly quantifying the magnitude of an illness and how well the body is coping with the resultant physiologic stress; the more deranged the vitals, the more sick the patient.
3. are markers of chronic disease states e.g. hypertension is defined as chronically elevated blood pressure beyond what is considered normal for that age and sex. (Goldberg, 2006)

Therefore if a patient's vital signs have changed significantly within a short period of time, a double check for accuracy may be warranted and unusual findings should be brought to the attention of the nurse in charge or attending medical officer. As you will soon discover, there is significant potential for measurement error, so repeated determinations can provide critical information.

**Indication:** To

1. Establish a baseline data for subsequent evaluation.
2. Recognise changes and abnormal variations.
3. Determine changes in the vital signs response to specific therapies.
4. Monitor clients at risk of alterations in vital signs.
5. Assess vital signs before and after administration of medication and general anaesthetics.
6. Monitor and assess changes in the client's health status.
7. Identify the existence of an acute medical problem

**Equipment:** A tray containing

1. Clinical thermometer
2. Galipot with dry cotton swabs
3. Galipot containing spirit cotton swabs
4. Watch with a second hand or pulsometer
5. Stethoscope
6. Sphygmomanometer
7. Kidney receiver for used swabs

**Procedure**

**Required Steps**  
**Assessment**

**Rationale**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>▪ Collect demographic and social data, past and present health history.</li> </ul> | <p>Facilitates patient identification and accurate inferences.</p> |
|---|--|

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Determine the patient baseline vital signs from the patient records.</li> <li>▪ Assess factors that normally influence the patient's vital signs.</li> </ul> | <p>Assists in making comparison and identifying changes.</p> <p>Ensures accuracy of the data.</p> |
| <ul style="list-style-type: none"> <li>▪ Determine the best site for each type of vital signs to be checked.</li> </ul>   | <p>Different sites may bring alteration in the value.</p>   |
| <ul style="list-style-type: none"> <li>▪ Develop individualized goals based on assessment data.</li> </ul>  | <p>Each patient is a unique being and often has needs that require individualistic care.</p>      |

### **Planning**

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>▪ Prepares appropriate environment</li> </ul>   | <p>Prevents disruption and interference.</p>  |
| <ul style="list-style-type: none"> <li>▪ Ensures adequate lighting in the room</li> </ul>  | <p>Enhances visibility and accuracy of measurement.</p>   |
| <ul style="list-style-type: none"> <li>▪ Minimizes or stops noise in the room</li> </ul>   | <p>Noise interferes in the perception of sounds.</p>  |
| <ul style="list-style-type: none"> <li>▪ Identifies the patient, introduce self and notify him/her about rationale for the procedure.</li> </ul> | <p>Knowing the reason for procedure may facilitate cooperation.</p>   |
| <ul style="list-style-type: none"> <li>▪ Explain procedure to patient and gain consent</li> </ul>  | <p>Demonstrates concern for patient's right and human dignity and may also enhance patient's cooperation.</p> |
| <ul style="list-style-type: none"> <li>▪ Let patient be at rest, provide safety and position the patient comfortably.</li> </ul>                 | <p>This will enhance accuracy of data</p>   |
| <ul style="list-style-type: none"> <li>▪ Prepares all necessary equipment and materials</li> </ul>   | <p>Enhances organisation of work and time management.</p>   |
| <ul style="list-style-type: none"> <li>▪ Measure the vital sign under the same condition</li> </ul>  | <p>Ensures consistency and avoids false impression.</p>   |

***NB – Wait for correct time before measuring vital signs if you identify any factors that may influence the reading.***

## Implementation

### 3.4.1 Temperature

This is generally obtained through a variety of routes viz: oral, axillary, rectal, and tympanic membrane. The health facility policy, patient's age cum patient's condition dictates which site is eventually used. Depending on the bias of a particular institution, temperature is measured in either Celsius or Fahrenheit. Rectal temperatures, which most closely reflect internal or core values, are approximately 0.5 – 1 degree F higher than those obtained orally.

#### Assessing Temperature through the Axillary's Route

Required Steps	Rationale
<ul style="list-style-type: none"> <li>▪ Wash hands</li> </ul>	Helps to prevent cross infection
<ul style="list-style-type: none"> <li>▪ Wipe thermometer with a wet clean swab soaked in cold water from bulb towards finger to remove disinfectants</li> </ul>	Ensure thorough removal of disinfectants which may cause irritation if not wiped from the thermometer.
<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>➤ Shake down the thermometer vigorously using a firm twisting motion to below 35°C.</li> </ul> </li> </ul>	Forces mercury down the thermometer glass so as to have a valid reading.
<ul style="list-style-type: none"> <li>▪ Wipe the patient's axilla dry with dry swab.</li> </ul>	Safeguards against false reading.
<ul style="list-style-type: none"> <li>▪ Insert thermometer in centre of axilla, lowers the patient arm over the thermometer and places arms across the patient's chest.</li> </ul>	When arms are placed across the chest, it helps hold the thermometer in situ and prevents possible displacement.
<ul style="list-style-type: none"> <li>▪ Leaves the thermometer for 3 – 5 minutes.</li> </ul>	Enables accurate reading to be obtained.
<ul style="list-style-type: none"> <li>▪ Remove and read the thermometer accurately while gently rotating it at eye level.</li> </ul>	Rotating the thermometer slowly tends to magnify the mercury making it easy to read.
<ul style="list-style-type: none"> <li>▪ Remove and wipe thermometer from shaft to bulb with alcohol impregnated swabs.</li> </ul>	Helps to prevent cross infection.

- |  |  |
|--|--|
| ▪ Shake the thermometer down to below 35°C before replacing in to its container. | In preparation for another use.  |
| ▪ Ensure patient comfort. Answer any questions regarding the recording.          | Relieves fear and anxiety and tends to facilitate compliance with medical regimen.   |
| ▪ Chart temperature recording. Report any abnormality.                           | Fosters communication of findings to other health team members for necessary action. |
| ▪ Clean discards and store materials appropriately                               | Aids the control of communicable diseases.   |

### 3.4.2 Pulse

The pulse rate is a measurement of the heart rate, or the number of times the heart beats per minute. As the heart pushes blood through the arteries, the arteries expand and contract with the flow of the blood. Taking a pulse not only measures the heart rate, but also can indicate the following: heart rhythm, strength of the pulse (volume) and tension. The pulse can be measured at any place where a large artery runs over a bone or simply by placing the diaphragm of the stethoscope over the left fifth intercostal space, mid-clavicular line. However for reasons of convenience it is generally done by palpating the radial pulse. The normal pulse rate for healthy adults ranges from 60 to 100 beats per minute. The pulse rate may also fluctuate and increase with exercise, illness, injury, and emotions.

#### Required Steps

#### Rationale

- |   |   |
|---|---|
| ▪ Place the index (second) and middle (third) fingers over the appropriate artery and press firmly but gently on the arteries until you feel a pulse. | The fingertips are sensitive to wave of distension and relaxation of the arteries as blood passes through them. Pressing too hard can obliterate the patient's pulse. |
| ▪ Begin to count the rate only when pulse is felt regularly.  | The forefingers have pulses of their own that may be mistaken for the patient's pulse.  |

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>▪ The most accurate way to count is to wait until the second hand of the watch is a whole number and count for 15 seconds, and then multiply by 4.</li> </ul> | <p>Promotes speed and accuracy. Besides, 15 seconds provide sufficient time to detect abnormalities.</p> |
| <ul style="list-style-type: none"> <li>▪ In addition to rate, assess for rhythm (regular or irregular), strength (bounding, strong, weak, thready) and tension.</li> </ul>                           | <p>Gives a broad picture of the patient's cardiovascular status.</p>                                     |
| <ul style="list-style-type: none"> <li>▪ If irregularities are detected within a 15- second count, count the pulse for a full minute.</li> </ul>   | <p>Enhances greater accuracy.</p>  |
| <ul style="list-style-type: none"> <li>▪ Record pulse rate; note the volume, rhythm, and tension. Chart any unusual findings</li> </ul>  | <p>Serves as a vehicle of communication with other members of the health team.</p>                       |

### **Apical pulse**

#### **Required Steps**

#### **Rationale**

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Screen the patient.</li> </ul>   | <p>Demonstrates respect for patient's privacy.</p>  |
| <ul style="list-style-type: none"> <li>▪ Have him lie in fowler's or dorsal position so that his chest becomes expanded.</li> </ul> | <p>This positions the heart as near front of the chest as possible and facilitates the hearing of the heart beat.</p>   |
| <ul style="list-style-type: none"> <li>▪ Clean stethoscope ear pieces and the diaphragm with alcohol wipe.</li> </ul>               | <p>Aids in the control of communicable diseases.</p>  |
| <ul style="list-style-type: none"> <li>▪ Expose patient's sternum and left side of chest for auscultation.</li> </ul>               | <p>This provides unhindered access to the chest.</p>  |
| <ul style="list-style-type: none"> <li>• Palpate correctly and locate apex of heart at points of maximal impulse.</li> </ul>        | <p>Guarantees accuracy of the result.</p>   |
| <ul style="list-style-type: none"> <li>▪ Warm diaphragm of stethoscope between hands.</li> </ul>                                    | <p>Patient may be sensitive to cold and that could be startling enough to momentarily elevate the pulse rate thus defeating your purpose of obtaining a resting rate.</p> |

- Place diaphragm over the chest just below the left nipple. Start listening in this area and move the stethoscope slightly left or right as necessary until the beat are quite distinct. Heart sounds are most easily picked in this region.
- Hold the diaphragm firmly against the chest wall; keep the stethoscope tubing hanging free and its head motionless. Facilitates sound transmission and prevents the perception of added/extraneous sounds thus ensuring accuracy of findings.
- Concentrate on the heart sounds, remembering that each 'lub-dub' (S1 and S2) represents one beat. You can lose count with any slight distraction or loss of concentration with resultant error.
- Count for a full minute and determine any rhythm irregularities. Allows sufficient time to detect irregularities and/or other defects.
- Replace patient's gown and assist patient to assume a comfortable position. Demonstrates concern for patient's privacy and well-being.
- Record the rate promptly and describe any rhythm irregularities in patient's chart. Enhances communication with other team members and engenders continuity of care.

### 3.4.3 Respiration

Respirations are recorded as breaths per minute. A complete cycle of inspiration and expiration constitutes one act of respiration. They should be counted for at least 30 seconds as the total number of breaths in a 15 second period is rather small and any miscounting can result in rather large errors when multiplied by 4. Try to do this as surreptitiously as possible so that the patient does not consciously alter their rate of breathing. This can be done by observing the rise and fall of the patient's chest while you appear to be taking their pulse.

#### Required Steps

#### Rationale

- It may be helpful to count the respirations immediately after counting the pulse with the Prevents patient from being aware that his respirations are being counted.



fingertips still on the patient's artery.

- Proceed to count respiration with fingers still on patient's artery.

If patient becomes conscious of your counting, he/she may inadvertently alter his/her usual breathing rate.
- Observe the movement of the chest wall. In order to sufficiently observe the rate, depths, and rhythm of respirations, count for at least 30 seconds.

This not only helps in detecting abnormalities but enhances accuracy.
- Evaluate the sounds made when the patient breathes.

Assist in detecting respiratory obstruction and assessing the need for suctioning.
- Count for one full minute (60 seconds) if abnormality is noted.

Allows sufficient time to detect irregularities or other defects.
- Record your findings.

In order not to forget them and to share information with other team members.

### 3.4.4 Blood Pressure

Blood pressure is the force of the blood pushing against the artery walls measured in mmHg. Each time the heart beats, it pumps blood into the arteries, resulting in the highest blood pressure as the heart contracts (<http://www.uen.org/Lessonplan/preview.cgi>). The blood pressure is therefore a measure of two pressures against the arterial wall: the systolic (ventricular contraction) and the diastolic – ventricular relaxation (Curren, 1983). This explains why two numbers are recorded when measuring blood pressure. The higher number, or systolic pressure, refers to the pressure inside the artery when the heart contracts and pumps blood through the body. The lower number, or diastolic pressure, refers to the pressure inside the artery when the heart is at rest and is filling with blood. Both the systolic and diastolic pressures are recorded as "mm Hg" (millimeters of mercury). This recording represents how high the mercury column is raised by the pressure of the blood (<http://www.uen.org/Lessonplan/preview.cgi>).

The blood pressure is routinely measured on the brachial artery of the arm using the sphygmomanometer which is most commonly called a

blood pressure ‘cuff’ or manometer. The cuff is inflated to temporarily stop the arterial blood flow, and sounds of returning circulation, called the korotkoff sounds are listened to with a stethoscope to determine the blood pressures. Korotkoff sounds start as a faint rhythmic tapping which increases in intensity, then suddenly muffles, and quickly becomes inaudible. The systolic pressure is that point at which the initial tapping sound is heard while the point at which the sound ceases is considered the best index of diastolic pressure (Curren, 1983).

### **Required Steps**

### **Rationale**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>▪ Have the patient sit, and support his arm comfortably at his heart level.</li> </ul>  | <p>This will ensure the accuracy of the reading.</p>   |
| <ul style="list-style-type: none"> <li>▪ Position patient's forearm at heart level with palm of hands turned up. Turn down radio or TV, clean stethoscope ear pieces with an alcohol wipe and place them around your neck in preparation for use.</li> </ul> | <p>Facilitates measurement and ensure accuracy of measurements. Cleaning with alcohol sponge helps to remove any transient organisms left on the stethoscope by previous user.</p> |
| <ul style="list-style-type: none"> <li>▪ Roll the patient's sleeve completely to his shoulder. If it is too tight to do this, have the patient remove it and turn his/her arm upward.</li> </ul>   | <p>Facilitates proper application of the cuff and easy access to the brachial pulsation.</p>   |
| <ul style="list-style-type: none"> <li>▪ The blood pressure cuff should be of appropriate size.</li> </ul>   | <p>If the blood pressure cuff is too small, the readings will be artificially elevated. The reverse is the case if the cuff is too large.</p>                                      |
| <ul style="list-style-type: none"> <li>▪ Wrap the cuff fabric around the patient's upper arm to secure it. The cuff must be smooth, snug and overlap perfectly.</li> </ul>   | <p>This ensures even inflation of the pressure bladder and complete occlusion of blood flow.</p>   |
| <ul style="list-style-type: none"> <li>▪ Ensure that the line marked "artery" is roughly placed over the brachial artery. This is located towards the medial aspect of the antecubital fossa.</li> </ul>   | <p>For easy location of the brachial artery and proper placement of the diaphragm of the stethoscope.</p>  |
| <ul style="list-style-type: none"> <li>▪ Palpate for brachial artery. To locate the brachial artery put</li> </ul>   | <p>Helps in measuring the systolic pressure by palpatory method</p>  |

- your hand under the patient's elbow and hyperextend his arm. while enhancing the accuracy of auscultatory method.
- If you are using an aneroid gauge adjust it so that you are able to read it straight on. Position manometer correctly for viewing. Prevents parallax error.
  - If you are using potable mercury gauge set it on a level surface. Get a chair ready so you can sit to read it at eye level, or be prepared to bend so as to accomplish this. Angles of viewing other than eye level can result in inaccuracies. The degree of error increases with the distance above or below eye level that the gauge is read.
  - Identify approximate systolic pressure by palpating brachial or radial pulse during cuff inflation. The systolic blood pressure is the point at the pulse first becomes perceptible corresponding to the point at which blood is first able to force its way through against the pressure exerted by the inflated cuff.
  - Wait for 30 seconds after deflating cuff before auscultation. This ensures complete deflation.
  - Next examine the stethoscope amplification of sound when the switch or head is in correct position by tapping on the diaphragm. Note that the diaphragm is usually used for higher pitched sounds like  $s_1$  &  $s_2$  while the bell is more suited for low pitched sounds.
  - Apply stethoscope correctly over the brachial artery while keeping the tubing hanging free of your uniform, bed clothes, blood pressure cuff, e.t.c. A stethoscope will magnify all sounds, not just the one you are trying to hear.
  - Tighten the thumb-screw valve of pressure bulb by turning it in clockwise direction. Avoid overtightening the valve. Closing the valve generates pressure in the cuff. Overtightening is a common mistake which interferes with skilful manipulation of the sphygmomanometer.

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>▪ Correctly inflate cuff to 30mmHg above that of the palpated systolic pressure and then slowly release the pressure valve and at the same time auscultate for the brachial pulse.</li> </ul> | <p>The systolic pressure is the point at which the korotkoff sound is first heard i.e. the point at which blood in the artery is able to force its way through against the pressure exerted by the inflated cuff.</p> |
| <ul style="list-style-type: none"> <li>▪ Continue cuff deflation at a steady rate and notes points on manometer at which sound muffles and eventually becomes inaudible.</li> </ul>  | <p>The diastolic pressure is the point at which the last distinct sound is heard and is synonymous with the pressure normally exerted on the wall of the artery when the heart is at rest.</p>                        |
| <ul style="list-style-type: none"> <li>▪ Remove cuff from patients arm, roll it up neatly and return the equipment.</li> </ul>   | <p>This not only makes the patient comfortable but gets equipment ready for another use.</p>  |
| <ul style="list-style-type: none"> <li>▪ Wash and dry hands.</li> </ul>  | <p>Prevents transfer of communicable infection.</p>   |
| <ul style="list-style-type: none"> <li>▪ Chart and records findings on appropriate documents. Any irregularities should be reported.</li> </ul>  | <p>Helps to monitor trends and detect abnormality. Also ensures continuity of care.</p>   |
| <ul style="list-style-type: none"> <li>▪ Clean, discards and stores materials appropriately.</li> </ul>  | <p>To prevent the spread of infection</p>   |

### **Evaluation**

- Is the patient made comfortable after the procedure?
- Are the vital signs – temperature, pulse, respiration and blood pressure – within normal limit for age and sex?
- Is there any marked difference in the values of the vital signs when compared with baseline data?
- With your knowledge of pathophysiology, what are the possible aetiology/contributory factors to the observed values and what possible impacts on the overall well-being of the patient?
- Is the patient anxious, worried, or calm in bed?
- Has the patient been carried along in his care and appropriate measures taken to correct any abnormal variation?

### 3.5 Routine Investigations

One of the means of gathering information about the patient's health status is by identifying pathogens and analyzing urine, blood, sputum, and farces. As a registered nurse, you may be responsible for collecting and labeling specimen for analysis and ensuring their delivery to the laboratory.

For self-protection and to prevent the spread of disease, wear gloves whenever you work with body fluids. Washing your hands carefully also prevents the spread of disease.  
[Universal Body Substance Precautions](#)

#### 3.5.1 Collection, Observation, Testing and Disposal of Urine

The living body naturally engages in metabolic activities (building up and breaking down processes). As vital as these building up (anabolism) and breaking down (catabolism) processes are to well-being, they equally result in generation of wastes (both endogenous and exogenous wastes) which are toxic or injurious to the body, hence the need for their removal. The urinary system plays a vital role in elimination of these waste products from the body. Urine therefore essentially contains wastes and excess water and electrolytes otherwise referred to as the normal constituents of urine.

