Procedure Manual Series

Procedure Manual for

Community Health Nursing

Includes All Important Procedures of CHN as per the INC Syllabus

N Gowri
G Grace Jebakani Sweety

Foreword
Rev Fr T Arokia Baskar DCL

CBS Publishers & Distributors Pvt. Ltd.

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FOREWORD

God created humans as social beings and commanded them to live in a community where there were no hospitals, no doctors and no nurses. But it was a healthy community. As the human beings grew up in so called civilization, diseases invaded into the community. At that juncture, needs arose to take care of the sick. Consequently, human beings themselves searched some sorts of remedies from the available natural resources.

In fact, it was the beginning of health care services. Even at that time, there were some procedures to be followed when the medicines were given to the sick. Hence, systematic process of designing and delivering health services became mandatory to improve the quality health care. Community health care concentrates not only in curing the sick but also in preventing diseases by imparting health education and raising awareness to create safe and healthy environment.

In all health services, a systematic procedure is followed and same applies on community health nursing. A wrong procedure or delayed administration of drugs may take away the lives of the people. This manual aims at maximum health attention during the community health services so that all lives could be saved. I wish that every health worker should take utmost care while attending the sick and follow the procedures to keep everyone safe. I convey my best wishes to the authors for their contribution and I am quite hopeful that this manual will help us achieve our goal of creating healthy community as God had set in the beginning.

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Dedicated to

Our Friends, Students and Nursing Fraternity

PREFACE

The Procedure Manual for Community Health Nursing is a comprehensive reference tool for all nursing students with regard to the nursing procedures performed in a community setting during home visit. The chapters are organized in such a way that it makes the understanding of procedures during home visit, quite easy. These procedures are effective for all the age groups of the community.

This manual covers the necessary formats including physical assessments, nutritional assessments and survey formats. As field visits are a vital component of the community health nursing curriculum, the objectives of the field visits are included in this manual.

The scientific rationales for all the steps of the home procedures are highlighted accordingly. As the authors of this manual, we focussed on the way to present content for easy understanding and efficient performance of the home procedures in community settings.

We hope that the readers will acquire abundant knowledge in promoting the healthy living of the people by defining their needs and problems. We are waiting to receive constructive criticism from readers and appreciate the willingness to render us their valuable suggestions.

We must say that this manual is quite handy in understanding the procedures in home settings. Enjoy reading and gain confidence in performing the procedures.

N Gowri

G Grace Jebakani Sweety

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CHAPTER 1

Community Health Nursing

INTRODUCTION

Community health nursing is a field of nursing, which is the amalgamation of primary healthcare with public health nursing. The goal is to promote and preserve the health of populations and is directed to communities, groups, families and individuals across their lifespan in a continuous manner rather than as an episodic process. It is concerned not only with individual beneficiaries but also with their families.

DEFINITION

Community health nursing, also called public health nursing or community nursing, combines primary healthcare and nursing practice in a community setting. Community health (CH) nurses provide health services, preventive care, interventions and health education to communities or populations.

PRINCIPLES OF COMMUNITY HEALTH NURSING

- Effective health workers, irrespective of position or place of work should function as a team.
- Health workers are accountable to authorized health agency.
- Health workers must be nonpolitical and nonsectarian.
- Health workers must not accept gifts or bribes ever.
- Teaching is an essential part of all health services.
- Records and reports are essential to community health services.
- Community health nurses should be qualified.
- Professional relationship and etiquette are essential aspects of community health services.
- The person who works with village people should extend his/her help in carrying out health programs.
- Evaluation of service is an important factor in planning and implementation of health services.
- Provision should be made for supervising and directing community nursing services.
- Professional interests should be developed and maintained.

COMMUNITY HEALTH APPROACH

To accomplish community health goals and aims, the following approaches are to be utilized by the community health professionals.

- **Persuasive approach:** Persuasive approach implies convincing people through dialogue and educating them to change or modify their health behavior.
- **Enforcement:** The enforcement implies the use of more coercive measures such as use of legislation, e.g. prohibition of drug abuse, child abuse, immunization as a condition to school admission, etc.
- **Team approach:** Community health is a problem-solving process and a team approach is a prerequisite to deal with varied and complex health needs and problems at large. It is just not possible for any one profession or discipline to provide such care.
- **Community involvement:** Health of the individuals living in a defined community is not only their 'right' but also their 'responsibility' to take care of their own health and also of the community at large. Without people's help, participation or cooperation, it is neither possible to make healthcare services accessible and acceptable to them nor it is feasible to achieve community health goals and aims.
- **Intersectoral approach:** Health of people at large cannot be attained by health sector alone because there are many factors which affect people's health. These factors are not under the purview of the health sector, e.g., food production and distribution, water, sanitation, housing, environmental protection and education, etc. Each one is dealt by separate sector and socioeconomic development and health.

CHAPTER 2

Home Visit

INTRODUCTION

Home visit refers to the process of visiting the families at their doorsteps and identifying their needs and problems, providing the appropriate healthcare services and empowering the family members toward healthy living and sustainable environment.

DEFINITION

A home visit is defined as the process of providing the nursing care to patients at their doorsteps.

Purposes

- To identify the environmental conditions of the people, which affect their health
- To investigate the source of an infectious disease
- To provide care for the sick in the families
- To follow-up cases emanating from schools, industries or hospitals
- To carry out simple nursing care
- To render family health education
- To supervise and guide other health workers.