Implicit in that statement is that the presence of certain other substances in urine constitutes abnormality. This underscores the need for routine urine examination in the management of our clients. Thus urinalysis is included in a health examination and as part of the admission process for all inpatients. Besides, nurses usually conduct simple urine tests, such as for sugar, protein, acetone, to mention but a few. The onus therefore is that of the nurse to become conversant with the procedure for collection, observation and testing of urine to ensure the overall well-being of her clients.

##### (a) Urinalysis

This literary means the analysis of a freshly voided urine to have an overall picture of its characteristics which include a description of its colour, its degree of cloudiness, pH, specific gravity, presence of protein or glucose, and a microscopic examination of the sediment. Therefore a regular urinalysis often includes the following tests:

- **Volume** – The volume of urine passed by individuals varies with the age of the individual, weather, fluid consumption, and state of health. However a range of 1200 – 1700ml within 24 hours is considered normal for a healthy adult. When the quantity of urine voided by an individual over 24 hours duration exceeds the upper normal limit,

that individual is described as being polyuric. When the total urine passes over 24 hours duration is less than 400ml, it is described as oliguria, and when less than 10ml it is referred to as anuria. Polyuria is manifested when there is excessive consumption of fluids and certain disease conditions such as nephritic syndrome, polyuric phase of acute renal failure, diabetes mellitus and diabetes insipidus. Oliguria and anuria are however regular features of certain renal conditions such as acute and chronic renal failure, end stage renal disease e.t.c.

- **Colour** – The urine colour is amber or pale amber but can however be golden yellow when too concentrated as it is the case in dehydration. There are however, some abnormal variations in colour. This is because many things affect urine colour, including fluid balance, diet, medicines, and diseases. Vitamin B supplements can turn urine bright yellow. Some drugs (such as nitrofurantoin, rifampicin, septrin in people with G6PD deficiency, e.t.c) blackberries, beets, or blood in the urine can turn urine reddish-brown.
- **Clarity** – Urine ordinarily should be clear and without deposit. When urine becomes cloudy or turbid, then abnormalities have set in. Bacteria, blood, sperm, crystals, pus or mucus when present in urine are some of the things that can make urine appear cloudy.
- **Odour** – Urine does not smell very strong, but has a slightly "nutty" odour or what is generally referred to as characteristic urine odour. However when urine has been passed over a long time it gives a pungent smell. This is usually due to the decomposition of the urine into ammonia. In addition some diseases cause a change in the odour of urine. For example, an infection with *E. coli* bacteria or urinary tract infection can cause a bad odour, while diabetes or starvation can cause a sweet, fruity odour (diabetes ketoacidosis). In addition, some foods (such as asparagus), vitamins, and antibiotics (such as penicillin) can cause urine to have a different odour. Urine that smells like maple syrup can indicate maple syrup urine disease that is when the body cannot break down certain amino acids.
- **Specific gravity** – This checks the amount of substances in the urine. It also shows how well the kidneys balance the amount of water in urine. The higher the specific gravity, the more solid material is in the urine.
- When an individual drinks a lot of fluid, the kidneys produce urine with a high amount of water with resultant low specific gravity. The corollary is also true that when an individual fails to take sufficient

fluids, the kidneys produce urine with high solute concentration and a small amount of water hence the high specific gravity. However when the specific gravity ranges between 1.010 – 1.025, it is considered normal. Anything outside this range is considered abnormal. In essence, a very high specific gravity means very concentrated urine, which may be caused by not drinking enough fluid, loss of too much fluid (excessive vomiting, sweating, or diarrhea), or presence of substances (such as sugar or protein as it is the case in diabetes mellitus or some kidney disease) in the urine. Very low specific gravity means dilute urine, which may be caused by drinking too much fluid, severe kidney disease, diabetes insipidus or the use of diuretics.

- **pH** – This is the degree of acidity and alkalinity of a substance. The pH is thus a measure of how acidic or alkaline (basic) the urine is. The pH ranges from 1 to 14 with 7 as the neutral point (neither acidic nor alkaline) but a slightly acidic pH is considered normal. The lower the figure the higher the acidity. However as the figure or value increases from 7 the higher the alkalinity. A urine pH of 4 is therefore strongly acidic, and 9 is strongly alkaline. Normal urine pH ranges from 4.6 – 8.0. Sometimes the pH of urine is affected by certain treatments. For example, some foods (such as citrus fruit and dairy products) and medicines (such as antacids) can affect urine pH. A high (alkaline) pH can be caused by severe vomiting, a kidney disease, some urinary tract infections, and asthma. A low (acidic) pH may be caused by severe lung disease (emphysema), uncontrolled diabetes, aspirin overdose, severe diarrhea, and dehydration, starvation, drinking too much alcohol, or drinking antifreeze (ethylene glycol).
- **Protein** – Protein is normally not found in the urine. Fever, hard exercise, pregnancy, and some diseases, especially kidney diseases, may cause protein to be in the urine. Protein in the urine may therefore mean kidney damage, an infection, cancer, high blood pressure, diabetes, systemic lupus erythematosus (SLE), or glomerulonephritis is present. Protein in the urine may also mean that heart failure, leukemia, poison (lead or mercury poisoning), or pre-eclampsia (in pregnant individuals) is present.
- **Glucose** – Glucose is the end product of carbohydrate digestion. It is the type of sugar found in blood which liberates energy during the process of chemical oxidation of food substances. Normally excess sugar is stored away as glycogen in the liver and the muscles. Therefore urine should be devoid of glucose. However when the blood sugar level becomes elevated, as in uncontrolled diabetes, it crosses the renal threshold and begin to spill over into the urine. This

possibly explains why glucose can be found in urine of clients on IV infusion. Healthy pregnant women can have glucose in their urine which is normal during pregnancy.

- However too much glucose in the urine may be caused by uncontrolled diabetes, an adrenal gland problem, liver damage, brain injury, certain types of poisoning, and some types of kidney diseases.
- **Nitrites** – Bacteria that cause a urinary tract infection (UTI) make an enzyme that changes urinary nitrates to nitrites. Nitrites in urine show a UTI is present.
- **Leukocyte esterase (WBC esterase)** – Leukocyte esterase shows leukocytes (white blood cells [WBCs]) in the urine. WBCs in the urine may mean a UTI is present.
- **Ketones** –When fats are broken down for energy, the body makes substances called ketones (or ketone bodies). These are passed in the urine. Normally urine should contain no ketones. However ketones are often found in the urine when a person does not eat (fasts) for 18 hours or longer. This may occur when a person is sick and cannot eat or vomits for several days. Similarly, a diet low in sugars and starches (carbohydrates), starvation, or severe vomiting may also cause ketones to appear in the urine. Low levels of ketones are also sometimes found in the urine of healthy pregnant women. Therefore, when present in urine, ketones could mean uncontrolled diabetes, a very low-carbohydrate diet, starvation or eating disorders (such as anorexia nervosa or bulimia), alcoholism, or poisoning from drinking rubbing alcohol (isopropanol). Large amounts of ketones in the urine may indicate the development of very serious condition (diabetic ketoacidosis).
- **Microscopic analysis.** In this test, urine is spun in a special machine (centrifuge) so the solid materials (sediment) settle at the bottom. The sediment is spread on a slide and looked at under a microscope. Things that may be seen on the slide include:
  - **Red or white blood cells.** Blood cells are not found in urine normally. Inflammation (e.g. glomerulonephritis), kidney stone, some renal diseases such as kidney or bladder tumor, or injury to the kidneys, ureters, bladder, or urethra can cause blood in urine. Strenuous exercise, such as running a marathon, can also cause blood in the urine. White blood cells may be a sign of infection, bladder tumor, inflammation of the kidneys, or systemic lupus erythematosus (SLE), or inflammation in the vagina or under the foreskin of the penis. or other kidney diseases.



- **Casts.** Some types of kidney disease can cause plugs of material (called casts) to form in tiny tubes in the kidneys. The casts then get flushed out in the urine. Casts can be made of red or white blood cells, waxy or fatty substances, or protein. The type of cast in the urine can help show what type of kidney disease may be present.
- **Crystals.** Healthy people often have only a few crystals in their urine. A large number of crystals, or certain types of crystals, may mean kidney stones are present or there is a problem with how the body is using food (metabolism).
- **Bacteria, yeast cells, or parasites.** There are no bacteria, yeast cells, or parasites) in urine normally. If these are present, it indicates that there is an infection.
- **Squamous cells.** The presence of squamous cells may mean that the sample is not as pure as it needs to be. These cells do not mean there is a medical problem, but there may be a need for a repeat examination.
- Red blood cells in the urine may be caused by kidney or bladder injury, kidney stones, a urinary tract infection (UTI), inflammation of the kidneys (glomerulonephritis), a kidney or bladder tumor, or systemic lupus erythematosus (SLE). White blood cells (pus) in the urine may be caused by a urinary tract infection.
- Depending on the type, casts can mean inflammation or damage to the tiny tubes in the kidneys, poor blood supply to the kidneys, metal poisoning (such as lead or mercury), heart failure, or a bacterial infection.
- Large amounts of crystals, or certain types of crystals, can mean kidney stones, damaged kidneys, or problems with metabolism. Some medicines and some types of urinary tract infections can also increase the number of crystals in urine.
- Bacteria in the urine mean a urinary tract infection (UTI). Yeast cells or parasites (such as the parasite that causes trichomoniasis) can mean an infection of the urinary tract.
- The presence of squamous cells may mean that the sample is not as pure as it needs to be. These cells do not mean there is a medical problem, but your doctor may ask that you give another urine sample

**Indication for Urinalysis:** To

- Establish and exclude diagnoses.
- Assess effectiveness of kidney function.
- Assess the severity of some disease process and determine their prognosis.
- Ascertain urine contents and characteristics for proper patient management.
- Identify any abnormality in the urine as to guide therapy.
- Monitor the effectiveness of the treatment.
- Serve as part of regular physical examination.

**Equipment**

- Beaker containing urine specimen
- Measuring jars/Graduated container
- Urinometer – An instrument that contains mercury bulb attached to a stem with a graduated scale indicating a range of concentration from 1:000 to 1:040.
- A rack of test tubes, brush, dropper, and test tube holder.
- Spirit lamp & test-tube holder.
- Filter papers, litmus papers and other reagents including esbach reagents.
- Disposable gloves.
- Sink with running tap, soap and hand towel.
- A pen or pencil.

These items are usually kept in urine testing room or side wards.

**Required Steps  
Assessment****Rationale****Planning**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>▪ Inform the client about the procedure.</li> </ul>  | Enhances consent gaining and cooperation.  |
| <ul style="list-style-type: none"> <li>▪ Obtain a fresh urine specimen from the client; have client void into a clean urinal to prevent contamination.</li> </ul> | Urine specimens quickly deteriorate while standing at room temperature resulting in changes in chemical composition of urine and resultant incorrect readings. |
| <ul style="list-style-type: none"> <li>▪ Take specimen to the side lab or side ward.</li> </ul>   | Promotes orderliness and organisation.   |
| <ul style="list-style-type: none"> <li>▪ Get the reagents and equipment ready at the side ward/lab.</li> </ul>  | Also enhances organisation and prevents disruption of the procedure.   |

### Implementation

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>▪ Wash your hands, mop dry and don gloves.</li> </ul>   | Helps to prevent cross infection.   |
| <ul style="list-style-type: none"> <li>▪ Perform a naked eye observation on the urine; observe the urine for colour, clarity, volume (quantity), pH, specific gravity, deposits, and odour.</li> </ul> | Assists in detecting abnormalities in urine; note abnormal variation in colour, odour, and clarity.   |
| <ul style="list-style-type: none"> <li>▪ Measure the urine by pouring out into the graduated measuring jar or pitcher and note the bottom meniscus.</li> </ul>   | Ensures accuracy and prevent parallax error.  |
| <ul style="list-style-type: none"> <li>▪ For PH, dip the tip of the blue and/or red litmus paper into urine, remove immediately and observe for colour change.</li> </ul>                              | Acid turns blue litmus paper to red while base turns red litmus paper to blue. The observed colour change indicates whether the urine is slightly acidic or alkaline. |
| <ul style="list-style-type: none"> <li>▪ To measure the specific gravity, fill a glass cylinder with urine until it is <math>\frac{3}{4}</math> full.</li> </ul>                                       | This is sufficient volume for the urinometer to float while still preventing spillage.  |
| <ul style="list-style-type: none"> <li>▪ Gently drop the urinometer in the cylinder and at an eye level</li> </ul>   | The urinometer is fragile and can break if not handled with care.   |

- |  |   |
|--|---|
| read the measurement at the base of the meniscus.                              | Reading at eye level helps to prevent parallax error.                 |
| ▪ Discard the urine appropriately and clean the equipment with soap and water. | Prevents environmental pollution and demonstrates concern for safety. |
| ▪ Return equipment to their proper place.                                      | In readiness for another use.   |
| ▪ Document findings.   | For reference purposes as well as indication for action.              |

### Simple Tests for Sugar

There are several methods of testing the urine for glucose. They include:

#### Clinistix Strip

This is a cold test for sugar. It is a simple qualitative dipstick test for sugar.

#### Required Steps

#### Rationale

- |   |  |
|---|--|
| ▪ Completely immerse all reagent areas of the clinistix strip in a fresh, well-mixed, uncentrifuged urine and remove immediately. | Demonstrates compliance with manufacturer's instruction, facilitates reaction, and ensures accuracy of result. |
| ▪ Tap edge of the strip against the side of the urine container.  | Helps to remove excess urine and prevent possible soiling.   |
| ▪ Hold the strip close to colour chart in a horizontal position.  | Apart from preventing possible soiling, enhances visualization.  |
| ▪ Compare test areas carefully with corresponding colour charts on the bottle label at the time specified.                        | Enhances good visualization and accuracy of readings.  |
| ▪ Document findings.  | For reference purposes as well as indication for action.   |

#### Clinitest Test

This is another cold test for sugar but unlike clinistix it is a quantitative test.

#### Rationale

#### Required Steps

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Place 5 drops of urine into a test tube with the aid of the special dropper provided. Rinse the dropper and add 10 drops of water to the urine.</li> </ul> | <p>Demonstrates knowledge of correct proportion of water to urine for procedure and facilitates accuracy of result.</p> |
| <ul style="list-style-type: none"> <li>▪ Drop in one clinictest tablet. Effervescence will occur. Watch the test carefully until effervescence stops and for 15secs longer.</li> </ul>              | <p>Demonstrates understanding of the right sequence of events and ensures complete reaction of urine with tablet.</p>   |
| <ul style="list-style-type: none"> <li>▪ Then shake the tube gently and compare the colour with the colour range on the chart to determine the approximate percentage of glucose.</li> </ul>        | <p>A colour change from blue to greenish yellow, brown, or brick-red colouration indicates the presence of sugar.</p>   |
| <ul style="list-style-type: none"> <li>▪ Document findings.</li> </ul>  | <p>For reference purposes as well as indication for action.</p>   |

### **Benedict Qualitative Test**

This is a hot test for sugar.

#### **Required Steps**

#### **Rationale**

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Place 5ml of Benedict qualitative reagent in a boiling tube and add 8 drops of urine.</li> </ul>                     | <p>Demonstrates understanding of procedure.</p>   |
| <ul style="list-style-type: none"> <li>▪ Boil the mixture vigorously for 2 minutes over a flame, or place the tube in boiling water for 5 minutes.</li> </ul> | <p>When subjected to heat, copper sulphate (a constituent of Benedict solution) reacts with sugar with resultant colour change.</p> |
| <ul style="list-style-type: none"> <li>▪ Observe for colour change.</li> </ul>  | <p>Any change in colour from blue</p>   |

to green, yellow, orange or brick red, indicates the presence of glucose.

- Document findings.

For reference purposes as well as indication for action.

### Simple Tests for Protein

Like the simple tests for sugar, there are a number of simple tests for protein ranging from simple dipstick tests to the hot tests.

**Albustix** – This is a simple dipstick test for protein that can be rapidly performed at side wards.

#### Required Steps

#### Rationale

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>▪ Completely immerse all reagent areas of the albustix strip in a fresh, well-mixed, uncentrifuged urine and remove immediately.</li> </ul> | <p>Demonstrates compliance with manufacturer's instruction, facilitates reaction, and ensures accuracy of result.</p> |
| <ul style="list-style-type: none"> <li>▪ Tap edge of the strip against the side of the urine container.</li> </ul>   | <p>Helps to remove excess urine and prevent possible soiling.</p>   |
| <ul style="list-style-type: none"> <li>▪ Hold the strip close to colour chart in a horizontal position.</li> </ul>   | <p>Apart from preventing possible soiling, enhances visualization.</p>  |
| <ul style="list-style-type: none"> <li>▪ Compare test areas carefully with corresponding colour charts on the bottle label at the time specified.</li> </ul>                       | <p>Enhances good visualization and accuracy of readings.</p>  |
| <ul style="list-style-type: none"> <li>▪ Document findings.</li> </ul>   | <p>For reference purposes as well as indication for action.</p>   |

### Salicylsulphonic Acid Test

This is a cold qualitative test for protein.

#### Required Steps

#### Rationale

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>▪ Add 5 drops of 25% salicylsulphonic acid to about 5ml of urine in a test tube.</li> </ul> | <p>Demonstrates knowledge of correct sequence of procedure.</p> |
| <ul style="list-style-type: none"> <li>▪ Shake the tube and look for</li> </ul>  | <p>The appearance of opacity</p>                                |

cloudiness in the urine.

indicates the presence of protein and the degree of cloudiness gives some idea of the relative protein concentration.

- Document findings.

For reference purposes as well as indication for action.

### **Esbach Quantitative Test**

As the name implies, this is a quantitative test for protein. It is also a cold test as no heat is required. Esbach urinometer and reagent are used for this test.

#### **Required Steps**

#### **Rationale**

- Collect all urine passed by the patient/client over a period of 6 hrs in a clean stopper bottle and mix.
- Measure its specific gravity. If it exceeds 1.010, dilute a portion with an equal volume of water.
- Check the PH with litmus paper. If the urine is alkaline, acidify with a few drops of 10% acetic acid.
- Then fill the Esbach urinometer with urine to the level marked U and add Esbach reagent up to the level marked R.
- Cork the tube and invert it gently several times to mix the contents. This ensures thorough mixing of urine with reagents.
- Stand the tube upright and leave it in a constant temperature for 24 hrs.
- Then read the level of the This gives the protein concentrate

precipitate of protein on tube's scale with eye level at the top of the sediment. of the urine in parts per 1000 (g/l).