PHASES OF HOME VISIT

There are five phases of home visit. These are as follows:

1. **Phase I:** Pre visit preparation
2. **Phase II:** Relationship establishment
3. **Phase III:** Family health nursing interventions
4. **Phase IV:** Documentation and closing the visit
5. **Phase V:** Post visit phase

Procedure

S. No.	Steps of home visit	Community health nurse's responsibilities
	Phase I: Pre visit preparation	
1.	Collect information regarding the community	• To identify the prevalence of common health problems in the community
2.	Collect family details	• To establish the goals and devise the plan of action • To review available family data with the family folder
3.	Ascertain the correct address and directions to the particular home	• To select the home and locate it correctly • To prepare for a safe visit and contact family over phone
	Phase II: Relationship establishment	
4.	Self-introduction with the family	• To introduce self and establish rapport
5.	Approach the family	• To identify family's need for providing community health nursing services
	Phase III: Family health nursing interventions	
6.	Identify the needs and health problems of the family members (family details, coping pattern and health behavior)	• To follow the principles related to interviewing techniques (eye contact, friendly attitude and reassuring the confidentiality)

Contd...

S. No.	Steps of home visit	Community health nurse's responsibilities
7.	Consider factors related to physical status, nutritional status, cultural background, socioeconomic status, psychological status	• To carry out family assessment, environmental assessment, beneficiaries' assessment, nutritional assessment
8.	Home care procedures- perform nursing care procedures by using community bag	• To provide comprehensive nursing care based on the prioritized needs and health problems of the individual **Note:** Standing orders should be followed
9.	Educate the beneficiaries based on their needs	• To review the previous health education • To assess the knowledge, attitude and practice related to current topic • To educate using appropriate AV aids
10.	Demonstrate the procedure as per the needs of the family	• To reinforce the pertinent information
Phase IV: Documentation and closing the visit		
11.	Record the visit and findings	• To write detailed report of the home visit
12.	Plan for the next visit	• To plan for follow-up care
Phase V: Post visit phase		
13.	Evaluate the progress	• To update the home visit findings in the health center family folder

CHAPTER

3

Community Health Bag and Bag Technique

INTRODUCTION

The community health nursing bag is devised to carry the equipment and materials needed during home visit.

Community health bag serves as a working tool or kit of a community health nurse which helps him/her to work efficiently during nursing procedures at the home, school or factory.

ARTICLES

Side Compartment

- Soap in a soap dish
- Nail brush
- Hand towel

Side Flip

- Newspaper
- Stethoscope
- Inch tape
- Paper bag
- Disposable syringe and gloves
- Fetoscope
- Flash card
- Family folder
- Pocket articles (pen, pencil, eraser, scale, pen torch)

Lower Compartment

Urine analysis kit (spirit lamp, specimen bottle, two test tubes, test tube stand, test tube holder, measuring cup, dropper, plastic kidney tray, swab stick and match box)

Upper Compartment

- Oral and rectal thermometer
- Solution bottles—4
- Temperature pack
- Medicine box
- Nutritional cup
- Dressing box (Stainless steel box containing artery forceps, thumb forceps, small bowl—2 and scissors)
- Cotton ball box

BAG TECHNIQUE

Definition

The bag technique is a tool by which the nurse, during his/her visit will enable him/her to perform a nursing procedure with ease and deftness, to save time and effort with the end view of providing effective nursing care to clients.

Purposes

- To carry equipment and materials needed during the visit to the home, school or factory
- To carry equipment and materials that are needed to do tests and to demonstrate care such as dressing, injections, urine testing, etc.

Principles

- Keep the bag away from the children and pet animals
- Keep the bag on the flat and raised surface
- Keep the community bag always clean and equip it economically
- Sterilize/boil contaminated articles before keeping them again into the bag
- Provide privacy to the clients and maintain the standards of community procedures

Procedure

S. No.	Steps	Rationale
1.	Select a work area, country yard or the verandah	To prevent children or domestic animals getting in the way
2.	Spread a newspaper or plastic square on a flat surface area	To create a clean area
3.	Make newspaper bag	To discard the waste
4.	Loosen the buttons of the bag	To open the bag after hand washing
5.	Perform hand washing	To avoid cross infection
6.	Take out necessary articles for the procedure and place on the clean area without touching the outside of the bag.	To perform the procedure
7.	Give nursing services as indicated	To meet the needs and problems
8.	After the procedure, wash the hands with soap and water.	To avoid cross infection
9.	Return the articles to the bag, use cotton swab moistened with sprit and wipe outside of used bottles. All other instruments used during the visit must be boiled for 5 minutes before replacing into the bag.	To avoid cross infection and to disinfect the articles.
10.	Fold the used paper bag and close the bag.	For disposing of used paper bag
11.	Write a brief report on what was observed, what was done, instruction given and plan for next visit.	To facilitate follow-up

CARE OF EQUIPMENT

Regular care of equipment is most important:

- To prevent any possibility of cross-infection because of carrying contaminated articles from house to house.
- To preserve the equipment for use as long as possible
- To put it to the best possible use.

Care of Equipment of Community Health Bag

- **Bag:** If the bag is made of metal, it may be well washed with soap and water or boiled. If it is a canvas bag, it should not be boiled but can be dried in the sun, after cleaning and washing. The bag must have a clean,

boiled lining of cotton (preshrink cotton), which can be removed easily and often replaced.

- **Rubber goods:** All such goods should be well washed in soap and water and rinsed. For sterilizing rubber goods, put them in boiling water and boil for ten minutes.
- **Thermometer:** The thermometer and the case may be soaked in antiseptic solution, after washing with soap and water.
- **Instruments:** All instruments should be washed well with cold water after use.
- **Methods of disinfecting the bag**
  - Empty the bag completely and boil all boilable articles. Soak other equipment in antiseptic or soapy water.
  - Wash the bag. When everything is disinfected, wash your hands well.
  - Place a clean towel or a cover on a table, and fill up the bag once again the contents will not be sterilized but will be free from infection.