- Document findings. For reference purposes as well as indication for action.

### Acetest

- |          |             |  |  |
|----------|-------------|--|--|
| Hot Test | Acetic acid | <ul style="list-style-type: none"> <li>- Check that the urine pH is mildly acidic or just acidic to litmus paper (if it is not so, add 10% acetic acid solution).</li> <li>- If the urine is cloudy, filter some for this procedure</li> <li>- Fill a boiling tube about <math>\frac{3}{4}</math> full with the urine and boil the top inch of liquid gently over a spirit lamp, turning the tube while heating it to prevent cracking</li> <li>- Let it boil for a few minutes</li> <li>- Compare the top boiled part of the urine with the lower part to see if any cloudiness has appeared (if so, it may have been caused by either protein or phosphates)</li> <li>- Add 3 drops of 10% acetic acid and reboil the top portion</li> </ul> | <p>If cloudiness persists, proteins are indicated. If cloudiness disappears, phosphate are indicated</p> |
|----------|-------------|--|--|

### Why It Is Done

A urine test may be done:

- To check for a disease or infection of the urinary tract. Symptoms of a urine infection may include colored or bad-smelling urine, pain when urinating (dysurea), and difficulty in passing urine, flank pain, blood in the urine (haematuria), or fever.



- To check the treatment of conditions such as diabetes, kidney stones, a urinary tract infection (UTI), high blood pressure (hypertension), or some kidney or liver diseases.
- As part of a regular physical examination.

### **How to Prepare**

Do not eat foods that can colour the urine, such as blackberries, beets, and rhubarb, before the test. Do not exercise strenuously before the test. Tell your health professional if you are menstruating or close to starting your menstrual period. Your health professional may want to wait to do the test.

Your health professional may ask you to stop taking certain medicines that colour the urine. These include vitamin B, phenazopyridine (Pyridium), rifampin, and phenytoin (Dilantin). Be sure to tell your health professional if you are taking diuretics, which may affect the test results.

Talk to your health professional about any concerns you have regarding the need for the test, its risks, how it will be done, or what the results will mean. To help you understand the importance of this test, fill out the medical test information form.

### **How It Is Done**

A routine urine test can be done in your health professional's office, clinic, or lab. You may also be asked to collect a urine sample at home and bring it with you to the office or lab for testing.

#### **Clean-catch midstream one-time urine collection**

- Wash your hands to make sure they are clean before collecting the urine.
- If the collection cup has a lid, remove it carefully and set it down with the inner surface up. Do not touch the inside of the cup with your fingers.
- Clean the area around your genitals.
- A man should retract the foreskin, if present, and clean the head of his penis with medicated towelettes or swabs.

- A woman should spread open the genital folds of skin with one hand. Then use her other hand to clean the area around the urethra with medicated towelettes or swabs. She should wipe the area from front to back so bacteria from the anus is not wiped across the urethra.
- Begin urinating into the toilet or urinal. A woman should hold apart the genital folds of skin while she urinates.
- After the urine has flowed for several seconds, place the collection cup into the urine stream and collect about 2fl oz of this "midstream" urine without stopping your flow of urine.
- Do not touch the rim of the cup to your genital area. Do not get toilet paper, pubic hair, stool (feces), menstrual blood, or anything else in the urine sample.
- Finish urinating into the toilet or urinal.
- Carefully replace and tighten the lid on the cup then return it to the lab. If you are collecting the urine at home and cannot get it to the lab in an hour, refrigerate it.

### **Double-voided urine sample collection**

This method collects the urine your body is making right now.

- Urinate into the toilet or urinal. Do not collect any of this urine.
- Drink a large glass of water and wait about 30 to 40 minutes.
- Then get a urine sample. Follow the instructions above for collecting a clean-catch urine sample.

Return the urine sample to the lab. If you are collecting the urine at home and cannot get it to the lab in an hour, refrigerate it.

### **How It Feels**

There is no discomfort in collecting a one-time urine sample.

### **Risks**

There is no chance for problems in collecting a one-time urine sample.

### **Results**

A urine test checks different components of urine, a waste product made by the kidneys. Normal results may vary from lab to lab.

<b>Colour</b>	Normal:	Pale to dark yellow (amber)
	Abnormal:	Many foods and medicines can affect the colour of the urine. Urine with no colour may be caused by long-term kidney disease or uncontrolled <u>diabetes</u> . Dark yellow urine can be caused by <u>dehydration</u> . Red urine can be caused by blood in the urine.
<b>Clarity</b>	Normal:	Clear
	Abnormal:	Cloudy urine can be caused by pus ( <u>white blood cells</u> ), blood ( <u>red blood cells</u> ), sperm, bacteria, yeast, crystals, mucus, or a <u>parasitic infection</u> , such as <u>trichomoniasis</u> .
<b>Odour</b>	Normal:	Slightly "nutty" odour
	Abnormal:	
<b>Specific gravity</b>	Normal:	1.005–1.030
	Abnormal:	.
<b>pH</b>	Normal:	4.6–8.0
	Abnormal:	
<b>Protein</b>	Normal:	None
	Abnormal:	
<b>Glucose</b>	Normal:	None
	Abnormal:	.
<b>Ketones</b>	Normal:	None
	Abnormal:	.
<b>Microscopic analysis</b>	Normal:	.
	Abnormal:	.

### What Affects the Test

Reasons you may not be able to have the test or why the results may not be helpful include:

- If you are having your menstrual period.

- Taking medicines, such as diuretics, erythromycin, trimethoprim (Trimpex), or high doses of vitamin C (ascorbic acid) taken with an antibiotic, such as tetracycline.
- Having an X-ray test with contrast material in the past 3 days.
- Not getting urine sample to lab in 1 hour.

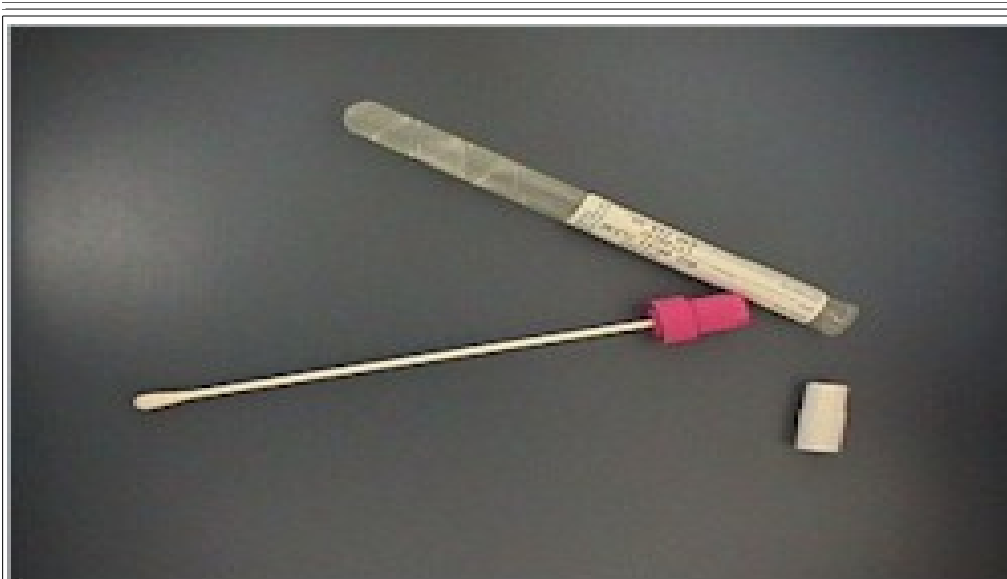
### What to Think About

- Some urine tests can be done using a home test kit. For more information, see the medical test Ketones or Home Test for Urinary Tract Infections.
- In some cases, the amount of urine you make in 24 hours may be measured. Most adults make about 1litres to 2liters per day. Children make about 0.3liters to 1.6liters per day.
- Other substances that may be checked during a urine test include:
  - **Bilirubin**. This is a substance formed by the breakdown of red blood cells. It is passed from the body in stool. Bilirubin is not found in urine. If it is present, it often means the liver is damaged or that the flow of bile from the gallbladder is blocked. For more information, see the medical test Bilirubin.
  - **Urobilinogen**. This is a substance formed by the breakdown of bilirubin. It is also passed from the body in stool. Only small amounts of urobilinogen are found in urine. Urobilinogen in urine can be a sign of liver disease (cirrhosis, hepatitis) that the flow of bile from the gallbladder is blocked.
  - **Bence Jones protein**. This is an abnormal protein found in the urine of about 50% of people with a rare type of cancer called multiple myeloma. A urine test is often done when multiple myeloma is suspected. The protein test done during a regular urine test does not check for Bence Jones protein.
- Collecting a urine sample from a small child or baby is done by using a special plastic bag with tape around its opening. The bag is placed around the child's genitals until he or she urinates. Then you carefully removed the bag. To collect a urine sample from a very sick baby, a health professional may use a urinary catheter through the urethra or a needle through the baby's belly directly into the bladder (suprapubic tap).

- To lower the chance of contaminating the urine sample with bacteria, a health professional may collect a urine sample by using a urinary catheter. A catheter may be used to collect urine from a person in the hospital who is very ill or who cannot give a clean-catch sample. Using a catheter allows a clean sample to be collected.
- If an abnormal result is found during a urine test, more tests may be done, such as a urine culture, X-ray of the kidneys (intravenous pyelogram [IVP]), or cystoscopy.

### 3.5.2 Throat Culture

Throat cultures are done to isolate and identify any pathogens, which may be medium. The slide or medium is incubated in the laboratory to determine which organisms are causing a throat disorder. A sample of mucus and secretions from the back of the throat is collected on a cotton-tipped applicator, incubated, cultured and then put on a slide for viewing. A determination of which drug is most effective against a particular organism may be done also. A full culture and sensitivity test takes several days because the organisms must have time to grow. If strept infection is suspected a quick strept test may be done, so that antibiotic therapy can be started immediately.



*Sterile cotton-tipped applicator specimen collection kit (culturette).*

## Supplies and Equipment

The supplies and equipment required to obtain a sample for throat culture are:

- a. Sterile cotton-tipped applicator specimen collection kit (culturette).
- b. Tongue depressor.
- c. [Laboratory request form.](#)
- d. Flashlight.

## Procedure for a Throat Culture

Always wash your hands before the procedure. Explain to the patient what you are going to do. Have the patient sit comfortably on a bed or chair and tilt his head back.

- a. Use the flashlight to illuminate the back of the throat. Check for inflamed areas using the tongue depressor.
- b. Ask the patient to say "Ahhh" as you swab the tonsillar areas from side to side. Be sure to include any inflamed or purulent sites.
- c. Avoid touching the tongue, cheeks, or teeth with the applicator, as this will contaminate it with oral bacteria.
- d. Place the cotton-tipped applicator into the culture tube immediately.
- e. Label the culture tube with the patient's name, serial number, and ward number if applicable.
- f. Complete the request form with the following information:
  - (1) Patient's name.
  - (2) Patient's rank or status.
  - (3) Ward number if inpatient, or phone number if outpatient.
  - (4) Source of the specimen (that is, throat).
  - (5) Any antibiotics the patient is taking.
  - (6) Date and time the specimen was obtained.
  - (7) Name of the physician who ordered the culture.

### 3.5.3 Sputum Specimen

For some respiratory disorders, a sputum specimen is obtained for culture or other examination to determine if any pathogen or blood is present. The specimen should be collected early in the morning before the patient eats, brushes his teeth, or uses mouthwash. The specimen is more likely to contain sputum at this time, rather than just saliva. Specimens are often taken for three consecutive days because it is difficult for the patient to cough up enough sputum at one time, and an organism may be missed if only one culture is done.

#### Supplies and Equipment

Supplies and equipment required to collect a sputum specimen are

- a. Sterile container with tight-fitting lid.
- b. Box of tissues.
- c. Gloves.
- d. Laboratory request form.

#### Procedure for Sputum Specimen

- a. Wash your hands and gather the equipment.
- b. Provide privacy for the patient and explain the procedure. Place the tissues nearby and have the patient rinse his mouth with clear water to remove any food particles.
- c. Assist the patient to a sitting position, if necessary and ask him to cough deeply and spit into the container. Tell the patient to avoid touching the inside of the container because it is sterile.
- d. A sputum specimen is considered highly contaminated and must be treated with caution. To prevent contamination by particles in the air, keep the container closed until the patient is ready to spit into it. Close the container immediately after collecting the specimen to prevent the spread of any organisms from the specimen. Offer tissues for the patient to wipe his mouth.

- e. Wash your hands, label the container, and complete the laboratory request form. Take the specimen to the laboratory immediately; allowing the specimen to remain in a warm place will result in overgrowth of any organisms that may be present.
- f. Record the amount, consistency, and color of the sputum collected, as well as the time and date in the nursing notes.

### 3.5.4 Stool Specimen

Stool specimens are collected for many examinations. The most common is the [ova and parasites test](#), a microscopic examination of faeces for detecting parasites such as amoebas or worms. Stools specimens are often tested for blood. [Guaiac or Hem Occult test may be done in the laboratory but are sometimes done at the nursing station to test a stool for occult blood.](#)

### Supplies and Equipment

Supplies and equipment required to collect a stool specimen are

- a. Gloves
- b. Clean bedpan and cover (an extra bedpan or urinal if the patient must void).
- c. Specimen container and lid.
- d. Wooden tongue blades.
- e. Paper bag for used tongue blades.
- f. Labels.
- g. Plastic bag for transport of container with specimen to laboratory.

### Procedure for Stool Specimen

- a. Explain the reason for the test and the procedure to the patient. Ask the patient to tell you when he feels the urge to have a bowel movement.
- b. Wear gloves when handling any bodily discharge (see [universal precautions in the introduction to this subcourse](#)).



- c. Give the bedpan when the patient is ready. If the patient wants to urinate first, give a male the urinal or give a female the extra bedpan.
- d. Remove the bedpan. Use the tongue blade to transfer a portion of the feces to the specimen container. Do not touch the specimen because it is contaminated. It is not necessary to keep this specimen sterile however, because the gastrointestinal tract is not sterile.
- e. Cover the container and label it with the patient's name and National Health Insurance number.
- f. Complete the appropriate laboratory request form, noting any special examination ordered.
- g. Take the specimen to the lab immediately; examination for parasites, ova, and organisms must be made while the stool is warm.



**Watch a video demonstrating the test for occult blood in the stool**  
**(6.1 MB)**

- h. If an infant's stool is to be examined, place the diaper in a leak proof bag, label it, and take the diaper and request form to the lab immediately.

### **Guaiaac Test**

The purpose of this test, using guaiac as a reagent, is to detect the presence of occult blood (blood that appears from a nonspecific source, with obscure signs and symptoms), which is not visible. Each method of testing has a specific procedure, which must be followed to get accurate results. If it is done at the nursing station, instructions should be kept with the reagents used. Follow the manufacturer's instructions or consult hospital standing operating procedures (SOP).

## **4.0 CONCLUSION**

Since patients admitted to a hospital not only face many unknown but strange environment. The nurse therefore assumes responsibility for facilitating adjustment of the individuals admitted through special and professional skills designed to increase their understanding of hospitalization and its routines through continuous nurse – patient interaction from the moment of admission through to discharge.

## **5.0 SUMMARY**

This unit has described the procedures required for basic patient care. These included admissions of patients, routine observation, history taking, assessing of vital signs namely: pulse, temperature, respiration and blood pressure as well as the collection, observation, testing and disposal of urine, feaces, vomitus and sputum.

## **6.0 TUTOR-MARKED ASSIGNMENT**

1. State the scientific principles underpinning the basic patient care.
2. Identify supplies/equipment and follow procedures that apply to obtaining all kinds of specimen.
3. Exhibit knowledge on the development and documentation of nursing assessment through observation and participation with other healthcare professionals in a variety of care settings.
4. Interact well with patients, identify patients' learning needs, and educate patients appropriately.
5. Demonstrate ability to assist the patient to use the designated equipment to void or defecate in safe and effective manner.

6. Collect specific specimens, be it urine, feaces, vomitus, and sputum in a correct, logical and systematic manner.
7. Identify significant observations about the urinary output: amount, colour, odour, specific gravity, e.t.c. and record appropriate information on the patient's record.
8. Conduct simple tests on urine for sugar, protein, acetone, and other abnormalities following prescribed procedure.
9. Identify where and why to take vital signs and demonstrate competence in assessing vital signs.
10. Records the vital signs correctly on vital signs chart and nurses' notes, reports abnormal findings to the nurse in charge/physician, and takes appropriate measures in case of abnormalities.
11. Follow the correct procedure of admitting patients into hospital wards.
12. Identify those aspects which allow healthcare professionals to help patients maximize their potential for health & maintenance of optimal health.
13. Demonstrate mastery of a range of essential nursing skills to meet basic healthcare needs of patients.

## 7.0 REFERENCES/FURTHER READING

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## **UNIT 3      BODY MECHANICS: MOVING AND LIFTING TECHNIQUES**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Principles and Rules of Body Mechanics
  - 3.2 Positioning a Patient for Examination or Treatment
  - 3.3 Turning a Patient from Side to Side
  - 3.4 Assisting a Patient to Transfer from Bed to Chair
  - 3.5 Assisting a Patient to Sit Up in Bed
  - 3.6 Moving a Patient towards the Head of the Bed
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

### **1.0 INTRODUCTION**

Body mechanics is defined as the efficient use of the body in moving and lifting. Its goal is to conserve energy and prevent injury, most specifically to the vulnerable and weak lower back muscles, by encouraging the use of the body's largest and strongest muscles, of the legs and arms. The rules of body mechanics are based on the physical principles of balance as these relate specifically to the human body. Thus they provide scientifically based guidelines for moving and lifting techniques.

### **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- explain the relationship of the centre of gravity, line of gravity, and base of support in balance
- correlate the physical principles with the rules of body mechanics.

### **3.0 MAIN CONTENT**

#### **3.1 Principles and Rules of Body Mechanics**

1. The balance of every object depends on the geometric relationship of three things:

- its base of support (that part of the object in contact with its supporting surface)
- its centre of gravity (that point at which its weight is centered and balanced)
- its line of gravity (an imaginary line passing vertically through the centre of gravity to the base of support).

Hence, balance is maintained as long as an object's line of gravity passes through its base of support.

2. An object's centre of gravity is constant; therefore when the object is tilted, its line of gravity begins to shift away from the centre of its base and support. The further from centre the line of gravity shifts, the more unstable the object becomes. When the line of gravity falls outside the base of support, the object will inevitably fall.
3. An object's centre of gravity will be about midway down its length.

### 3.2 Positioning a Patient for Examination or Treatment

Patients are put in special positions for examination, for treatment or test, and to obtain specimens. You should know the positions used, how to assist the patient, and how to adjust the drapes.