Points to Remember

Things to be remembered	Rationale
Do not carry in the bag anything which cannot be disinfected, such as notebooks, etc., and never put any personal items such as handkerchiefs or money inside the community bag.	To maintain professionalism
Do not handle the contents of the bag without washing your hands.	To prevent cross infection
Do not take out any materials from the bag more than what is required for the particular nursing care to be carried out	To prevent contamination
Do not place the bag near fire and water service area.	To prevent harmful issues

CHAPTER

4

Hand Washing

INTRODUCTION

Keeping hands clean is one of the most important steps we can take to avoid getting sick and spreading germs to others. Many diseases and health threatening situations could occur if we are not washing our hands with soap and clean running water.

DEFINITION

Hand washing is the act of cleaning one's hands for the purpose of removing soil, microorganisms or other unwanted substances.

Purposes

- To remove dirt and soil from the hands
- To reduce the risk of cross contamination

Articles Needed

S. No.	Articles	Purpose
1.	Soap with soap dish	To wash the hands
2.	Nail brush	To clean the nails
3.	Towel	To dry the wet hands
4.	Newspaper (small)	To keep the hand washing articles in the washing area

Procedure

S. No.	Steps	Rationale
1.	Select a work area, country yard or the verandah	To prevent children or domestic animals getting in the way
2.	Spread a newspaper or plastic square on a flat surface area	To create a clean area

Contd...

S. No.	Steps	Rationale
3.	Take the necessary articles for hand washing and keep it in the washing area	To wash the hands
4.	Wet the hands till elbow and apply enough soap to cover all surface as follows:	To prevent cross infection
	Rub palms together 	
	Rub the back of both hands 	
	Interface fingers and rub hands together 	
	Interlock fingers and rub the back of fingers of both hands 	
	Rub thumb in a rotating manner followed by the area between index finger and thumb for both hands 	
	Rub fingertips on palm for both hands. Use nail brush and clean the fingers 	
	Rub both wrists in a rotating manner 	

Contd...

S. No.	Steps	Rationale
5.	Wash the hands and hold hands up	To prevent water running from elbows to hands
6.	Dry one hand with one side of the towel by pat movement and use the other side of the towel for other hand	To dry the wet hands
7.	Spread the used towel under the sun to dry	To dry the towel

CHAPTER 5

Checking Vital Signs at Home

INTRODUCTION

Vital signs include temperature, pulse, respiration, blood pressure and oxygen saturation. Method of taking temperature is determined by age, condition and diagnosis. Body temperature is the balance between the amount of heat produced by the body processes and the amount of heat lost to the external environment.

DEFINITION

Vital signs are a group of most important medical signs that indicate the status of the body's vital functions. These measurements are taken to help assess the general physical health of a person, give clues to possible diseases, and show progress toward recovery.

Purposes

- To assess and appraise the health status
- To diagnose the health condition
- To record the body temperature

Articles Needed

S. No.	Articles	Purpose
1.	Thermometer	To check the temperature
2.	Spirit	To disinfect the thermometer
3.	Temperature pack (contains cotton balls with one cotton pledget)	To wipe the thermometer
4.	Paper bag	To discard the waste
5.	Wrist watch	To note the time
6.	Washing material	To wash hands
7.	Lubricants (oil/available in home) if rectal thermometer is to be used	To lubricate the rectal area
8.	Sphygmomanometer and stethoscope	To check the blood pressure

PREPARATION OF CLIENTS

- Explain the procedure to get cooperation and confidence of the client
- Explain the sequence of procedure and tell him how the client can cooperate
- Tell the client not to drink or eat, smoke or chew betel leaves 15 minutes prior to the oral temperature procedure
- Place the client in comfortable position (either lying or sitting)

Procedure

S. No.	Steps	Rationale
1.	Follow the steps 1–5 given in the bag technique	To get ready the necessary articles to perform the temperature checking
2.	Take out the thermometer, temperature pack, cotton ball box and spirit container from the upper compartment of the bag. Close the upper compartment with upper flap	To perform the procedure effectively
3.	Take out the thermometer from the case and leave the case in the working area. Take the thermometer and pledget to the hand washing area. Soak the pledget with soap and rinse the thermometer with running water and bring it to the working area	For disinfecting the thermometer
4.	Take the first cotton ball and wipe the thermometer from bulb to stem	To clean from less contaminated area to more contaminated area

Contd...

S. No.	Steps	Rationale
5.	Place the thermometer under the tongue for 3 minutes or in the axilla for 5 minutes. Concurrently check the pulse and respiratory rate. **Note:** For axillary temperature take one cotton ball from cotton ball box and wipe the axilla.	To know the temperature of the client
6.	Take out the thermometer, clean it from stem to bulb in circular manner by using the same cotton swab and discard the swab into the paper bag	To clean from more contaminated area to less contaminated area
7.	Read the temperature at eye level	To prevent parallax error
8.	Go to washing area, wash the thermometer in running water and keep it in the cotton pledget	To disinfect the thermometer properly
9.	After 10 minutes remove the thermometer and rinse under running water and bring the thermometer to the working area	To prevent the cross infection
10.	Dry the thermometer with second cotton swab in circular motion from bulb to stem and discard it in the paper bag. Apply spirit and clean the thermometer case. Keep the thermometer in the case	To disinfect the articles properly
11.	Discard the soapy cotton. Open the bag and replace the things	To dispose the wastes properly
12.	Check the blood pressure if the beneficiary is above 18 years	To assess the hemodynamic stability
13.	Perform recording	To document the findings

Note: While checking temperature of the beneficiary, the pulse rate and respiratory rate should also be checked.