<p><b>a. Horizontal Recumbent Position</b> – Used for most physical examinations. Patient is on his back with legs extended to relax the abdominal wall. Arms may be above the head, alongside the body or folded on the chest.</p> <p><b>b. Dorsal Recumbent Position</b> – Patient is on his back with knees flexed and soles of feet flat on the bed. Fold sheet once across the chest. Fold a second sheet</p>	
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<p>crosswise over the thighs and legs so that genital area is easily exposed.</p> <p><b>c. Fowler's Position</b> – Otherwise known as sitting up position. Used to promote drainage or ease breathing. The head of the bed is elevated to desired height (45° angle). Where this is impossible the back rest is pulled into position with 3 – 5 pillows arranged in arm-chair fashion and bed is raised slightly under patient's knees.</p> <p><b>d. Dorsal Lithotomy Position</b> – Used for examination of pelvic organs. Similar to dorsal recumbent position, except that the patient's legs are well separated and thighs are acutely flexed. Feet are usually placed in stirrups. Fold sheet or bath blanket crosswise over thighs and legs so that genital area is easily exposed. Keep patient covered as much as possible.</p> <p><b>e. Prone Position</b> – Face-lying. Used to examine spine and back. Patient lies on abdomen with head turned to one side for comfort. Arms may be above head or alongside body. Cover with sheet or bath blanket.</p> <p><b>Note:</b> An unconscious patient or one with an abdominal</p>	
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<p>incision or breathing difficulty usually cannot lie in this position.</p> <p><b>f. Sim's Position</b> – Used for digital rectal examination. Patient lies on his/her left side with right knee flexed against abdomen and left knee slightly flexed. Left arm is extended behind the back and right arm is placed forward comfortably.</p> <p><b>Note:</b> Patient with leg injuries or arthritis usually cannot assume this position.</p> <p><b>g. Knee-Chest Position</b> – Used for rectal and vaginal examinations and as treatment to bring uterus into normal position. The patient assumes a kneeling position with chest resting and elbows resting on bed or arms above head. Head is turned to one side. Thighs are straight and lower legs are flat on bed.</p> <p><b>Note:</b> Do not leave patient alone; he/she may become dizzy, faint, and fall.</p>	
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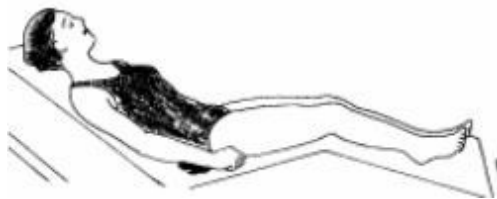




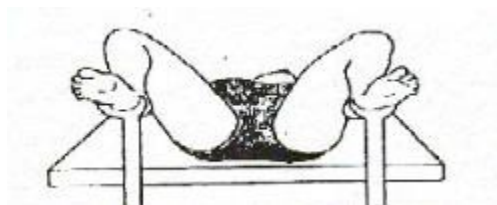
**Figure 1-1. Horizontal recumbent position.**



**Figure 1-2. Dorsal recumbent position.**



**Figure 1-3. Fowler's position.**



**Figure 1-4. Dorsal lithotomy position.**

**Source** – Adapted from [http://www.brooksidepress.org/Products/Nursing\\_Fundamentals](http://www.brooksidepress.org/Products/Nursing_Fundamentals)

### **3.3 Moving Patient from side to side**

**Requirements as above**

**Method:**

1. Strip top of the bed in the usual manner, leaving patient covered by the top sheet
2. Turn the patient to one side, arranging pillows and limbs carefully
3. Nurse on opposite side untucks bottom sheet from top to bottom, roll it well under the patient and pull mattress cover straight
4. She then unfolds the clean bottom sheet and arrange it on the bed with the center increased in the middle
5. She then makes up her own side of bed in the usual manner
6. The patient is gently rolled to the already made side of the bed
7. The other nurse untucks the bottom sheet from top to bottom of bed. Remove carefully, and discard. She then makes up her own side
8. The patient is made comfortable and top of bed made up in the usual way

### **3.4 Lifting from bed to Chair-Orthodox lift**

1. Position patient's chair on right side of bed facing foot of bed
2. Two lifters are required to work together
3. Remove top bedclothes, patient is covered with top sheet or in pyjamas. Cross patient's lower arms over the chest

4. Lifters on either side of patient join hands under patient's thighs and at his lumbar curve
5. With lifters back straight and legs slightly bent patient is lifted and moved to right edge of bed. Lifter on right side supports patient in sitting position, facing foot of bed.
6. Lifter from left side of bed joins colleague on right side. While the former supports and turn the trunk clockwise the latter carries patient's legs, turns them simultaneously both stooping when patient faces the right side of bed. The latter then drops the legs gently leaving them to hang freely
7. Both lifters join hands again under patient's thighs and at the lumbar curve
8. With patient's hands over lifters' shoulder, facing same direction, lifters move anti-clock-wise till patient faces foot bed, then to the right in front of chair
9. Patient is then lowered gently on to the chair
10. Cover patient with top bed sheet.

To return patient to bed, remove cover clothes and repeat the process in ascending order substituting "raise" for "lower" "clockwise" for "anti-clockwise" and vice-versa.

### **Shoulder lift**

1. Two lifters are required. Place a chair on right side of bed
2. Top clothes are removed leaving patient in pyjamas or covered with top sheet
3. Patient places each upper arm on the far side shoulder of each lifter
4. Lifters, facing patient back, join their hands on the far side under patient's thighs supporting patient's lumbar curve with unjoined hands on the near side, they lift and sit patient on the right edge of bed
5. Lifter from left side joins colleague on the right side, support patient in sitting position. The latter carries patient's legs and turn them clockwise as the former turns the trunk

6. Both join hands as before and lift patient from bed, turn anti-clockwise till patient is in front of chair and lower patient gently on to the chair
7. Cover patient with top bed sheet.

**(Shoulder Lift Contd.)**

To return patient to bed, remove cover clothes and repeat process upward substituting “raise/lift” for “lower”, “clockwise” for “anti-clockwise” and vice-visa. One lifter’s free hand on patient’s back may be used to arrange pillows before lowering patient gently into bed.

**Turning Patient****Requirements:**

1. Chair for resting stripped top sheet e.g. draw sheet: to replace soiled ones.
2. Soiled linen bin

**Back to Side****Procedure**

1. Remove counterpane
2. Leave patient covered with only top sheet
3. Lift patient’s head
4. Remove all pillows but one except for patient in sitting up position
5. Position patient’s heads on pillow
6. Lift patient’s hands on pillow
7. Cross patient’s opposite hand across chest
8. Put own hands, one under far shoulder (Scapula) the other under far buttock (Sacrum)
9. Straighten own arms and move patient towards self

10. Support patient in the position with own hands at the back and thighs in front while the procedure is completed

### **For Prolonged Lying on Side (Lateral)**

1. Put hands under head and should move to middle of bed. Support head with pillows
2. Put hands under lower hip and move to middle of bed. Rest top lower leg and arm on one pillow each.

### **Side to Front**

1. Put patient in lateral position on one half of half of the bed, facing the middle of bed
2. Return patient to his face
3. Use one pillow to support head and if desired, chest
4. Separate legs.

## **4.0 CONCLUSION**

The rules of body mechanics are based on the physical principles of balance as these relate specifically to the human body. Thus they provide scientifically based guidelines for moving and lifting techniques.

## **5.0 SUMMARY**

This unit provided you with the principles and rules of body mechanics, positioning a patient for examination or treatment, turning a patient from side to side, moving a patient towards the head of the bed, assisting a patient to sit up in bed, assisting a patient to transfer from bed to chair, ambulating a patient and range of motion exercises

## **6.0 TUTOR-MARKED ASSIGNMENT**

1. State the scientific principles underpinning the body mechanics.
2. Identifies supplies/equipment and follow procedures that apply to positioning and examination of patients.

3. Interacts well with patients, identifies patient learning needs, and educates patient appropriately.
4. Identifies significant observations during the process of moving patient up in bed, transfers from bed to chair as well as ambulating a patient coupled with the range of motion exercises and patient's record.
5. Follows the correct procedure of positioning a patient for examination or treatment.
6. Identifies those aspects which allow healthcare professionals to help patients maximize their potential for health & maintenance of optimal health.
7. Demonstrates mastery of a range of essential nursing skills to meet basic healthcare needs of patients.

## 7.0 REFERENCES/FURTHER READING

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## **MODULE 2**

Unit 1	Hygiene and Comfort Measures
Unit 2	Nutrition and Nasogastric Procedures
Unit 3	Parenteral Procedures Including Blood Transfusions

## **UNIT 4      HYGIENE AND COMFORT MEASURES**

### **CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Hand Washing
  - 3.1 Oral Care
  - 3.2 Bed Bath
  - 3.3 Bed Making
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor-Marked Assignment
- 7.0 References/Further Reading

### **1.0 INTRODUCTION**

Attending to the hygiene needs of a patient is an important role of the nurse. This is because not only does it promote patient's health and comfort, but also contributes immeasurably to the patient's feeling of emotional well-being. Many a nurses have had experience of seeing a sick and uncomfortable patient drop off into a restful sleep after taking his bath and having his bed changed. While it is true that some patients are capable of meeting their own hygiene need, not a few are so much incapacitated by their ill health that they require the nurses' assistance to meet all their hygiene needs. For such individuals, procedure for care of the mouth, hair, nails and skin are a routine part of daily nursing care. When these areas are left unattended, the patient looks and feels more miserable than his state of health warrants. The onus is therefore on the nurses to assess the person's ability to perform self-care, plan necessary

intervention to meet any deficit, and evaluate the effectiveness of the care.

It must however be noted that maintaining personal hygiene is a very intimate role and the safety, privacy and comfort of the patient must be considered at all times throughout the procedure. It is equally imperative that the nurse possesses a professional caring attitude whilst assisting the patient in all aspects of personal hygiene, including dressing and grooming needs (McLaurin).

## **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- demonstrate an understanding of the basic principles underpinning each of the hygiene and comfort measures
- explain and demonstrate correct sequence of hand washing techniques to others
- determine who an oral needs care, when to give oral care and its significance
- identify principles for and purposes of hair care
- determine purposes for giving a patient a bath and observations to make during the bathing procedures
- recognize conditions that encourage skin breakdown and institute interventions aimed at preventing skin breakdown.

## **3.0 MAIN CONTENT**

### **3.1 Hand Washing**

Handwashing is the single most important procedure for preventing the spread of biological contamination. Even though hands may appear to be clean, they may carry germs or microorganisms that are capable of causing diseases. Handwashing therefore is a simple habit that can help keep you healthy.

#### **Indication**

1. Remove organic materials.
2. Reduces the number of transient microorganisms on the hand.
3. Reduce the risk of transmission of infectious organism to clients.
4. Reduce the risk of cross-transmission among clients.



### **When do we need to wash hands?**

1. On arrival at work, after touching body fluids with or without gloves.
2. Before and after each patient contact.
3. Following each patient contact where significant care is given.
4. In between procedures on same patient.
5. Before and after serving food.
6. Before and after removing gloves following invasive procedures.
7. After using the toilet.
8. After changing a diaper — wash the diaper-wearer's hands, too
9. Before and after dressing wounds or cuts.
10. After handling garbage.
11. Before inserting or removing contact lenses.

When using public restrooms, such as those in airports, train stations, bus stations and restaurants.

### **Equipment and supplies required**

- A sink
- Soap (tablet or mounted liquid soap)
- Running water from a tap or basin
- Disposable paper preferably towel or clothing

**NB:** Bar soap should be kept in a self draining holder that is cleaned thoroughly before new bars are put out. . Liquid soap containers should be used until empty and then disposed of.

### **Hand Hygiene Techniques/Procedure**

#### **Suggested Action**

#### **Rationale**

- Keep your nails short and clean and remove all ornate jewelry.
- Long nails and ornate jewelry harbors microbes. In addition to harboring microbes both promote skin injury to the client and yourself.

- Remember the sink is dirty so stand in such a way that your uniform will not touch it.
  - Turn on the water and adjust the water to a moderate flow.

Reduces the chances of transmission of microorganism from nurse to client.

Prevents water from splashing out of the sink.
- Run the water long enough to be sure that the temperature is adjusted to only warm NOT hot water.

Warm water facilitates the removal of dirt from the hands and at the same time removes less of the protective oil of the skin than hot water.
- Leave the water running throughout the entire procedure.

Touching the taps once you commence handwashing will recontaminate your hands.
- Wet your hands thoroughly to above wrist before dispensing soap or picking up bar soap and work up a good lather.

Prevents hand chapping and enhances lather formation. The soap lather suspends both the dirt and germs trapped inside and make it easy for them to be washed away.
- If you have used a bar soap, rinse it thoroughly before dropping it back in the soap dish.

Keep soap from becoming a breeding place for microorganisms.
- During the washing hold the hands lower than the elbows at all times so that the water flows from the arms to the fingertips.

Gravity will push the suds and water downward, away from the less contaminated upper arms to the most contaminated area.
- Vigorously rub together all surfaces of the lathered hands for at least 10 seconds using firm, rubbing and circular movements. Proceed in this sequence: Wash the palms, interlace the fingers and the thumbs, then the back of hands, move to the wrist of each hand and finally the finger tips. Note that the length of wash is less important than its

The rubbing and circular action generates friction which helps to loosen dirt and removes microorganisms mechanically. Interlacing the fingers and the thumbs cleans the interdigital spaces.

thoroughness and should be suited to occasion.

- When the wash is complete, rinse your hands thoroughly under clean running water. If soap is not removed it acts as an irritant, and irritated or chafed hands harbor microorganisms and invite infection.
- When you have finished rinsing, shake the excess water off your hands over the sink. Pick up two paper towels for drying. Use a squeezing rather than a rubbing motion for drying and dry thoroughly. One will not be enough unless it is double thickness. Squeezing motion is less damaging to the skin. Damp hands chafe very quickly.
- Use same paper towel to turn off tap (if not elbow or pedal controlled). It prevents recontaminating the washed hands with microbes from tap.
- Discard used paper towel in appropriate container and use hands lotion as necessary. Helps to prevent hands from becoming dry and sore.

Friction helps remove dirt and microorganisms. Wash around and under rings, around cuticles, and under fingernails

### 3.2 Oral Care

**Definition:** It is the act of cleaning and activating the mouth so as to refresh the patient.

**Indication:** To

- Keep the teeth, gum, tongue, and oral mucosa in good condition.
- Remove offensive odors and food debris from the mouth.
- Promote patient comfort and a feeling of well-being.
- Preserve the integrity and hydration of the oral mucosa and lips.
- Alleviate pain and discomfort, thereby enhancing oral intake.

- Facilitate rapid healing after mouth surgery.

### **General Guidelines**

- Oral hygiene should be performed before breakfast, after each meal, and at bedtime.
- Oral hygiene is especially important for patients receiving oxygen therapy, patients who have nasogastric tubes, and patients who are Nil per Oral (NPO). Their oral mucosa dries out much faster than normal due to their mouth-breathing.
- Provide for patient privacy during the procedure, as this is an extremely personal procedure for most patients.
- Oral care for the unconscious patient should be performed at least every four hours.
- Lipstick, Chap Stick, or Vaseline may be applied to the lips to keep them from drying out.

### **General Considerations**

- Patients with dentures
  - Many patients are sensitive or embarrassed about wearing dentures; therefore, the patient's privacy should be respected when the dentures are cleaned.
  - Dentures must be handled carefully; they are fragile and expensive, and the patient is handicapped without them.
  - If the dentures are left out of the mouth for any period of time, place them in a covered opaque container with the patient's name on the container.
  - Dentures must be kept in water to preserve their fit and general quality; the color may change if they become dry.
  - You may avoid breaking the dentures while cleaning them by holding them over a basin of water with a washcloth folded in the bottom.
  - Dentures are brushed in the same way as natural teeth; be sure to rinse them well.

- The denture cup should be labeled with the patient's name and room number.
  - Never use hot water to rinse the dentures as it could warp them; use cool or lukewarm water.
  - The patient's gums and soft tissues should be cared for at least twice per day while the dentures are out of the mouth; a soft-bristled toothbrush, swab, or gauze-covered tongue blade dipped in mouthwash should be used to cleanse the gums, tongue, and soft tissues.
- Patients with Mouth Complications. The following problems are common in patients receiving chemotherapy and radiation therapy:
    - **Bleeding**
      - (a) Observe the patient's mouth frequently for the amount of bleeding present and the specific areas;
      - (b) Do not floss the patient's teeth; use a water-pik;
      - (c) Brush the teeth carefully with a very soft toothbrush and do not use lemon/glycerine swabs or commercial mouthwash because they contain alcohol which causes burning.
    - **Infection**
      - (a) Observe the patient's mouth for appearance, integrity, and general condition;
      - (b) Wear clean gloves during the procedure;
      - (c) Obtain a culture, if ordered;
      - (d) Do not floss the teeth if the mouth is irritated or painful;
      - (e) Assist the patient with brushing the teeth and cleaning the mouth, using a soft toothbrush or a gauze-padded tongue blade;
      - (f) Rinse the mouth with water and the prescribed solution, if ordered.

- **Ulcerations including Stomatitis**

- (a) Basic procedure for the patient with an infection should be followed;
- (b) If the patient's mouth is extremely painful, rinsing the mouth with a local anesthetic, as prescribed by a physician, may be necessary;
- (c) Mouthwash and other solutions which contain alcohol should not be used for the patient with ulcerations as they are frequently very painful;

- **Unconscious Patients.**

- Oral care should be performed at least every four hours.
- Oral suctioning may be required for the unconscious patient to prevent aspiration.
- A soft toothbrush or gauze-padded tongue blade may be used to clean the teeth and mouth.
- The patient should be positioned in the lateral position with the head turned toward the side to provide for drainage and to prevent aspiration.