Normal vital signs ranges for the average healthy adult while resting are:

Vital signs	Normal range
Temperature	97.8°F to 99.1°F (36.5°C to 37.3°C); average 98.6°F (37°C)
Pulse	60–100 beats per minute
Respiration	12–18 breaths per minute
Blood pressure	100/70 mm Hg to 120/80 mm Hg

CHAPTER

6

Urine Testing for Glucose and Albumin

INTRODUCTION

Analysis of urine is important as disturbance of normal physiological functions are often reflected in the urine. It assists in monitoring the disease process inside the body and efficacy of treatment.

DEFINITION

The analysis of urine to check the protein and/or sugar is called urine testing for glucose and albumin.

Purpose

To test urine for albumin and sugar and other abnormalities

Indications

- Beneficiaries above 40 years
- Diabetic, hypertensive clients and antenatal mothers

Articles Needed

S. No.	Articles	Purpose
1.	Test tube	To perform the procedure
2.	Test tube holder	To hold the test tube
3.	Benedict's solution and acetic acid solution	To perform sugar and albumin test
4.	Spirit lamp	To heat the solution
5.	Match box	To lit the spirit lamp
6.	Dropper	To take the urine from the specimen container for the procedure
7.	Ounce glass	To measure the Benedict's solution
8.	Specimen container	To collect the urine
9.	Kidney tray and paper bag	To collect the wastes
10.	Swab stick	To dry the test tubes

Procedure

Figs A and B: Carrying out the urine test in lab

S. No.	Procedure	Rationale
1.	Follow steps 1–5 of the bag technique	To prevent contamination
2.	Take the urine analysis articles from the lower compartment of the bag	To perform the procedure
3.	Provide a labeled specimen container	To collect urine
4.	Instruct the person to clean the genitalia with clean water and collect the midstream urine in giving container	To get clean sample of urine
5.	Select the area outside home and take half-sheet of newspaper and spread it and keep the urine analysis articles such as test tube, test tube holder, measuring glass, kidney tray, spirit lamp, match box, dropper and urine test pack	To do the procedure
6.	Instruct the client to place the specimen container in the kidney tray and keep it in the half-way opened manner	To take the specimen easily
	Test for glucose	
7.	Pour 5 cc Benedict's solution in the test tube	To find out presence of glucose in urine
8.	Light sprit lamp and heat the solution at the bottom till it boils, holding the test tube with its mouth facing in the opposite direction; watch for color change; if color changes, discard and use new solutions	To check purity of the Benedict's solution

Contd...

S. No.	Procedure	Rationale
9.	Add eight drops of urine into the test tube using dropper through the upper side of the test tube and boil it for few seconds. Then blow off the lamp and allow the solution to cool.	When the Benedict's solution and simple carbohydrates are heated, the solution changes from green to brick red. This reaction is caused by the reducing property of simple carbohydrates. The copper (II) ions in the solution are reduced to copper (I) ions which causes the color change.
10.	Watch for color change and compare with standard color code	To interpret the values
	Blue: Nil	No glucose <180 mg/dL
	Green (+)	180–200 mg/dL
	Yellow (++)	200–250 mg/dL
	Orange (+++)	250–300 mg/dL
	Brick red (+++++)	>300 mg/dL
	Test for albumin	
11.	Take 2/3 of urine in the test tube and boil the top portion of the test tube	To find out the presence of albumin
12.	If the cloudiness appears, add 2 drops of 5% acetic acid and heat the test tube again.	It may be due to presence of albumin or phosphate
13.	Read the test tube for cloudiness. If the cloudiness disappears after adding acetic acid, it shows that there is no albumin	To confirm the presence of albumin
14.	If the turbidity does not disappear, it infers the test is positive	The turbidity is confirmed due to the presence of albumin
15.	Discard urine in toilet and rinse specimen container, test tube, kidney tray and dropper with water. Dry the test tube with swab sticks. Then dry the above mentioned items in the sunlight	To disinfect the articles
16.	Wash hands and replace the spirit, Benedict's, acetic acid containers and cotton ball box in the upper compartment after wiping it with spirit cotton and then replace the lower compartment articles	Reduces the risk of transmission of microorganisms
17.	Record the result and inform the findings to the client	For regular follow-up

Administration of Intramuscular Injection at Home

CHAPTER 7

INTRODUCTION

Intramuscular injection is the process of injecting medicine directly into a muscle. It is one of several methods for parenteral administration of medications. It is used for those forms of medication that are administered in small volumes.

DEFINITION

An intramuscular injection is a technique used to deliver a medication deep into the muscles.

Purposes

- To get a rapid and systemic effect of the drug
- To obtain a local effect at the site of the injection

Articles Needed

S. No.	Equipment	Purpose
1.	Hand washing items	To wash hands
2.	Syringe—1 and Needles—2 or 3 (different sizes)	To administer medicine
3.	Injection pack—3 cotton balls, spirit, cotton ball box	To clean the site
4.	Medication	—
5.	Paper bag or kidney tray	To discard the waste

SITES FOR INJECTION

- Deltoid muscle of the arm. The deltoid muscle is the site most typically used for vaccines
- Vastus lateralis muscle of the thigh

- Ventrogluteal muscle of the hip
- Dorsogluteal muscles of the buttocks

Procedure

S. No.	Steps	Rationale
1.	Follow the steps 1–5 of the bag technique	To prevent contamination
2.	Take out needed articles from the bag	To administer the injection
3.	Follow the rights of medication administration	To ensure the safety
4.	Instruct the beneficiary to be in comfortable position	To minimize the discomfort
5.	Take the 1st cotton swab and apply spirit, and clean the top of the injection vial, and discard the swab in the paper bag	To avoid cross infection
6.	Draw the medications from the vial into the syringe	For medication administration
7.	Take the second cotton swab and apply spirit and then clean the site and hold swab between third and fourth fingers of the nondominant hand	Swab remains readily accessible when needle is withdrawn
8.	Follow the injection procedure	To administer injection
9.	Place the same second cotton swab while withdrawing the needle	Support tissue around the injection site and thus minimize discomfort during needle withdrawal
10.	Massage injection site if advisable	Stimulates circulation and improves drug distribution

Contd...

S. No.	Steps	Rationale
11.	After administration of injection, recap the needle	To avoid needle prick injuries
12.	Wash hands	To reduce transmission of microorganisms
13.	Record the procedure	Timely documentation prevents errors
14.	Replace the articles	For proper replacement of articles

NURSE'S RESPONSIBILITY

- Follow every rule for giving the right medicine to right client in right amount at right time and right route.
- Take prevention to guard against infection:
  - AIDS, hepatitis B and jaundice are transmitted by needles and syringes, if not sterilized.
  - Use a separate needle and syringe for every dose. Do not combine any medicine.
  - If one client is ordered two different medications by injection, use 2 sterilized needles with the same syringe and administer injections.
  - Boil all the articles for 5 minutes and autoclave them.
  - Use only sterilized solutions.
  - Cleanse injection site thoroughly.
  - Cleanse rubber caps and ampule neck with spirit.
- Test the needle before sterilizing for sharpness. Explain the procedure to the client to get cooperation. Select the site of injection carefully to avoid striking a bone, nerve or blood vessel.
- Alcohol inactivates both insulin and penicillin. Syringes and needles must not be chemically disinfected.
- Observe the person for reaction after administering injection.

CHAPTER

8

Wound Dressing at Home

INTRODUCTION

A wound is defined as an injury to the body (as from violence, accident, or surgery) that typically involves laceration or breaking of a membrane (such as the skin) and usually damage to underlying tissues.

DEFINITION

Wound dressing can be defined as the process of cleansing a wound or incision, and applying sterile protective covering using aseptic technique.

Purposes

- To remove and dispose of the soiled matter to prevent the spread of infection
- To provide a clean area around the covered wound to prevent additional infection
- To apply sterile dressings, to prevent other infection and to promote healing

Articles Needed

S. No.	Articles	Purpose
1.	Dressing pack (gauze pad—1, pieces of gauze, cotton balls autoclaved)	To provide wound care
2.	Kidney basin or paper bag	To receive the waste
3.	Artery forceps—1	To clean the wound
4.	Thumb forceps—1	To take gauze from the dressing box
5.	Scissor—1	To remove the dead tissues
6.	Large bowl with lid autoclaved	To boil all the instruments at home
7.	Steel bowl	To pour the cleaning and disinfectant solution
8.	Spirit, betadine or any other antiseptic	To apply on the wound
9.	Dressing bandage/plaster	To secure the dressing
10.	Plastic sheet	To prevent the spilling of the solution while doing the procedure
11.	Plaster	To secure the wound

Procedure

Figs A and B: (A) Wound; (B) Procedure of wound dressing

S. No.	Procedure	Rationale
1.	Follow steps 1–5 of the bag technique	To prevent contamination
2.	Assess the wound and explain the procedure to the client	To get confidence and cooperation
3.	Take the needed articles, like steel bowl, dressing box, dressing pack, betadine solution, spirit and cotton ball box from the upper compartment and close the upper flap	To provide wound care
4.	To prepare normal saline, add about a teaspoon/5 g of salt for each 200 mL of water and boil it vigorously for 10 minutes	To prepare cleansing solution
5.	Remove the old soiled dressing	To prevent contamination
6.	Scrub the hands for 2–3 minutes	To avoid cross infection
7.	Clean the wound with cotton swab in cleansing solution (normal saline) using artery forceps. For surgical wounds, clean the incision from center to periphery. For infected wounds, clean it from periphery to center and use one swab for one stroke	To reduce the risk of contamination

Contd...

S. No.	Procedure	Rationale
8.	While dressing, thumb forceps should be confined with dressing box and should not touch the infected site and artery forceps	To reduce the risk of contamination
9.	After cleaning the wound, apply appropriate medicine in the gauze and secure it with roller bandage and plaster	To promote healing
10.	Wash the used instruments and bowls with soap and water Clean the instruments and replace them	To promote good workmanship
11.	Explain the condition of the wound to the beneficiary and document the care	To maintain good relationship

NURSE'S RESPONSIBILITY

- Help the client to dress up and take a comfortable position in the bed, change the garments if soiled.
- Discard the used dressing.
- Wash articles and instruments with soap and water, boil it for 20 minutes at home.
- Wash the hands thoroughly with soap and water.

CHAPTER 9

Hemoglobin Estimation

INTRODUCTION

Hemoglobin is the major component of blood which carries oxygen to the tissue for various functions. If hemoglobin goes down below the normal level it causes lethargy and fatigue. Estimation of hemoglobin to assess the status of anemic condition, is important as many women suffer from serious side effects.

DEFINITION

A hemoglobin test measures the amount of hemoglobin in your blood.

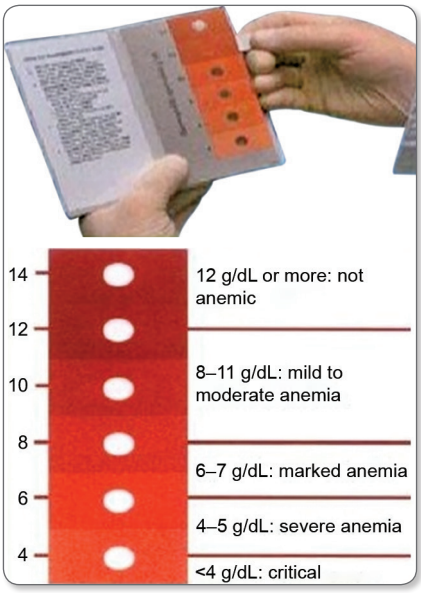
Purposes

- To identify the Hb% in the blood
- To assess the improvement after 30 days of implementation of treatment for anemia