**Equipment**

- |                                 |   |
|---------------------------------|---|
| ▪ Towel                         | ▪ Bite-block to hold mouth open and teeth apart (optional)          |
| ▪ Emesis bowl or basin          | ▪ Tissue or piece of gauze to remove dentures (optional)            |
| ▪ Disposable gloves             | ▪ Denture pot or container as needed                                |
| ▪ Toothbrush                    | ▪ Mouthwash   |
| ▪ Cup of tepid water            | ▪ Suction catheter with suction apparatus (optional)                |
| ▪ Dentifrice or denture cleaner | ▪ Petroleum jelly (Vaseline)  |
| ▪ Rubber-tipped bulb syringe    | ▪ Applicators and cleaning solution for cleaning the mucus membrane |

- Cotton wool
- Mouth gag for unconscious patient
- Wooden spatula and/or Orange stick
- Non tooth dissecting forceps for unconscious patient

## Procedure

### Suggested Action Assessment

### Rationale

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|--|---|
| <ul style="list-style-type: none"> <li>▪ Assess extent of client's abilities, usual mouth care practices and status of the oral cavity.</li> </ul> | <p>Helps to determine the need for mouth care and the type of materials needed.</p> |
| <ul style="list-style-type: none"> <li>▪ Note presence of halitosis.</li> </ul>  | <p>Gives an insight into patient's oral status.</p>                                 |

## Planning

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>▪ Inform and explain procedure to patient.</li> </ul>                   | <p>This not only helps in gaining patient's cooperation but facilitates consent gaining.</p>  |
| <ul style="list-style-type: none"> <li>▪ Gain patient's consent.</li> </ul>                                    | <p>For ethical and legal reasons.</p>   |
| <ul style="list-style-type: none"> <li>▪ Assemble all necessary equipment needed for the procedure.</li> </ul> | <p>Demonstrates organisation and aids time-management.</p>  |
| <ul style="list-style-type: none"> <li>▪ Prepare the required oral wash solution.</li> </ul>                   | <p>Solution must always be prepared immediately prior to use to maximize their efficacy and minimize the risk of microbial contamination.</p> |

## Implementation

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>▪ Wash and dry hands and observe appropriate infection control measures.</li> </ul> | <p>Reduces the chances of transmission of infection to the nurse as well as to the patient.</p> |
| <ul style="list-style-type: none"> <li>▪ Don gloves.</li> </ul>  | <p>Prevents possible soiling of hands and development of nosocomial infection.</p>              |
| <ul style="list-style-type: none"> <li>▪ Provide privacy for patient.</li> </ul>   | <p>Gives patient a sense of security.</p>   |

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Position patient in a sitting position if health permits. If not, assist to a side-lying position with head turned.</li> </ul>   | <p>Proper positioning facilitates access to patient's mouth, enhances nurses' body mechanics and prevents aspiration.</p>         |
| <ul style="list-style-type: none"> <li>▪ Place towel under patient's chin, moisten the bristles of the toothbrush with tepid water and hold receptacle under patient's chin, fitting the receptacle around neck or chin.</li> </ul> | <p>Protect the patient's clothing and the bed linen from getting wet.</p>   |
| <ul style="list-style-type: none"> <li>▪ Remove the patient's dentures if necessary, using paper tissues or topical swabs, and place them in denture pot.</li> </ul>  | <p>Removal of the denture is necessary for the cleaning of the underlying tissue.</p>   |
| <ul style="list-style-type: none"> <li>▪ Hand the toothbrush to the patient or brush the teeth, holding the brush against the teeth with the bristles at a 45-degree angle.</li> </ul>  | <p>Involving patient in his care stimulates cooperation and promotes active and passive exercises.</p>                            |
| <ul style="list-style-type: none"> <li>▪ Move bristles up and down gently in short strokes from the sulcus to the crown of the teeth.</li> </ul>  | <p>Sulcular technique removes plaques and cleans under the gingival margins.</p>  |
| <ul style="list-style-type: none"> <li>▪ Clean all the mouth tissues including the biting surfaces, the roof of the mouth, base of the mouth, and then the tongue with short strokes.</li> </ul>                                    | <p>Ensures the removal of all debris including bacteria and freshens breath.</p>  |
| <ul style="list-style-type: none"> <li>▪ Hand the patient the water cup or mouthwash to rinse mouth vigorously, and then spit the water into the basin.</li> </ul>  | <p>Vigorous rinsing loosens food particles and washes out already loosened particles.</p>   |
| <ul style="list-style-type: none"> <li>▪ Repeat the preceding step until mouth is free of particles, clean and remove receptacle and help patient wipe the mouth.</li> </ul>  | <p>Ensures that mouth is thoroughly clean and breath refreshed.</p>   |
| <ul style="list-style-type: none"> <li>▪ Observe the mouth tissues closely.</li> </ul>  | <p>The mouth is examined for changes in condition in respect to moisture, cleanliness, infected or bleeding areas, ulcer etc.</p> |



- Replace artificial dentures if indicated      Enhances patient's self esteem and usage.
- Lubricate client's lips with petroleum jelly      Prevents cracking of the lip due to dehydration and to increase patient's comfort.
- Remove and dispose of equipment appropriately.      Proper disposal keeps patient environment clean and makes patient comfortable.
- In cases where the patient's teeth are wholly dentures, remove the dentures using gloves and lower it in the denture container.      Removal facilitates thorough cleaning of the dentures.
- Take denture container to the sink; handle carefully taking care not to drop the dentures.      Dentures are fragile and expensive, and the patient is handicapped without them.
- Place a washcloth in the bowl of the sink      This is to prevent damage in case of accidental dropping of dentures.
- Use a toothbrush or special stiff-bristled brush to scrub the dentures with a cleaning agent and tepid water. Rinse the dentures with tepid **not hot** running water.      Stiff toothbrush would facilitate removal of debris. Hot water could distort, pervert or cause dentures to bend or shrink unevenly. Rinsing removes the cleaning agent and food particles.
- Inspect and observe the dentures and the mouth particularly assessing whether the dentures are not defective.      Inspection and observation helps in ascertaining the state of cleanliness of the mouth and the fitness of the dentures.
- Return the dentures to the mouth and offer some mouthwash to rinse the mouth.      Ensures total cleanliness of the mouth.
- Assist patient as needed, wipe patient's hand and mouth with towel. If patient does not want to or cannot wear the dentures,      Dentures must be kept in water to preserve their fit and general quality; the colour may change if they become dry.

store them in an opaque denture container with water. Label the container with patient's name and identification number.

- In case of an unconscious patient or patient that is unable to follow verbal instruction, apply pressure to the outside of the lower jaw to open the mouth and keep it open gently with a mouth gag or a padded wooden spatula inserted to the side of the mouth. Enables the nurse to have access to inside the mouth there by facilitating oral care. The mouth care should be used with caution in order not to injure the patient.
- Roll cotton wool or gauze firmly over orange sticks or split wooden spatula. The cotton wool is wrapped securely over the orange stick or split wooden spatula so that it will not pull off during use.
- Moisten the wool or gauze slightly with mouth wash and carefully and sequentially clean the mouth with as many sponges as necessary until the mouth is clean. Facilitate the removal of debris and freshens breath.
- Then rinse the patient's mouth by drawing out 10mls of water or alcohol-free mouthwash into the syringe and injecting it gently into each side of the mouth. Careful delivery of solution from the syringe ensures that minimal amount of fluid are used and consequently prevent aspiration.
- Rinse the client's mouth by drawing about 10 ml of water or mouth wash into the syringe and injecting it gently into each side of the mouth. Rinsing removes loosened debris and makes the mouth taste fresher.
- Watch carefully to make sure that all the rinsing solution has drained out of the mouth into the basin. If not, suction the fluid from the mouth. Fluid remaining in the mouth may be aspirated to the lungs.

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▪ Repeat rinsing until the mouth is free of the cleansing lotion.</li> </ul> | <p>If lotion is left in the mouth, it may be irritating to the mouth.</p>                 |
| <ul style="list-style-type: none"> <li>▪ Lubricate client's lips with petroleum jelly</li> </ul>                    | <p>Prevents cracking of the lip due to dehydration and to increase patient's comfort.</p> |

### **Evaluation**

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|--|--|
| <ul style="list-style-type: none"> <li>▪ Evaluate status of oral tissues, lips and tongue; any irritation, dryness or lesions</li> </ul> | <p>Helps to assess whether the intervention impacts positively on the health of the patient.</p> |
| <ul style="list-style-type: none"> <li>▪ Document and report significant findings.</li> </ul>  | <p>Enhances accountability and continuity of care.</p>   |

## **3.3 Bed Bath**

### **Definition**

This is the process of removing accumulated oil, perspiration, dead skin cells, and some bacteria.

### **Objectives**

- Helps to remove transient micro organisms, body secretions and excretions, and dead skin cells.
- Stimulates circulation to the skin.
- Produce a sense of well-being.
- Promotes relaxation and comfort.
- Prevents or eliminates unpleasant body odours.
- Induce sleep.
- Reduces body temperature.
- Provides the nurse with an opportunity for health assessment and health teaching.
- Boost patient morale, emotional and mental well-being as well as promoting patient's self-image.

- The process of building rapport may begin during the initial bath.
- The bath aids in the development of the therapeutic nurse-patient relationship as the patient has the nurse's undivided attention.

### Basic Principles

- Follow **infection control guidelines** because bathing increases the chance of exposure to body fluids.
- Encourage **personal choice and participation** in care decisions when possible.
- Protect your patient's right to **privacy and confidentiality** of information.
- Promote **comfort and safety**.
- Use **proper body mechanics** to protect your patient's safety as well as your own.
- Select **equipment based on your patient needs and agency policy**.

### Equipment

▪ Warm Water between 38 <sup>C</sup> and 46 <sup>C</sup>	▪ Basin
▪ Soap	▪ Two bath towels
▪ Face and body flannel	▪ Bath blanket
▪ Gloves (if giving perineal care)	▪ Additional bed linen and towels, if required
▪ Hygiene supplies such as lotion, powder, and deodorant.	▪ Clean gown or pyjamas as needed.
▪ Urinal or bedpan	▪

### **Suggested Actions Assessment**

### **Rationale**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>▪ Read the nursing report and care plan.</li> </ul>  | <p>To ascertain need for bedbath.</p>  |
| <ul style="list-style-type: none"> <li>▪ Assess the condition of the hair and skin (colour, texture and turgor; pigmented spots; lesions; excoriations; and abrasions)</li> </ul> | <p>To determine the hygienic status of the patient and need to pay special attention to some parts of the body.</p>  |
| <ul style="list-style-type: none"> <li>▪ Assess for presence of pain and need for adjunct measures (e.g. analgesics) before the bath.</li> </ul>                                  | <p>Demonstrate concern for patient comfort as well as ensuring patient's cooperation.</p>  |
| <ul style="list-style-type: none"> <li>▪ Assess range of motion of the joints and any other aspects of health that affects the bathing process.</li> </ul>                        | <p>This helps to identify any limitation in mobility of part of the body.</p>  |
| <ul style="list-style-type: none"> <li>▪ Assess for need of special equipment, special needs of client.</li> </ul>  | <p>It gives an organised working environment for the nurse.</p>  |
| <ul style="list-style-type: none"> <li>▪ Inquire if the client needs a bedpan or urinal, if he wishes to defecate or urinate.</li> </ul>  | <p>Warm bath or activity may stimulate the urge to void or defecate. The client will be more comfortable after voiding. Voiding before cleaning the perineum is advisable.</p> |

### **Planning**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>▪ Inform, take consent and ask for preferences of client</li> </ul>                                 | <p>This gives the patient a sense of belonging</p>   |
| <ul style="list-style-type: none"> <li>▪ Invite a parent or family member to participate if desired and with consent of client.</li> </ul> | <p>It provides sense of security for the patient</p> |
| <ul style="list-style-type: none"> <li>▪ Request for an assistance from</li> </ul>   | <p>One may need extra hands during</p>               |

- |   |   |
|---|---|
| among nursing staff and give information on nature of assistance required   | the procedure   |
| <ul style="list-style-type: none"> <li>▪ Close the windows and doors to make sure the room is free from draught.</li> <li>▪ Provide privacy by drawing the curtains or closing the door.</li> <li>▪ Lower head of bed and remove pillows if permitted.</li> <li>▪ Remove the top and bottom linen and replace it with bath blankets.</li> <li>▪ Remove all patients clothing.</li> <li>▪ Avoid undue exposure.</li> <li>▪ Maintain temperature of water</li> <li>• Fold wash cloth to avoid dripping (bath mitt)</li> </ul> | <p>Air current increases loss of heat by convection.</p> <p>Hygiene is a personal matter.</p> <p>This avoids undue reaching and straining and promotes good body mechanics.</p> <p>Bath blanket provides comfort, warm, and privacy.</p> <p>Hygiene is a personal matter.</p> <p>This provides warmth and undue exposure</p> <p>Appropriate temperature is necessary for comfort and normal physiological functioning</p> <p>Folded cloth retains heat and water than a loosely held one and prevents end of washcloth from dragging across the skin.</p> |

## Implementation

### Wash the face

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Place one towel across the patient's chest</li> <li>• Begin the bath at the cleanest area and work downward toward the feet.</li> <li>• Wash the client's face with water only, if he doesn't want soap and dry them well.</li> </ul> | <p>Prevent the bed linen from getting wet</p> <p>This allows for individual preference</p> |
|--|--|

- Wash, rinse and dry client's face, neck and ears.
- Wipe from the inner to the outer canthus      This prevents secretion from entering the eye.
- Use a separate corner of the washcloth for each eye.      Using separate corners prevents transmitting micro organism from one eye to another.
- Assist or allow client to wash as desirable      This enhances client participation

#### Wash the arms and hands

- Place the bath towel lengthwise under the arm      It protects the bed from becoming wet.
- Wash, rinse and dry the arm using long, firm strokes from distal to proximal areas      Washing from the distal to proximal area promotes circulation by stimulating venous blood flow.
- Wash the axilla well      Due to increase of sweat pore and air makes the place conducive for the growth of microbes and the tendency for offensive odour.
- Repeat for the other arm
- Place a towel directly on the bed and put the basin on it      This protects the bed from getting wet.
- Place the client hands in the basin, wash rinse and dry the hands paying particular attention to the spaces in between the fingers      Many clients enjoying immersing their hands in the basin and washing themselves. Soaking loosens dirt under the nails.  
Firm strokes from distal to proximal area promote circulation by increasing venous return.
- Wash, rinse and dry the arm using long, firm strokes from distal to proximal areas.
- Repeat for the other arm

#### Wash the chest and abdomen

- Place the bath towel lengthwise over the chest and abdomen. This keeps the client warm while preventing undue exposure of the chest.

Wash, rinse, and dry the chest and abdomen, while giving special attention to the skin fold under the breast.

- Replace the bath blanket when the areas have been dry

Wash the legs and the feet

- Wrap one of the client's leg and the feet with the bath blanket; ensure that the pubic area is well covered.

Covering the perineum promotes privacy and maintains client's dignity.

Washing from the distal to proximal areas promotes circulation by stimulating venous blood flow.

- Expose the leg that is farthest from you by folding the bath blanket toward the other leg being careful to keep the perineum covered.

- Place the bath towel lengthwise under the other leg, and wash that leg. Use long, smooth, firm strokes, washing from the ankle to the knee to the thigh)

- Rinse and dry that leg.

Water may become dirty or cold

- Reverse the coverings, and repeat for the other leg.

- Wash the feet by placing them in the basin of water.

- Dry each foot and pay particular attention to the spaces between the toes.

Obtains fresh warm bathwater now or when



necessary

Wash the back and then  
the perineum

- Assist the client to a prone or side-lying position facing away from you. It provides proper body alignment and ensure comfort of the patient
- Place the bath towel lengthwise alongside the back and buttocks. This protect the bed linen from being wet
- Wash and dry the back, buttocks, and upper thighs paying particular attention to the gluteal folds. It ensures scrutiny washing of the unexposed area of the body.
- Assist the client to a supine position and determine whether the client can wash the perineal-genital area independently. Perineal region is a sensitive area and patient needs to be asked his preference.
- Note status of skin, client's strength and percentage of bath done without assistance. It helps the Nurse to determine coping level of the patient.
- Record assessment, such as excoriation in the folds beneath the breast or reddened areas over bony prominences and other relevant information. Enhances prompt identification of patient's health problems. Documentation also provides for accountability in nursing practice.

## **Evaluation**

1. Assess client's tolerance of procedures
2. Note skin status, client's strength and percentage of bath done without assistance
3. Record assessment, such as excoriation in the folds beneath the breast or reddened areas over bony prominences and other relevant information

## **Basic Care Procedures – Showering and Bed-Bathing**

***Suggested Student Responses While Viewing the Program*****Bed Bath**

1. Explain why it is necessary for the carrier or nurse to read the nursing care plan prior to preparing the patient for a bed bath.

***To be aware of the patient's strength, mobility and capabilities***

2. When does the carrier or nurse wash their hands?
  - a) Before the procedure
  - b) During the procedure
  - c) Before and after the procedure
  - d) On completion of the procedure
3. How do you prepare the surroundings?

***Ensure comfortable room temperature and privacy***

4. What do you do when you approach the patient?

***Introduce yourself, establish how the patient prefers to be addressed, e.g. Christian name or******Mr./Mrs/Miss and explain the procedure you are about to undertake***

5. Explain why it is important to offer the patient toilet facilities before the procedure?

***For the comfort of the patient***

6. What materials do you need and when do you collect and assemble them?

***What - toiletries, linen including bed linen, two towels, two face cloths, tooth brush/paste, hair brush/comb, shaving equipment, nail care items, makeup (if appropriate), clean clothes, gloves, and linen***

***When - prior to commencing procedure***

7. Where do you place the linen skip?
  - a) In the pan room/clean up room
  - b) In the passage outside the room
  - c) Nearby
8. When attending to a bed bath, what parts of the body do you wash and where do you start?

***Whole body starting with the face***

9. Explain the action you use to dry the patient and why.

***Pat, do not rub as it may damage fragile skin*****Basic Care Procedures – Showering and Bed-Bathing**

10. When drying the body, what areas do you pay particular attention to?

***The skin folds, e.g. under the breasts, perineal area, abdominal flap, groins and between the fingers and toes***

11. How do you ensure that the patient does not get cold throughout the procedure?

***Ensure the room temperature is comfortable and free of draughts, keep the patient covered and change the water frequently maintaining appropriate temperature***

12. How do you leave the patient on completion of the procedure?

***Warm, comfortable with all personal items within reach, e.g. glasses, drink, book, call bell*****Showering**

13. Explain the general preparation prior to showering.

***Read the nursing care plan, assess strength and mobility******Assemble the items as for bed bath but include non slip surface or bath mat, shower chair***

***Prepare the surroundings, attention to warmth, comfort, safety, and privacy of the patient***

***Introduce yourself and explain procedure***

***Offer toilet facilities prior to procedure***

14. Why is it important to assess for any assistance that may be required?

***To maintain the safety of the patient and encourage the patient to participate***

15. What sort of assistance may be provided?

***Another staff member, lifting machine or other aids to assist transfer, e.g. walking stick or wheel chair***

16. It is important to have the water temperature constant and at the right warmth. How is this achieved?

***Preset by a thermostatic valve***

17. What do you do if a patient collapses during the procedure?

***Seek assistance of other staff members alerting them via the nurse call bell system***

18. Why is it important to encourage the patient to participate?

***It promotes activity and range of movement, provides the patient with a sense of achievement, encourages independence rather than helplessness and dependency***

19. On the completion of the procedure it is important to attend the peripherals. What does this refer?

***Ensuring spectacles are cleaned, hearing aids are cleaned, no wax in either of the ears or the aids, batteries are functioning and the aids are correctly placed in the ears***

20. How should the bathroom be left on completion of the procedure?

***The bathroom should be left clean, tidy and free of any of the patient's personal items which should be returned to the bedside locker. All***

***soiled items such as linen, clothing and gloves should be disposed in the appropriate receptacles***

### **3.4 Bedmaking**

A clean comfortable bed is important for hospital patient, some of whom may have to spend varying length of time in bed because of illness, injury or treatments. Consequently, the need to improve and maintain, for as long as possible, the physical and psychological comfort of these patients as well as promoting sleep and optimal wellness forms the primary reason for bedmaking. A related reason is the need to relieve pressure from certain parts of the body and stimulate circulation thereby preventing the development of decubitus ulcer (pressure sore).