Articles Needed

S. No.	Articles	Purpose
1.	Hemoglobin test paper with standard tint color chart	To check the Hb% level
2.	Disposable lancet	To prick the finger
3.	Spirit swab	To cleanse the pricking area
4.	Paper bag or kidney tray	To receive waste

Procedure



S. No.	Steps	Rationale
1.	Explain the procedure to the client	To get the cooperation
2.	Wash hands	To prevent contamination
3.	Clean the fingertip with the spirit swab and prick with the lancet	To prevent infection and fingertip is highly vascular.
4.	Place a drop of blood on the testing paper and wait for 10 seconds	Provide time for absorption of blood and allow to dry for few seconds
5.	Apply pressure over the puncture site with cotton ball for 2–3 minutes	To prevent bleeding
6.	Compare the testing paper with standardized color chart	To confirm the percentage of hemoglobin and read the result under proper light for accuracy
7.	Inform the client and record the result	Recording is essential in any procedure

SAHLI'S METHOD

Principles

Hemoglobin is converted into acid hematin with the action of dilute hydrochloric acid. The hematin is brown in color and its intensity is matched with a standard brown glass comparator in a visual colorimeter called Sahli's colorimeter.

Articles Needed

■ Sahli hemoglobinometer	■ Graduated tube or calibrated
■ Sahli pipette marked up to 0.02 mL	■ Glan rod
■ Dropper	■ Filter paper
■ N/10 HCl	■ Sterile lancet

Collection of capillary blood by finger prick method:

- Clean the site with spirit swab.
- Blood is collected from the site of the third or fourth left finger.
- Prick the finger firmly and rapidly with lancet.
- Wipe away the first drop of blood with cotton wool.
- Press the finger to produce a drop of blood.
- Collect the blood in the pipette up to 0.02 mark: Do not allow air bubbles to enter.

Procedure

- Fill the graduated tube 0.02 mark with N/10 hydrochloric acid.
- Draw the blood in the pipette up to 0.02 mark; do not allow air bubbles to enter.
- Wipe the extra blood from the outside of the pipette.
- Stir with stirrer and wait for 10 minutes.

Fig. Sahli's hemoglobinometer

- Add distilled water drop by drop and stir till color matches with the comparator.
- Take the reading at upper meniscus.

Normal Values of Hb

- **Men:** 15 + 2 g/dL
- **Women:** 13.5 + 1.5 g/dL
- **Infants:** 16.5 + 3 g/dL

Advantage

Reagents and apparatus are cheap.

CHAPTER

10 Blood Smear for Malaria Parasite

INTRODUCTION

Malaria must be recognized promptly in order to treat the client in time and to prevent further spread of infection in the community via local mosquitoes. Malaria parasites can be identified by examining under the microscope by smearing a drop of the client's blood on a microscope slide. Thick smears are 20–40 times more sensitive than thin smears for screening of Plasmodium.

DEFINITION

It is collection of a blood smear, its staining with Romanowsky stains and examination of the red blood cells for intracellular malarial parasites.

Purposes

- To detect malarial parasite
- To distinguish the species
- To quantify the parasite load

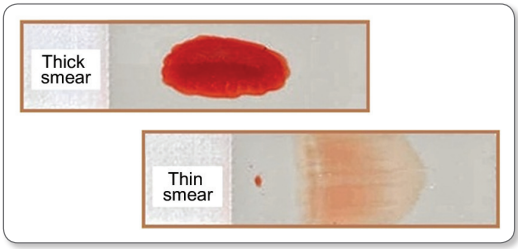
Indications

- Fever, chills, sweating
- Headache, weakness, and other symptoms mimicking a viral syndrome

Articles Needed

S. No.	Articles	Purpose
1.	Disposable lancet	To prick the finger
2.	Slide box with two slides	One to obtain blood and second to make smear
3.	Cotton swab	To give pressure over the punctured area
4.	Spirit swab	To cleanse the area

Procedure



S. No.	Steps	Rationale
1.	Follow steps 1–5 of the bag technique	To prevent contamination
2.	Select the finger to puncture (usually the third or fourth finger). Clean the fingertip with cotton or gauze soaked in spirit or with soap and clean water. Dry it in air	If spirit remains behind it changes the cell morphology
3.	Prick with a lancet with firm pressure	Firm pressure helps to obtain correct sample
4.	Press the finger and allow the blood to ooze out. Discard the first drop	The first drop may contain epithelial and endothelial cells
5.	Allow the blood to flow freely with adequate puncture	It allows proper blood collection
6.	Keep cotton swab on the puncture site and with firm pressure until bleeding stops	To prevent bleeding
7.	Immediately after collection try to make it thick and thin smear with the help of another glass slide	It helps to eject the expected outcome/proper result
8.	Allow the film slide to dry for 1–2 minutes and number it	It prevents confusion of the client
9.	Record the full name and address in the register, wrap the slide with required information	Documentation prevents duplications
10.	Clean and replace the slide box	For next use
11.	Discard all wastes	To prevent cross infection

CHAPTER 11

Oral Rehydration Solution Preparation at Home

INTRODUCTION

Oral rehydration solution (ORS) or oral rehydration therapy is a type of fluid replacement used to prevent and treat dehydration, especially caused by diarrhea.

DEFINITION

It involves drinking water with modest amounts of sugar and salts, specifically sodium and potassium.

OBJECTIVES OF ORAL REHYDRATION THERAPY

- To prevent dehydration and reduce mortality due to diarrhea and dehydration
- To enhance the intestinal absorption of salt and water and is capable of electrolyte and water deficit.

COMPOSITION OF ORAL REHYDRATION SOLUTION

Ingredients	Quantity
Sodium chloride	2.6 g
Tri sodium chloride	2.9 g
Potassium chloride	1.5 g
Glucose	13.5 g

HOME-BASED ORS PREPARATION

Articles Needed

S. No.	Articles	Purpose
1.	Table salt and sugar or ORS packet	To prepare ORS
2.	Clean drinking water 1 L	To dissolve the ORS
3.	A clean container with lid	To store the ORS
4.	One clean spoon	To stir the solution

Procedure

If ORS packet is available at home:

S. No.	Steps	Rationale
1.	Wash hands thoroughly with soap and water	To prevent contamination
2.	Take 1000 mL of boiled and cooled water in a container	To prepare ORS
3.	Open the packet or ORS and pour the whole content into water	To mix accurately
4.	Stir it with spoon till the whole powder is mixed with water	To mix solution completely
5.	Keep it covered and give it to the child whenever he/she requires.	To prevent contamination
6.	Use it within 24 hours. Discard, if it is not consumed within 24 hours.	To enhance the effectiveness of ORS

If ORS packet is not available at home (ORS preparation at home according to WHO):

Six level teaspoons of sugar and half level teaspoon of salt are mixed with 1000 mL of boiled and cool water. It should be consumed within 24 hours.

Note: 1 teaspoon = 4.2 g = 5 mL
1 tablespoon = 3 teaspoon

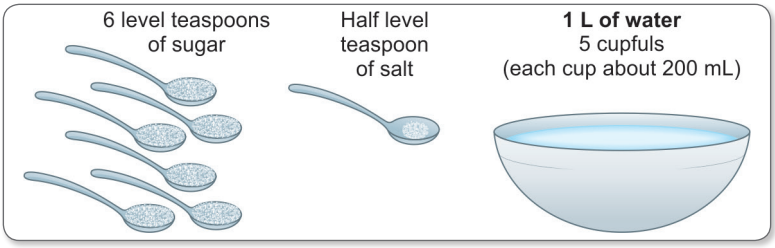


Fig. ORS preparation at home

RECOMMENDATION OF ORS SOLUTION

Age in years	Amount
2 years	¼ glass of ORS solution after every stool
2–8 years	½ glass of ORS solution after every stool
8–10 years	1 glass of ORS solution after every stool or as much as the child can take

SPECIAL CONSIDERATIONS

- If the child is breastfed, care should be taken along with medical advice.
- Hand washing to be done with soap and water, before preparing food, before eating, before feeding a child, after defecation, etc.
- Always keep the food covered with closed lid.
- Use boiled water for drinking.
- Proper disposal of stools should be done.
- Food should be kept protected from dust and flies.
- If diarrhea is not treated at home and signs of dehydration are present, like sunken eyes, skin pinch goes back slowly, child is restless, irritable, then the child should be taken to doctor immediately for treatment.

CHAPTER 12

Steam Inhalation at Home

INTRODUCTION

Steam inhalation is one of the most widely used home remedies to soothe and open the nasal passages and to get relief from the symptoms of a cold or sinus infection.

DEFINITION

It is also called steam therapy and it involves the inhalation of water vapor.

Purposes

- To relieve the inflammation and congestion of the mucus membranes of the respiratory tract and paranasal sinuses, thus to produce symptomatic relief in acute cold and sinusitis
- To soften thick, tenacious mucus and help its expulsion from the respiratory tract, thus to relieve cough in bronchitis, postoperative cases, etc.
- To provide heat and moisture and to prevent the dryness of the mucous membranes of the lungs and upper respiratory passages following operations such as tracheostomy
- To aid in the absorption of oxygen
- To relieve spastic conditions of the larynx and bronchi
- To provide antiseptic action on the respiratory tract

Indications

- Common cold
- Flu (influenza)
- Sinus infections (infectious sinusitis)
- Bronchitis
- Bronchial asthma
- Nasal allergies
- Headache, congested (stuffy) nose
- Throat irritation, breathing problems caused by airway congestion
- Dry or irritated nasal passages, cough

Articles Needed

- Big towel
- Small towel
- Utensil with wide mouth
- Utensil with small mouth (Lota used for drinking water)
- Plastic cup or empty ice cream cup for discarding secretions/sputum.

Procedure

Fig. Steam inhalation at home

- Explain the procedure to the client and relatives.
- Ask the client to boil water according to the capacity of utensil of small mouth.
- Ask the client to empty the bladder.
- Place the utensil of small mouth in utensil with wide mouth and put small towel around it.
- Pour boiled water into inner utensil.
- Ask the client to sit comfortably on bed or floor. Cover the client with big towel and keep the utensil in front of the client.
- Ask the client to inhale fumes coming from boiled water in the utensil. Ask to take deep breaths.
- Small towel should be kept near the client so that he can wipe sweating, if any.
- Ask him to continue the same till water becomes cold.
- Vicks VapoRub or eucalyptus can be added to the water.
- Keep the sputum cup near the client so that he can spit in it if required.
- Record the observations and procedure on client's diary and in the nursing workbook.

NURSE'S RESPONSIBILITY

- Auscultate the client's chest before and after the procedure.
- Switch off the fans to prevent draught.
- Keep the client warm to prevent draught during, before and after the procedure.
- Effective steam inhalation should be at least for 15–20 minutes.
- Wash the articles with warm soapy water after emptying their contents and then rinse with clean water.

CHAPTER 13

Pediculosis Treatment

INTRODUCTION

Pediculosis treatment is carried out in patients with the help of treatment modalities including over the counter permethrin and pyrethrin, and prescription medicines, including malathion, lindane, benzyl alcohol and spinosad. First-line pharmacologic treatment of pediculosis is permethrin 1% lotion or shampoo. Multiple novel treatments have shown limited evidence of effectiveness superior to permethrin. Wet combing is an effective nonpharmacologic treatment option.