#### **Purpose: To**

- Promote patient physical and psychological comfort.
- Prevent cross-contamination.
- Receive patient for admission and from the theatre.
- Promote patient's optimum safety.
- Prevent development of decubitus ulcer by ensuring a crumb/creases-free bed.
- Beautify environment or for aesthetic purposes.
- Boost patient's morale.

#### **Definition and Types**

The process of applying or changing linens is what is referred to as bed making. It has also been described as the art of putting the bed in comfortable and suitable state for the patient. Types of bedmaking include:

- ***The Unoccupied Bed:*** There are two types of unoccupied bed viz – The Closed Bed and the Open Bed. A closed bed is the bed making process that is performed following the discharge or transfer of a patient when no new patient is expected. An Open Bed on the other hand is the bed making process that is carried out when the occupant is able to be up while the bed is being made i.e. the type that is made for an ambulant or out-of-bed patient.

- ***The Occupied Bed:*** Bed making process in which the bed is made while the patient is in it.
- ***Special Beds:*** These include – Fractured Bed (Characterized by a firm lying surface it offers the patient. It is often employed in the care of patient with back pain and those with fractures); Divided Bed (So named by the fashion in which it is made. Used mostly in the care of amputees. It is also employed after application of Plaster of Paris to enhance its dryness). Post Operative Bed/Operation Bed – This is the bed that is prepared to receive a post surgical patient with minimal disturbance. Cardiac Bed – Usually employed in the management of patients with cardiac and respiratory disorder to ease respiration and promote comfort. With the aid of the back rest and pillows that are arranged in arm-chair fashion, the patient is put in sitting position and a bed table with an extra pillow placed in front for the patient to lean on.

### **Special Appliances used in Bed making**

***Bed tables*** preferably of adjustable height for eating or leaning arms on when sitting upright or when in respiratory embarrassment.

***Bed cradles*** - Made of metal. Used for keeping the weight of bedclothes off the patient's legs or body, especially in weak or debilitated patients. Particularly useful after Plaster of Paris (POP) has been applied to fractured leg or patient with burns.

***Bed rest*** – Usually attached to but may be separate from the bed. More often than not metal but occasionally could be made of wood especially the separate type. Most commonly used in putting the patient in sitting up position with pillows placed between it and the patient.

***Bed elevators & bed blocks*** – A number of beds have elevators built into them so that the head or foot of the bed may be raised as required. In some cases, the elevators, which are usually metal, have several rungs at varying heights on which the bar of the bed may be supported at desired height.

Sometimes portable wooden bed block may be used for the same purpose. Such blocks usually have a depression at their tops into which the castors of the bed can fit. They also vary in height.

***Bed – strippers*** – These are stands placed at the foot of the bed over which bedclothes are draped during bedmaking. Sometimes, two chairs placed back to back can be improvised for this.

**Air rings /Air cushions/Foam rubber rings** – These may be placed under the patient's buttocks to relieve pressure.

**Fracture boards** – Wooden. May be placed under the mattress to provide a firmer base on which to lie. In other words, they prevent the mattress from sagging. Patients with spinal conditions, back injuries and some fractures find this most helpful.

**Sand bags** – These are made of impermeable materials, which are filled with sand. They are used for immobilisation of limb(s) in the treatment of special conditions e.g. amputation to control phantom movement/pain. They must always be covered with cotton.

**Hot water bottles** – These are made of rubber or aluminum. They are used to give added warmth to patient. However, this is being discouraged to avoid burning the patient.

**Others** are Drip stand, Bed stirrup e.t.c

### **Basic Principles**

Bed making is essentially a two-man procedure. Some of the principles guiding this procedure are outlined below:

**Principle of Organisation** – Bedclothes and other materials needed must be arranged in order of priority. The two nurses must work from top to bottom of the bed. They must work in unison/harmony i.e. there must be synchronicity of action; or uniformity of action.

**Principle of Body Mechanics** – Use proper body mechanics. Body mechanics is described as the use of the safest and most efficient methods of moving and lifting i.e. the use of mechanical principles as applied to human body. Maintain good body alignment. It is easier to pull, push, or roll an object than to lift it. So, as much as possible, push, roll, rather than lift. Work smoothly and rhythmically. If you must lift, remember that it takes less effort to lift an object when you work as close to it as possible. Use your leg and arm muscle as much as possible and your back muscles, which are not as strong, as little as possible. Avoid reaching. Rocking backward or forward on your feet uses your body weight as a force for pulling or pushing. Always use your own weight to counteract the weight of the object or client/patient being lifted (Roark, 1995).  
[http://www.brooksidepress.org/Products/Nursing\\_Fundamentals](http://www.brooksidepress.org/Products/Nursing_Fundamentals)).

**Personal Choice** – Encourage personal choice and participation in care decision as much as possible. Any conversation during bed-making

should include the patient and should not be on personal matters between the nurses.

***Principle of Comfort and Safety*** – Promote comfort and safety. Support the patient as necessary. The two nurses must maintain a near erect position and avoid straining or overstretching their back to prevent injury.

The bed should be crump and wrinkle-free to promote patient comfort and prevent development of decubitus ulcer. Always lift the patient off the bed or roll him from side to side in case of occupied bed. On no account should the patient be dragged on bed. Call for help when necessary to move heavy or very ill patient. Be sure that the patient is comfortable after bed making.

***Principle of Asepsis / Infection Control Guidelines*** – Follow infection control guidelines because bedmaking increases the chance of exposure and transmission of microorganisms. Note that patients are often less resistant to infections because of the stress resulting from an existing disease process. Therefore put off fans during the bedmaking. Avoid jarring or flying of bed sheets in the air and do not allow beddings to drag on the floor. This is to prevent cross infection. Prevent uniforms from touching bedclothes. Fold and place on chair linen to be reused. Soak and rinse linen soiled with faeces or blood before placing in hamper and always have a receptacle or hamper on hand for dumping soiled linen. Lastly, ensure that hands are washed before and after the procedure.

***Principle of Privacy and Confidentiality*** – Protect privacy and confidentiality. Keep patient well covered throughout the procedure.

***Appropriate Equipment*** – Select equipment based on patient's needs and agency policy.

***Principle of Time Management*** – The goal here is speed and accuracy. This implies that the two nurses must work with utmost speed while not denigrating on accuracy of actions. Besides there must be economy of movement.

### **When does the bed get changed?**

- Usually after client's bath.
- When bed is rumpled and client is sitting out of bed.
- When client is out of room for tests.
- After meals, if eating in bed.
- When linen are soiled or wet.



- Throughout the day as often as necessary.

## **Making the Unoccupied Bed**

### **Equipments Needed**

1. Cotton quilted mattress cover.
2. 2 large sheets.
3. Rubber or plastic draw sheet, if it is the policy to use one.
4. Cotton draw sheet.
5. Blanket, if needed.
6. Bedspread/Counterpane.
7. Pillowcase for each pillow used.
8. Hamper.

### **Planning**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>▪ Wash your hands scrupulously before selecting linen.</li> </ul> | Unclean hands may spread disease germs to clean linen and to patients. |
| <ul style="list-style-type: none"> <li>▪ Take everything needed to patient unit.</li> </ul>              | Demonstrates organisation.   |
| <ul style="list-style-type: none"> <li>➤ Put off all fans.</li> </ul>                                    | Fanning soiled linen can aid spread of microorganisms through the air. |

### **Implementation**

#### **Required Steps**

#### **Rationale**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>▪ Wash your hands before selecting linen.</li> </ul> | Unclean hands may spread disease germs to clean linen and to patients. |
| <ul style="list-style-type: none"> <li>▪ Take everything needed to patient unit.</li> </ul> | Demonstrates organisation.   |

- Place linen on straight chair near foot of bed. Stack the items in order of use, that is, bedspread and pillowcase on bottom and draw mackintosh and bottom sheet on top.

Stacking linens in this manner saves time and effort later on.
- Adjust bed to suitable height and ensure that wheels are locked.

The higher the bed the lesser the strain on the back and leg muscles and immobilizing the bed makes bedmaking relatively stress-free.
- Place the folded quilted mattress pad on near side of bed and unfold it without lifting or shaking it out.

Lifting and shaking any item of linen may stir up dust and lint which may carry disease-causing organisms.
- Place folded sheet on near side of bed and unfold it lengthwise in the same manner described above, that is, without shaking or flapping it out. Arrange sheet in this way:

Lifting and flapping linen at shoulder level to unfold it also causes unnecessary strain and fatigue on the back, shoulder, and arm muscles.
- (a) Spread the bottom sheet right side up, wide hem at top, even and straight.

Placing the bottom sheet correctly is the most important step in bedmaking.
- (b) Allow 15 to 18 inches at head of bed to tuck under mattress. If the sheet is short, tuck in at top and at sides, and keep taut.

The foundation sheet should be secured against anything that might tend to loosen it. For this reason, never skimp on this 15–to–18 inches allowance to tuck under head of mattress. Covering foot of mattress is far less important.
- (c) With center of sheet at center of bed, fanfold the far half of sheet beyond the center of bed.

The sheet is doubled back on itself in folds of several inches - like a fan. Placing this foundation sheet straight on the bed is also important.
- Lift the head of mattress with one hand and pull sheet under the mattress with the other hand. See that material is smooth after tucking under. Leave no wrinkles.

If you face in the direction of your work and move along in this position, you will avoid twisting groups of muscles, thus reducing strain and fatigue. A sheet that is even but just a little crooked on the base will always have wrinkles.

- Make a mitered corner at head of mattress. A mitered corner will hold the bedding firmly and makes bed attractive.

How to mitered a corner of a sheet or how to make half envelope corner:

- (a) Take corner of sheet between thumb and finger and draw around corner of the mattress.
- (b) At the same time, slip other hand under side edge of sheet and draw upward into a diagonal fold.
- (c) Lay this fold up over the mattress.
- (d) Now turn under mattress the part of sheet left hanging.
- (e) Drop upper fold and tuck in under mattress.

This makes a box like corner.

- Grasping bottom sheet with both hands, tuck under mattress along side of bed, tightening and smoothing it, as you move from head to foot of bed. Keep your back as straight as possible and feet slightly separated. Helps in preventing wrinkles and securing bottom sheet firmly. By keeping your back straight and feet slightly separated you will reduce strain.
- If rubber draw sheet is used, Prevents bed from getting soiled place it about 12 to 15 inches and soaked. This not only helps to from head of mattress. Grasp maintain the bed as safe and with both hands, holding palms comfortable as possible for the downward on level with mattress; patient, it also helps to prolong tighten the sheet and tuck the lifespan of the bed. When smoothly under side of mattress. holding the sheet with palms Where plasticized mattresses are downward, the strong muscles of

used, it is often the policy to omit the shoulders and arms are used. a waterproof sheet. It is sometimes placed over the mattress and under the quilted mattress pad.

- Cover rubber sheet with cotton draw sheet or a large sheet folded once cross-wise. Place this cotton sheet about two or three inches higher than the rubber sheet and see that it is completely covered. Lying directly on even a small strip of the rubber sheet will be uncomfortable and may cause skin irritation to patient.
- Tuck cotton draw sheet smoothly under side of mattresses simultaneously on both sides. Fanfold far side of the sheet at center of bed. Guarantees availability of an extra dry section of draw sheet when a side gets wet and there is no spare draw sheet.

### **Now you are ready to make the top part of the bed**

- Place the folded top sheet on near side of bed and unfold it without shaking it and flapping it. Spread the top sheet even and straight, right side down, with wide hem at top, and upper edge of sheet even with the head of mattress and ensuring that center of sheet is straight and at the center of bed. Lifting and flapping linen at shoulder level to unfold it causes unnecessary strain and fatigue on the back, shoulder, and arm muscles. If wrong side of hem is up, when the top edge of the sheet is turned down over the edge of bedspread, the right side of hem will show.
- Tuck sheet (and blanket if used) under foot of mattress and make a mitered corner. Tuck under mattress at corner but DO NOT tuck in along the side of the bed. Allow it to hang free. A mitered corner will hold the bedding firmly and makes bed attractive. When the top sheet, blanket and bed spread are allowed to hang free, it creates enough room for patient to move freely in bed without the bed getting roughened.
- Place folded spread on bed and unfold it in such a way that it is centered (its upper edge even with head of mattress) and hangs evenly, covering the sheet and blanket completely. Lay spread smooth and even.

- Tuck bedspread under the mattress at foot of bed. Make a mitered corner on near side, but do not tuck the finished corner under mattress. Promotes aesthetics.
- Make up the pillow this way: Facilitates the covering of pillow without denigrating on the principle of asepsis and body mechanics.
  - (a) Slip your hand inside pillowcase and grasp the inside seam at end of case.
  - (b) Still holding the inside seam, place this same hand over the end of pillow and pull on pillowcase. This also promotes aesthetics.
  - (c) Fit corners of case over corners of pillow.
  - (d) If pillowcase is considerably wider than the pillow, tuck the excess material into a smooth fold on one side, making the case fit well over the pillow. Keep this tuck in place when placing on bed.
- Place the pillow(s) flat at the head of bed with open end away from door. Placing open end away from door also promotes aesthetics.
- If you wish to "open" this bed, here is one of various ways it might be done: Opening the bed, that is, turning the covers down, makes it look more inviting to the patient sitting for a time in a chair. Besides, it makes it easier to assist patient back in bed.
  - (a) With both hands grasp the upper edge of the top covers; carefully bring your arms toward foot of bed, until the upper edge of cuff is at the foot of the bed.
  - (b) With hands still in place, bring the cuff up to the fold halfway up the bed. Straighten and smoothen the cuff.

- If you wish a "closed" bed for a patient not yet admitted, the upper edge of bedspread is left even with the head of mattress. Indicates that bed is still unoccupied.
- When the bed has been made, the nurse must see that the locker has been returned to its position at the bedside and that the two chairs used have been replaced in their proper position. Demonstrate organisation and concern for patient's safety.

### **Admission Bed**

**Requirements:** Same as for simple Hospital Bed plus the following:

- 1 bath towel
- Clean nightdress or pyjamas

### **Procedure:**

1. Make up bed to the draw sheet as for the simple hospital bed
2. Spread on the bed the top sheet make as usual and cover with counterpane/bed spread
3. Place the pyjamas or night dress on the bed

**Operation Bed** – This is a special kind of bed that is purposely made to receive patient post surgery.

### **Purpose:** To

- Get patient into bed as quickly and safely as possible.
- Prevent shock.
- Protect bed linen from vomits and saliva.
- Clear the mouth of post anesthetic thereby maintaining a clear airway.

**Requirements:** Same as for simple unoccupied bed but plus the following:

- Dressing mackintosh and towel
- Bed elevator or blocks
- Drip stand

- Oxygen apparatus
- Suctioning machine
- Bedside tray containing:
  - One Sponge holding forceps or long artery forceps
  - A pair of tongue holding forceps
  - One oxygen spanner
  - Cold water in a gallipot
  - Vomit bowl or receiver
  - A pair of dissecting forceps
  - Tongue depressor
  - Mouth wash
  - Sterile gauze in a bowl
  - Receiver for used swabs

**Assessment:** As for simple unoccupied bed.

**Planning:** As for simple unoccupied bed.

### Implementation

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>▪ Assemble requirements.</li> </ul>  | <p>Demonstrates organisation.</p>  |
| <ul style="list-style-type: none"> <li>▪ Make foundation of bed in usual manner.</li> </ul>   | <p>Shows understanding of correct sequence of procedure.</p>   |
| <ul style="list-style-type: none"> <li>▪ Place top linen on bed in usual manner; omit tucking in at foot of bed. Fold top clothes into three, and then fold in the edges in an envelope manner to one side of the bed.</li> </ul> | <p>Facilitate transfer of the returning patient from the stretcher to the bed without undue exposure and strain.</p>   |
| <ul style="list-style-type: none"> <li>▪ Place dressing mackintosh and towel to replace the pillow.</li> </ul>  | <p>The use of pillows is contraindicated in patients recovering from certain general anesthesia. The mackintosh protects the bed from getting soaked with secretion.</p> |
| <ul style="list-style-type: none"> <li>▪ Provide and place appropriately any other bed protection according to the type of operation being performed.</li> </ul>  | <p>Prevents bed from getting soaked and stained.</p>   |

- Place chair on the side of bed where linen has been folded and bed table/bedside locker away from bed. This is to allow stretcher as near the bed as possible.
- Place prepared post-anesthetic tray on beside locker and oxygen cylinder nearby. For emergency resuscitation.
- Position the movable drip stand close to the bed; the suctioning machine and bed elevator also at easy reach. Facilitates intravenous therapy, suctioning, and enhances shock management if the need arises.

**Cardiac Bed** – This is another special bed made for patients with cardiac failure and those with respiratory disease experiencing respiratory embarrassment. The patient finds it easier to breathe when nursed on this bed as it affords them to assume an upright position.

### Requirements

In addition to the basic requirement for bed making, the following extra appliances are used:

- Back rest
- 5 pillows or more as needed by patient
- Bed table and soft pillow
- Air-ring
- Bed cradle (if there is pedal oedema)
- Sand bags or pillows to rest the feet
- Oxygen apparatus and its accessories
- Sputum mug
- Call bell

**Assessment:** As for simple unoccupied bed.



**Planning:** As for simple unoccupied bed.

### Implementation

- |   |   |
|---|---|
| • Assemble requirements.  | Demonstrates organisation.  |
| • Make up the bed until the draw sheet is in position.  | Demonstrates knowledge of correct sequence of procedure.  |
| • Place back rest at the top of the bed and place pillows on the back rest in an arm-chair fashion. | Enables the patient to assume and maintain a near erect position while still offering as much comfort as possible.        |
| • Place the air-ring on the middle of the draw sheet.   | Relieves pressure on the gluteal muscles and thereby helping to prevent the development of decubitus ulcer.               |
| • Place the sand bags at the foot of the bed.   | Offers support to the feet and prevent foot drop.   |
| • Place the bed cradle on the bottom part of the bed. Cover it with top bed clothes.                | Takes the weight of top bed linens off the possibly oedematus patient's legs thereby preventing decubitus ulcer.          |
| • Place the bed table with soft pillow in front of the patient.                                     | For client to lean forward: for comfort and to ease respiration. Besides, could be used for eating, writing, and reading. |
| • Place the sputum mug and call bell on the table.  | Prevents indiscriminate spitting of sputum on the floor and helps to summon assistance and relieve the stress of talking. |
| • Place the oxygen cylinder near the top of the bed in case the patient needs it.                   | For easy reach when the need for oxygen therapy arises.   |
| • Tidy patients unit.   | Promotes aesthetic feelings.  |

**Amputation Bed (Below Knee)** – This is yet another special bed for nursing patient who had just undergone below knee amputation.

### Requirements

In addition to the basic requirements for making simple unoccupied bed, the following extra bed appliances are used:

- Dressing mackintosh and towel; dressing towel
- 2 sand bags
- Bed cradle
- Bed elevators
- 1 bed sheet

**Assessment:** As for simple unoccupied bed.

**Planning:** As for simple unoccupied bed.

### **Implementation**

- |  |  |
|--|--|
| ▪ Assemble requirements.   | Demonstrates organisation.                               |
| ▪ Make foundation of bed as usual.   | Demonstrates knowledge of correct sequence of procedure. |
| ▪ Place pillows as required.   | Promotes comfort.  |
| ▪ Place dressing mackintosh and towel on bed where the stump will be.        |  |
| ▪ Arrange dressing towel over the stump, fix in position with two sand-bags. |  |
| ▪ The bed sheet is placed over the patient' chest, trunk and good leg.       |  |
| ▪ Place small bed cradle over stump.   |  |
| ▪ Spread top clothes length –wise over bed and bed cradle.                   |  |
| ▪ Fold back on the cradle to allow for easy observation of the               |  |

stump.

- Tuck in sides of top bed clothes.
- Place bed elevator near the bed.

### **Amputation Bed (Above Knee)**

Requirement:

As for simple hospital Bed plus:

1 set of extra top clothes

Dressing mackintosh and towel

2 covered sand bags

Dressing towel

Bed cradle

Bed elevator

### **Procedure**

1. Make foundation of bed as usual
2. Place dressing mackintosh and towel, under stump
3. Arrange roller bandage over stump
4. Support sides with two sand bags
5. Place a small bed cradle over stump
6. Top bedclothes are made into two packs. The top pack must overlap the lower pack by about 20cm
7. The lower pack is tucked in at the foot of the bed
8. The two sets of top clothes are tucked in at the sides of the unaffected leg

9. Place bed elevator ready near bed.

### **Changing of Bottom Sheet on an Occupied Bed**

#### **Purpose**

To prepare a clean unwrinkled bed surface with a minimum of energy expenditure while a client remains in bed.

To create a bed that provides for easy access

To contribute to patient's comfort with little or no exposure

Moving patient from top to bottom

#### **Requirements**

2 Chairs placed back to back at foot of bed

Clean sheets and any other clean requirements placed on the trolley

Dirty linen bag

#### **Screen**

Latex gloves (when necessary)-

#### **Method**

1. Provide privacy by screening. Remove pillow
2. Strip the top of the bed in the usual manner, leaving the patient covered by the top sheet
3. Move patient towards the foot of the bed
4. Untuck the bottom sheet roll down, pull mattress cover straight
5. Unfold the clean sheet and tuck in at the top loosely or the lower end and pull down to reach the buttocks
6. Move patient to the top of the bed to sit on the clean sheet already placed there
7. Untuck bottom sheet at the bottom of bed. Remove and place in the dirty linen bin

8. Pull mattress cover straight. Pull the clean sheets and tuck in at the bottom, then pull and tuck in at the middle
9. Change pillow cases if necessary and place the pillow on the bed
10. Move patient to the center of the bed and make patient comfortable
11. Make up the top of the bed in the usual manner.

### **Making the Occupied bed**

#### **Points to Keep in Mind**

1. Making the bed with a patient in it is necessary when the patient is too ill or disabled to be out of bed. It is a long procedure and if not accomplished skillfully, can be an extremely exhausting experience for the patient. It is therefore a time when individual adjustments are needed to save time and to lessen the exertion of the patient. And it calls for skills in handling each step smoothly and avoiding irritations, such as bumping and jarring the bed.
2. It is also a time to observe the patient and to give him chance to talk about anything on his mind. This may be done by listening, not talking about your own problems and experiences.
3. If this procedure follows the patient's bath in bed, the first steps as given here will have already been accomplished. For instance, all the top linen would have been removed and the patient covered with a bath blanket. However, to give a complete description here, this procedure starts with all bed linens in place.

#### **Equipments Needed**

1. 2 large sheets, or as many as policy calls for
2. Cotton draw sheet, if used. Top sheet is now used for draw sheet
3. Bedspread
4. Pillowcase for each pillow
5. Bath blanket.

#### **Important Steps**

#### **Reasons for Action**

- |     |   |  |
|-----|---|--|
| 1.  | Wash your hands before selecting<br>Take everything needed to<br>unit and stack items on<br>chair in order of use.  | If this procedure follows linens.<br>the patient's bath, start patient's<br>with step 5 and loosen all the<br>lower sheets. The reason is that<br>the clean linen will already be<br>stacked on chair at bedside. If top<br>covers are removed and bath<br>blanket is on the patient, move on<br>to step 10. |
| 2.  | Provide for privacy by placing<br>screen or pulling curtain.  |  |
| 3.  | Adjust the bed to level position and<br>lock the wheels. Remove all but one<br>pillow from under the patient's head.  |  |
| 4.  | See that laundry bag is in a place<br>Close-by.   |  |
| 5.  | Loosen all bottom sheets all around<br>the bed.   | You will be delayed later if<br>sheets are still tucked securely<br>under mattress.  |
| 6.  | Remove bedspread by grasping it<br>at top edge and folding it to foot<br>of bed. If it is not to be used again,<br>fold and bunch it and drop in laundry<br>hamper. |  |
| 7.  | Place the folded bath blanket on<br>near side of bed and unfold it so<br>that he can be sure that he will not<br>be too exposed.                                    | If patient is not familiar with this<br>step for removing sheet, tell him<br>what you will do. If patient is not<br>ill, can ask him to hold the top<br>edge of bath blanket.  |
| 13. | Slip hands under side of blanket<br>and grasp upper edge of sheet and<br>pull it from under the blanket to<br>the foot of bed.                                      |  |
| 9.  | Bring the top and bottom hems<br>together and fold the sheet on<br>lower part of bed without shaking<br>it out.   | Shaking and flapping linens<br>(especially used linen) stirs up<br>dust and lint which carry disease-<br>causing organisms into the air.   |
| 10. | Place folded top sheet on back of<br>chair.   | This top sheet will be used again<br>as a bottom sheet or to cover<br>rubber draw sheet.   |
| 11. | Go to other side of bed and help<br>patient move toward you, then turn  | It is much easier to remove sheets<br>and replace them if there are no   |

- him to side-lying position, facing you. Position him in good alignment without pillow, if this is not too uncomfortable for him. pillows on the sheets. However, one pillow can be managed, if patient is uncomfortable without it.
12. Raise the side rail on that side of bed before returning to your original position. If patient is turned away from you to his side, he may just keep on turning and fall out of bed. There is real danger of this.
13. Fold the near half of used cotton draw sheet close against the patient's back.
14. Fanfold the rubber draw sheet smoothly to the back of patient. These sheets are folded separately. Because each will be removed later (except the rubber draw sheet) one at a time.
15. Fanfold the entire length of the used bottom sheet to the center of bed and close to the patient's back. Tuck each sheet under the one before.
16. Place the folded clean bottom sheet on the near side of bed and unfold it length-wise in this manner:
- (a) With center fold straight with Face the direction of your work mattress with it. and move, Keeping back straight
  - (b) Allow 15 to 18 inches at head of mattress. but not rigid; bend at hips. Knees should be slightly flexed and feet apart throughout action.
  - (c) With bottom hem even with foot of mattress. This sheet will be placed under the patient later. Do not wrinkle or pull it out of shape.
  - (d) Fanfold far half of sheet carefully to patient's back
17. Lift corner of mattress with one hand as you tuck sheet under head of mattress with the other hand.
18. Make a mitered corner at head of mattress
19. Tuck sheet smoothly under mattress along side of bed from head to foot.

20. Locate the free end of the rubber sheet near patient and pull it toward you, without disturbing the folded bottom sheet
21. Straighten the rubber sheet in place and tuck it under mattress at side of bed.  
Make sure that rubber sheet will never be next to patient's skin, because it will be irritating.  
Allow the cotton draw sheet to overlap the rubber sheet by two or three inches at upper and lower edges.
22. Place the used top sheet (folded once crosswise) over the rubber draw sheet and completely cover it. Fold far half of sheet next to patient's back. Tuck hanging part under mattress, and make sure both rubber sheet and draw sheet are smooth.
23. Let the patient know that it is time for him to roll back toward you and that he is to roll over the folded sheets which are at the center of the bed.  
At this point, the patient has to roll over the clean as well as soiled linen folded next to him.
24. First, cradle the patient's feet and lower legs in your arms and move towards you over the "bump" of folded line.  
Try to keep the patient's body in as good' alignment as possible. It will be much - less strain on him. Also, it will cause you less strain and bath blanket folded up on your knees slightly flexed. Keep one foot a little in front of the other. This allows you to use the long thigh muscles rather than the small muscles of the back.
25. Next, give patient the assistance he needs to move his hips and shoulders as he rolls toward you to his side.
26. Reach over the patient and push folded sheets away from patient's back toward the far side of bed.  
If patient has a drainage tube of any kind, see that there is enough slack in tube for turning.
27. Raise the side guard on your side, then go the other side of bed.  
Use these side guards if available because the patient may misjudge



- the width of bed and move to near edge.
28. Lower side guard. Starting with soiled bottom sheet, fold and as you remove it from the bed. Hold linens away from uniform and drop in bunch laundry it hamper.
  29. Remove and discard cotton draw sheet in the same manner. If patient is becoming uncomfortable Without a pillow, reach for the one you put aside earlier, change pillowcase and place under patient's head.
  30. Pull clean bottom sheet in place; tuck under mattress at head of bed; make mitered corner and tuck under mattress along side of bed.
  31. Pull both draw sheets toward you and straighten them. Tuck free end of rubber draw sheet under mattress, keeping it smooth and tight.
  32. Straighten clean cotton draw sheet in place over rubber sheet. With both hands (palms down), with mattress. Pull it tightly and tuck under side of mattress without causing the patient to roll out of bed. You may cause the patient to roll out of bed. There is no reason to overdo the tugging Grasping and pulling at this step. If you lift the draw sheet up higher than mattress level, hold it at level The cause and effect of this is something like using crowbar to pry or lifting it up,
  33. Place clean top sheet on near side of bed and unfold it on blanket top of bath blanket
  34. Have patient hold upper edge of sheet while you fold bath blanket to foot of bed and remove it. This is done to prevent exposing patient. At the same time, folding the blanket toward the foot of bed under the top sheet does not stir up dust.
  35. Arrange top sheet to extend high enough to cover patient's shoulders; leave excess at foot of bed; see that it hangs evenly on both sides.
  36. Before tucking sheet (and blanket, if used) under foot of mattress, make a toe pleat to allow Tight top covers not only are uncomfortable for patient's feet but may cause a serious condition.

- |   |  |
|---|--|
| <p>room for patient's feet. When blanket is used, make the pleat in sheet and blanket together. The toe pleat may be made in this way.</p>  | <p>If the feet are restrained in a forward position over a period of time, the muscles of the soles of the feet are weakened. This results in a serious deformity called drop foot.</p>  |
| <p>37. Place folded bedspread on near side of bed and unfold as described earlier. Arrange it in this way:</p> <p style="margin-left: 40px;">(a) With upper edge high enough to cover patient's shoulders.</p> <p style="margin-left: 40px;">(b) Center it so it will hang evenly on both sides.</p> <p style="margin-left: 40px;">(c) With excess at foot of bed to tuck under mattress and to loosen over patient's feet.</p> | <p>Another type of toe pleat may be made from the width of the sheet and blanket (if used)</p>   |
| <p>38. Tuck bedspread under mattress at foot of bed. Make a corner but stop short of last step and do not tuck hanging part under mattress. Allow it to hang free.</p>  |  |
| <p>39. Fold top edge of spread down under edge of blanket, if used. Turn edge of top sheet down over spread making a cuff.</p>  | <p>During this long procedure it is easy to drift into the habit of chattering unceasingly to your patient. This may be tiresome to most patients.</p> <p>About this time before finishing procedure, check drainage tube, if any, and see that there are no kinks in tube which might stop the flow. Also see that signal cord is where patient can reach it.</p> |
| <p>40. Go to other side of bed and finish repeat steps above to second side of bed.</p>   |  |
| <p>41. Change pillowcase on remaining pillow in the manner described earlier. Smooth pillows and position under patient's head.</p>   |  |

## Evaluation

Inspect bed

– Clean

- Neat
- Wrinkle free

**When finished evaluate**

- Safety of bed position
- Call light
- Side rails
- Untidiness
- Personal belongings are within reach

**4.0 CONCLUSION**

While it is true that some patients are capable of meeting their own hygiene need, not a few are so much incapacitated by their ill health that they require the nurses' assistance to meet all their hygiene needs. The care of the mouth, hair, nails and skin are a routine part of daily nursing care and when these areas are left unattended, the patient looks and feels more miserable than his state of health warrants.

**5.0 SUMMARY**

In this unit we have described the procedures for hand washing, oral care, hair care, bed bath, and various bed making.

**6.0 TUTOR-MARKED ASSIGNMENT**

1. Identify articles/equipment required in the patient care area.
2. Maintain ward cleanliness and tidiness.
3. Maintain and take hospital equipment for repair when necessary.
4. Identify and apply the hospital fire, electrical and general safety measures when providing care for patients.
5. Identify guidelines for terminally cleaning the patient care unit.
6. Recognize rules for the use of disposable and non-disposable items.
7. Organize work efficiently.
8. Delegate, explain duties according to ward routines and responsibilities.
9. Recognize priorities in nursing care.
10. Develop a mastery of communication techniques as evidenced by candid, complete, concise, clear, concrete, cautious and correct communication with clients and other health professionals in a variety of settings.
11. Demonstrate correct sequence of activities during handing and taking over of patients and the ward unit.

**7.0 REFERENCES/FURTHER READING**

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## **UNIT 2      NUTRITION AND NASOGASTRIC PROCEDURES**

### **CONTENTS**

1.0	Introduction	
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### **1.0      INTRODUCTION**

Nutrition and health are inextricably interwoven. Dietary therapy has not only become an essential adjunct of care but the bedrock of treatment in some illnesses like chronic renal failure, diabetes mellitus, to mention a few (Locatelli, Grazian, Buccinati, Radaelli and Giangnade, 1991; Mitch, 1995; and Rosman, 1995). The link between diet, health, illness and indeed longevity is well documented in literature (Parry, 1985; Mainland 1998 and Turrel, 1998). While it is a general belief that to stay healthy, man must eat nutritious food that will enhance his growth, repair worn out tissue and fortify his immune system, it is not uncommon to find supposedly healthy individuals having a poor eating pattern. When illness sets in, this poor and inadequate food intake becomes amplified due to poor appetite, anxiety, strange hospital environment, negative effects of certain drugs, e.t.c. Yet the full benefit of hospital menu in terms of health promotion and maintenance can only be fully realized when it is adequately consumed by these patients.. This unit therefore discusses meal service, alternate feeding methods and related nasogastric procedures.

### **2.0      OBJECTIVES**

At the end of this unit, you should be able to:

- carry out routine meal service
- identify alternate feeding methods
- successfully conduct nasogastric intubation
- perform nasogastric and gastrostomy feeding.

### 3.0 MAIN CONTENT

#### 3.1 Serving of Meals

##### Equipments needed

Food trolley containing the following:

1. Dietary trays
2. Serving plates
3. Serving spoons
4. Cutleries
5. Drinking cups
6. Jug containing clean water
7. Napkins
8. Serviettes
9. Straws

Suggested Actions	Scientific Rationale
<b>Assessment</b>	
▪ Check on the usual time for meals	Facilitates planning.
▪ Determine which patients are undergoing tests, or for some other reasons require that food be withheld	Ensures that therapeutic outcomes are not affected by eating
▪ Note the type of diet that is currently prescribed for each patient.	Follows the patient therapeutic management plan
▪ Review patients case note for information concerning patients' food allergies or food intolerance.	Reduces the potential for adverse reactions

<b>Planning</b>	
▪ Inform patient about procedure and about designated mealtime	It prepares patient and ensures that food is served at its appropriate temperature
▪ Meet patients' needs for comfort, hygiene, and elimination before dietary trays arrive.	Promotes appetite and eating
▪ Help patient to sitting position as condition allows	Provides for patients' comfort and safety
▪ Remove unnecessary article from overhead table or bedside locker and place table or locker conveniently for the meal tray	Promotes patients' comfort and reduces inconveniences during mealtimes
<b>Implementation</b>	
▪ Wash hands before serving trays	Prevents transmission of microbes
▪ Deliver dietary trays containing diet in plates, one by one, as soon as possible	Facilitates enjoyment of eating through prompt delivery of food at its intended temperature.
▪ Ask patient to identify himself or herself by name	Avoids dietary errors
▪ Place the tray within the reach of patient	Provides ease of access to the food
▪ Spread diet cloth across the patients' chest	Protects patients' cloth from getting soiled
▪ Uncover the food and check its appearance	Ensures that tray is complete, orderly, and tidy
▪ Notice patients' reaction to the food	
▪ Check on patients' progress from time to time	Indicates a willingness to provide assistance
▪ Remove dietary tray and diet cloth when the patient has finished eating and leave patient	Restores order and cleanliness to patients' environment. Leaving patient in feeding position for a

to remain in the feeding position for a short while	short while helps the nurse to assess patient.
▪ Tidy bedclothes, replace lockers or tables with articles taken off	Restores order to patients' unit
▪ Record the amount of fluid consumed from the dietary tray on the patients' fluid chart, if patient fluid intake is being monitored	Ensures accurate fluid assessment
▪ Note the percentage of food that the patient has eaten	Ensures that dietary intake is documented
▪ Assist patient to brush or floss teeth, if desired	Removes food deposit that may support microbial growth
▪ Put patient back into comfortable position to rest	Demonstrate care and concern
<b>Evaluation</b>	
▪ Consumes a major portion of meal.	
▪ Claimed to be full / Express satiety.	

### 3.2 Nasogastric Intubation

#### Purpose

1. To administer tube feedings and medications to clients unable to eat by mouth or swallow without aspirating food or fluids into the lungs
2. To establish a means of suctioning stomach contents to prevent gastric distension, nausea and vomiting
3. To remove stomach contents for laboratory analysis
4. To lavage the stomach in case of poisoning or overdose of medications

#### Equipment

Large- or small- bore tube

Guidewire or stylet for small bore-tube



Solution basin filled with warm water

Nonallergenic adhesive tape

Disposable gloves

Water-soluble lubricant

Facial tissues

Glass of water and drinking straw

20-50ml syringe with an adapter

Basin

PH test strip or meter

Stethoscope

Disposable pad or towel

Clamp or plug (optional)

Suction apparatus if required

Gauze Square or plastic specimen bag and elastic band

Safety pins and elastic band

Suggested Actions	Rationale
<b>Assessment</b>	
<ul style="list-style-type: none"><li>Assesses for patency of nares and intactness of nasal tissues</li></ul>	To identify any obstruction liable to prevent intubation.

<ul style="list-style-type: none"> <li>Assesses presence of gag reflex</li> </ul>	Gag reflex will assist in pushing the tube down.
<ul style="list-style-type: none"> <li>Determines mental status of client or ability to cooperate with procedure</li> </ul>	To prevent patient from choking
<b>Planning</b>	
<ul style="list-style-type: none"> <li>Explain to the client what you plan to do</li> </ul>	To gain his consent and cooperation.
<ul style="list-style-type: none"> <li>Assist the client in a semi-fowler position if health permits</li> </ul>	To allow easy passage of the tube. This position also enables easy swallowing and ensures that the epiglottis is not constricting the oesophagus.
<ul style="list-style-type: none"> <li>Arrange a signal by which the patient can communicate if he/she wants the nurse to stop e.g. by raising his/her hands</li> </ul>	The patient is often less frightened if he/she feels able to have some control over the procedure.
<ul style="list-style-type: none"> <li>Place a towel or disposable pad across the chest</li> </ul>	To protect the patient and linen from water.
<ul style="list-style-type: none"> <li>Select the nostrils that has the greater airflow</li> </ul>	
<ul style="list-style-type: none"> <li>Use the tube to mark of the distance from the tip of the client's nose to the tip of the ear lobe and then to the tip of the sternum. Mark this length with adhesive tape if the tape does not have markings</li> </ul>	To indicate the length of the tube required for entry into the stomach
<b>Implementation</b>	
<ul style="list-style-type: none"> <li>Don disposable gloves</li> </ul>	To maintain asepsis
<ul style="list-style-type: none"> <li>Lubricate the tip of the tube with water soluble lubricant or water</li> </ul>	To reduce the friction between the mucous membranes and the tube.
<ul style="list-style-type: none"> <li>Ask the client to hyperextend the</li> </ul>	To facilitate the passage of the

neck, and gently advance the tube towards the nasopharynx	tube by following the natural anatomy of the nose.
<ul style="list-style-type: none"> <li>If the tube meets resistance, withdraw it, relubricate it, and insert it in the other nostril</li> </ul>	To prevent trauma to the nasal mucosa.
<ul style="list-style-type: none"> <li>In cooperation with the client, pass the tube 5-10 cm with each swallowing until the desired length is inserted.</li> </ul>	The swallowing action closes the glottis, enabling the tube to pass into the oesophagus.
<ul style="list-style-type: none"> <li>Ascertain correct placement of the tube by aspirating stomach content, and checking the PH, or auscultating air insufflation.</li> </ul>	To avoid placing the tube in the lung
<ul style="list-style-type: none"> <li>Secure the tube by taping it to the bridge of the client's nose. Secure the tube to the client's gown.</li> </ul>	To prevent the tube from dangling and pulling.
<b>Evaluation</b>	
<ul style="list-style-type: none"> <li>Determines the degree of client's comfort</li> </ul>	Patient will feel comfortable if the tube is well placed in the gastro intestinal tract.
<ul style="list-style-type: none"> <li>Determines client tolerance of the tube</li> </ul>	This is demonstrated by patient calmness and quietness.
<ul style="list-style-type: none"> <li>Assesses correct placement of nasogastric tube in the stomach</li> </ul>	Wrong placement may result in aspiration.
<ul style="list-style-type: none"> <li>Assesses colour and amount of gastric contents, if attached to suction or contents aspirated and document</li> </ul>	To confirm that the tube is in the stomach
<ul style="list-style-type: none"> <li>Document the type of tube inserted, date and time of tube insertion and client tolerance of the procedure</li> </ul>	To monitor and communicate progress.

### Care of Nasogastric Tube

Inspect the nostrils for discharge and irritation	To identify any trauma to the nostril
Clean the nostrils and tube with moistened cotton tipped-applicators	To remove crust and prevent growth of micro organism.
Change the adhesive tape as required	To prevent growth of micro organism
Give frequent mouth care	To promote patient's comfort and prevent growth of micro organism

### Removal of Nasogastric Tube

#### Equipment

Disposable pad

Tissues

Disposable gloves

50-ml syringe (optional)

Plastic disposable bag

Suggested Actions	Rationale
<b>Assessment</b>	
<ul style="list-style-type: none"> <li>Assesses for dryness of the nostrils and lips</li> </ul>	Nostril is often dry if not attended to after a long time.
<b>Planning</b>	
<ul style="list-style-type: none"> <li>Confirm the physician's order to remove it</li> </ul>	To ensure that there is no need for untimely removal.
<ul style="list-style-type: none"> <li>Inform the client of the procedure</li> </ul>	To obtain consent and cooperation
<ul style="list-style-type: none"> <li>Assist the client to a sitting position if health permits</li> </ul>	This position will facilitate easy removal.

<ul style="list-style-type: none"> <li>Place disposable pad across the client's chest to collect any spillage of mucous and gastric secretions from the tube</li> </ul>	This will prevent secretion from getting to the patient.
<ul style="list-style-type: none"> <li>Unpin the tube from the client's gown</li> </ul>	This will aid the removal
<ul style="list-style-type: none"> <li>Remove the adhesive tape securing the tube to the nose</li> </ul>	To prevent the tube from dangling.
<b>Implementation</b>	
<ul style="list-style-type: none"> <li>Put on disposable gloves</li> </ul>	To prevent cross infection
<ul style="list-style-type: none"> <li>Ask the client to take a deep breath and hold it</li> </ul>	This will push the tube up
<ul style="list-style-type: none"> <li>Pinch the tube with the gloved hand, and then quickly and smoothly withdraw the tube</li> </ul>	Quick removal will lessen patient discomfort.
<ul style="list-style-type: none"> <li>Place the tube in a plastic bag and observe the intactness of the tube</li> </ul>	To ascertain that there is no dislodgement of any part of the tube
<ul style="list-style-type: none"> <li>Provide mouth care if desired</li> </ul>	For hygiene and comfort
<ul style="list-style-type: none"> <li>Assist the client as required to blow the nose</li> </ul>	To ensure that there is no obstruction
<ul style="list-style-type: none"> <li>Dispose the equipment appropriately</li> </ul>	To avoid environmental contamination
<b>Evaluation</b>	
<ul style="list-style-type: none"> <li>Document date and time of removal of tube and any other relevant information</li> </ul>	For accountability and continuity of care

### 3.3 Colostomy Irrigation

#### Objectives

To encourage an action in a recently established colostomy

To relieve the constipation for a patient who finds difficulty in managing colostomy

To achieve and maintain comfort and security

To maintain good skin and stoma hygiene

### **Equipment**

A bowl containing funnel, rubber tubing, clip, glass connector and catheter

A basic dressing pack

Jug of solution (Normal saline or plain tap water at 40°C)

Lotion thermometer

Two receivers

Lubricant (Vaseline or K.Y. Jelly)

Mackintosh or towel

Dressing bin

Receiver for used instrument

Covered bed pan

Bandage/disposable colostomy bag

<b>Suggested Actions</b>	<b>Rationale</b>
<b>Assessment</b>	
<ul style="list-style-type: none"> <li>Assess stoma size and shape, colour, presence of swelling</li> </ul>	This may indicate presence of infection
<ul style="list-style-type: none"> <li>Assess status of peristomal skin</li> </ul>	To determine if there is retraction
<ul style="list-style-type: none"> <li>Note amount and type of effluent</li> </ul>	This may help to detect changes in the health condition of the patient
<ul style="list-style-type: none"> <li>Inspect allergy to tape</li> </ul>	Any allergic material should be avoided.

<ul style="list-style-type: none"> <li>Inspect type and size of appliance currently used</li> </ul>	This will help to determine what materials will be used for the patient
<ul style="list-style-type: none"> <li>Note client's emotional status and complaints of discomfort</li> </ul>	This may indicate acceptance or denial of the colostomy
<ul style="list-style-type: none"> <li>Assess client's learning needs</li> </ul>	To identify learning needs.
<b>Planning</b>	
<ul style="list-style-type: none"> <li>Explain procedure</li> </ul>	To gain his consent and cooperation
<ul style="list-style-type: none"> <li>Screen the bed and close nearby windows</li> </ul>	To maintain privacy
<ul style="list-style-type: none"> <li>Position patient accordingly and, expose the site of the colostomy</li> </ul>	Ensure exposure of only the body part that you are working on.
<ul style="list-style-type: none"> <li>Place mackintosh and towel to protect bed clothes</li> </ul>	To protect the bed from soiling
<b>Implementation</b>	
<ul style="list-style-type: none"> <li>Wash hands and remove soiled dressing then, place receiver in a convenient position under colostomy</li> </ul>	To prevent water from spilling on the patient
<ul style="list-style-type: none"> <li>Don disposable gloves</li> </ul>	To prevent cross infection
<ul style="list-style-type: none"> <li>Lubricate catheter and expel air as for enema</li> </ul>	To prevent friction
<ul style="list-style-type: none"> <li>Insert catheter into colostomy for about 5-7 cm</li> </ul>	The thickness of the colon is between 5-7cm
<ul style="list-style-type: none"> <li>Hold funnel for about 25 cm above colostomy</li> </ul>	The liquid should flow by gravity
<ul style="list-style-type: none"> <li>Pour in the required solution,</li> </ul>	This is the required amount to avoid

usually 500-1000mls	over distension of the colon.
<ul style="list-style-type: none"> <li>• Leave catheter in for about 5 minutes</li> </ul>	To allow the water to dissolve and cleanse the colon
<ul style="list-style-type: none"> <li>• Remove catheter and allow colostomy to drain into the receiver</li> </ul>	Water and the content of the colon will drain out with ease
<ul style="list-style-type: none"> <li>• Clean colostomy and surrounding area, apply dressing and disposable colostomy bag</li> </ul>	To avoid spread of infection and ensuring patient comfort.
<ul style="list-style-type: none"> <li>• Unscreen and open windows. Make patient comfortable</li> </ul>	This signifies the end of the procedure.
<ul style="list-style-type: none"> <li>• Wash and sterilize used equipment</li> </ul>	To avoid spread of micro organism
<b>Evaluation</b>	
Note amount, colour and consistency of faeces	For early detection of any abnormality.
Notes colour and size of stoma	To detect changes in the condition of the patient
Record pertinent data	For continuity of care and accountability.

#### 4.0 CONCLUSION

Dietary therapy has become an essential adjunct of care and the bedrock of treatment in some illnesses like chronic renal failure, and diabetes mellitus among others. Man must therefore eat nutritious food that will enhance his growth, repair worn out tissue and fortify his immune system. When illness sets in, poor and inadequate food intake becomes amplified due to poor appetite, anxiety, strange hospital environment, negative effects of certain drugs.

#### 5.0 SUMMARY



This unit had examined the related procedures to patient's nutritional status in his care. These included: meal service, nasogastric tube intubation, enteral / Nasogastric (tube) feeding, gastrostomy feeding, gastric aspiration and gastric lavage

## 6.0 TUTOR-MARKED ASSIGNMENT

1. Identify articles/equipment required in the patient care area.
2. Maintain ward cleanliness and tidiness.
3. Maintain and take hospital equipment for repair when necessary.
4. Identify and apply the hospital fire, electrical and general safety measures when providing care for patients.
5. Identify guidelines for terminally cleaning the patient care unit.
6. Recognize rules for the use of disposable and non-disposable items.
7. Organize work efficiently.
8. Delegate/explain duties according to ward routines and responsibilities.
9. Recognize priorities in nursing care.
10. Develop a mastery of communication techniques as evidenced by candid, complete, concise, clear, concrete, cautious and correct communication with clients and other health professionals in a variety of settings.
11. Demonstrate correct sequence of activities during handing and taking over of patients and the ward unit.

## 7.0 REFERENCES/FURTHER READING

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### **UNIT 3      PARENTERAL    PROCEDURES    INCLUDING BLOOD TRANSFUSIONS**

#### **CONTENTS**

- 1.0    Introduction
- 2.0    Objectives
- 3.0    Main Content
  - 3.1    Blood Transfusion
  - 3.2    Procedure and Rationale for Blood Transfusion
- 4.0    Conclusion
- 5.0    Summary
- 6.0    Tutor-Marked Assignment
- 7.0    References/Further Reading

#### **1.0    INTRODUCTION**

This unit discusses the parenteral procedures which includes administration of Intravenous fluids, monitoring of intake and output and blood transfusion

## **2.0 OBJECTIVES**

At the end of this unit, you should be able to:

- describe the procedures for administration of intravenous fluids and other parental infusions
- list the requirements for blood transfusion
- understand the rationale for blood transfusion.

## **3.0 MAIN CONTENT**

### **3.1 Blood Transfusion**

#### **Definition**

A transfusion consists of the administration of whole blood or any of its components to correct or treat a clinical abnormality.

#### **General Aim**

1. To restore blood volume after severe haemorrhage
2. To restore the capacity of the blood to carry oxygen
3. To provide plasma factors, such as antihemophilic factor (AHF) or factor VIII, or platelets concentrates, which prevent or treats bleeding

#### **Equipment**

- Units of whole blood, or packed Red Blood Cells(RBC)
- Blood administration set
- 250 ml normal saline for infusion
- IV pole
- Venipuncture set
- Alcohol swabs
- Tape
- Gloves

### 3.2 Procedure for administration of Intravenous fluids, intake and Output and blood transfusion

Procedure	Rationale
<b>Assessment</b>	
<ul style="list-style-type: none"> <li>• Verify that a signed consent form was obtained</li> </ul>	For documentation
<ul style="list-style-type: none"> <li>• Assess vital signs for base line data</li> </ul>	To establish base line data for subsequent evaluation
<ul style="list-style-type: none"> <li>• Determine any known allergies or previous adverse reactions to drugs</li> </ul>	
<ul style="list-style-type: none"> <li>• Assesses status of infusion site</li> </ul>	To confirm the patency of the intravenous line
<ul style="list-style-type: none"> <li>• Determine any unusual symptoms</li> </ul>	
<b>Planning</b>	
<ul style="list-style-type: none"> <li>• Instruct the client to report promptly any sudden chills, nausea, itching, rash, dyspnea, back pain or other unusual symptoms</li> </ul>	These are earlier signs of transfusion reaction
<ul style="list-style-type: none"> <li>• Obtain the correct blood component for the client</li> </ul>	Blood should be collected just immediately before use.
<ul style="list-style-type: none"> <li>• Make sure that the blood is left at room temperature for no more than 30 minutes before starting the transfusion</li> </ul>	To avoid lyses and growth of micro organism
<ul style="list-style-type: none"> <li>• Verify the client's identity</li> </ul>	To ensure that the right patient receive the blood.
<ul style="list-style-type: none"> <li>• Set up the infusion equipment</li> </ul>	This will ensure organised working environment.
<b>Implementation</b>	

<ul style="list-style-type: none"> <li>Put on Gloves</li> </ul>	To maintain asepsis
<ul style="list-style-type: none"> <li>Hang the normal saline container on the IV pole about 1 meter above the planned venipuncture site and prime the tubing</li> </ul>	Blood bag should be high above the patient so as to allow flow by gravity.
<ul style="list-style-type: none"> <li>Invert the blood bag gently several times to mix the cells</li> </ul>	This will guarantee even transfusion of the blood and components
<ul style="list-style-type: none"> <li>Establish the blood transfusion</li> </ul>	This is done by opening the flow tap.
<ul style="list-style-type: none"> <li>Run the blood slowly for the first 15 minutes at 20dpm and observe the client closely for the first 5-10 minutes</li> </ul>	So as to identify any early sign of transfusion reaction
<ul style="list-style-type: none"> <li>Observe for any adverse reaction for 15 minutes after initiating the blood transfusion, check the vital signs and then every 30 minutes or more often depending on the client's health status.</li> </ul>	To identify any sign of transfusion reaction which include chills, nausea, itching, rash, dyspnea, back pain etc.
<ul style="list-style-type: none"> <li>Do not transfuse for longer than 4 hours</li> </ul>	Bacteria growth may occur if blood run for more than four hours.
<ul style="list-style-type: none"> <li>Put on gloves, clamp the blood tubing and remove the needle if no infusion is to follow</li> </ul>	To discontinue the line
<ul style="list-style-type: none"> <li>Remove gloves and monitor vital signs</li> </ul>	To identify any variation in the health status
<ul style="list-style-type: none"> <li>Do not discard the blood bag immediately but keep it in the ward</li> </ul>	For reference in case of blood of post transfusion reaction.
<ul style="list-style-type: none"> <li>Dispose off blood bag according to agency protocol</li> </ul>	To avoid environmental contamination.

<b>Evaluation</b>	
<ul style="list-style-type: none"> <li>Assess changes in vital signs or health status of the client (Presence of chills, nausea, vomiting or skin rash)</li> </ul>	Absence of any of these sign will confirm that the transfusion is successful
<ul style="list-style-type: none"> <li>Document pertinent data</li> </ul>	For legal accountability and to continuity of care.

#### 4.0 CONCLUSION

The process by which drugs and fluids are introduced into the body to maintain the electrolyte balance and quicken the effect of any drug mechanism is of great importance in the saving of lives of patients in serious clinical problems such as anaemia and burns among others.

#### 5.0 SUMMARY

In this unit, we have been able to identify and explain the procedure for the administration of Intravenous fluids, monitoring of intake and output and blood transfusion.

#### 6.0 TUTOR-MARKED ASSIGNMENT

- Identify articles/equipment required in the patient care area.
- Maintain ward cleanliness and tidiness.
- Maintain and takes hospital equipment for repair when necessary.
- Identify and apply the hospital fire, electrical and general safety measures when providing care for patients.
- Identify guidelines for terminally cleaning the patient care unit.
- Recognize rules for the use of disposable and non-disposable items.
- Organize work efficiently.
- Delegate/explain duties according to ward routines and responsibilities.
- Recognize priorities in nursing care.
- Developed a mastery of communication techniques as evidenced by candid, complete, concise, clear, concrete, cautious and correct communication with clients and other health professionals in a variety of settings.
- Demonstrate correct sequence of activities during handing and taking over of patients and the ward unit.

## 7.0 REFERENCES/FURTHER READING

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