DEFINITION

Pediculosis is an infestation of the hairy parts of the body or clothing with the eggs, larvae or adults of lice. The crawling stages of this insect feed on human blood, which can result in severe itching. Pediculosis treatment is defined as an external application of medication on the scalp and in hair to remove pediculi or lice.

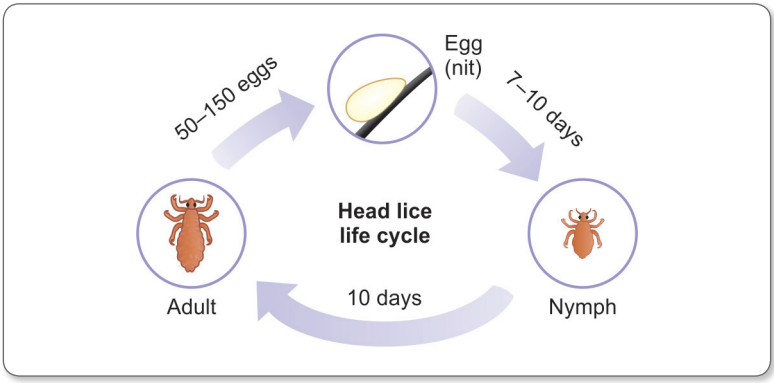
Purpose

To remove pediculi and nits as they suck blood and cause skin irritation

TYPES OF LICE

- Head louse—*Pediculus capitis*
- Body louse—*Pediculus corporis*
- Pubic or crab louse—*Pthirus pubis*

MODE OF TRANSMISSION OF LICE



- **Direct contact:** Lice are disseminated by close contact with lousy or infested persons. Overcrowding provides an excellent opportunity for the direct transference of lice from one person to another. Children get easily infested at school when their heads come together at work or play.
- **Indirect contact:** Lice may also be acquired from clothing, bedding, combs or brushes used by lousy persons.

Articles Needed

S. No.	Articles	Purpose
1.	Big towel	To cover the hair
2.	Apron	To prevent contamination
3.	Bowl with gauze pieces	To apply shampoo or medication
4.	Bowl with anti-lice shampoo or medications like 25% benzyl benzoate or other commercial preparations	To remove lice
5.	Bath towel and safety pins	To cover the client's shoulder
6.	Comb	To remove tangles
7.	Sponge cloth	To cover the eyes

Procedure

Fig. Pediculosis treatment

S. No.	Steps	Rationale
1.	Explain the procedure to the client	To gain cooperation
2.	Position the client in sitting or lying position comfortably	To promote the comfort of the client
3.	Wear apron	To prevent contamination
4.	Spread the bath towel over the client's shoulders and fix it with safety pins	To prevent the spreading of lice over the body
5.	Comb hair	To remove tangles
6.	Instruct the client to close the eyes and cover the eyes with sponge cloth	To avoid eye irritation
7.	Pour medication or anti lice shampoo in a bowl	To use effectively and to avoid spillage
8.	Divide hair into several sections	To apply thoroughly
9.	Apply anti-lice medication or shampoo to the scalp and hair using gauze piece	To destroy pediculi and nits
10.	Cover the entire hair with the big towel, pin it, leave it for a period of time as per the medicine used	To avoid the spread of pediculi
11.	Clean and disinfect the comb and other articles after use	To prevent the spread of pediculi and nits
12.	Instruct the client to take head bath	To remove the medication and shampoo off the hair
13.	Wash hands thoroughly	To prevent infection
14.	Replace the articles and document the procedure	For the follow-up care

Insertion and Removal of Intrauterine Contraceptive Device

CHAPTER 14

INTRODUCTION

Intrauterine contraception is highly effective, very safe, and generally well tolerated by most women. Intrauterine contraception device (IUCD) insertion and removal are usually relatively simple procedures that can be performed in the healthcare setting by trained nurses.

DEFINITION

An IUCD is a device made up of copper or plastic which is inserted to the uterus to prevent pregnancy for a specific period of time.

Purposes

- To prevent pregnancy
- To serve as a contraception for a long period of time
- To reverse fertility (90% of females will get pregnant within two years of removal)

IDEAL INTRAUTERINE CONTRACEPTIVE DEVICE CANDIDATE

A woman who:

- Has at least one child
- Has no history of pelvic disease
- Has normal menstrual periods
- Is willing to check the IUD tail
- Has access to follow-up and treatment of potential problems and is in a monogamous relationship.

CONTRAINDICATIONS

Absolute

- Suspected pregnancy
- Pelvic inflammatory disease
- Vaginal bleeding of undiagnosed etiology

- Cancer of the cervix, uterus or adnexia and other pelvic tumors
- Previous ectopic pregnancy.

Relative

- Anemia
- Menorrhagia
- History of pelvic inflammatory disease since last pregnancy
- Purulent cervical discharge
- Distortions of the uterine cavity due to congenital malformations, fibroids
- Unmotivated person.

TIMING OF INSERTION

Intrauterine contraceptive device (IUCD) can be inserted 6 weeks after delivery and 2–3 days after the end of menstruation. But IUCD can be inserted even during the menstrual cycle as the opened cervical canal, distended uterine cavity and cramps will make the insertion easier. It can be inserted 6 weeks after termination of pregnancy. Insertion of the device can be done before the mothers are discharged after their delivery from the hospital.

Articles Needed

S. No.	Articles	Purpose
1.	A sterile tray containing Copper T	To insert into the uterus
2.	Sims vaginal speculum	To retract the posterior vaginal wall
3.	Vulsellum	To hold the cervix promptly
4.	Uterine sound	To measure the length of the uterine cavity
5.	Sponge holding forceps	To hold the cotton swab
6.	Bowl, cotton swabs and antiseptic lotion	To clean the perineum
7.	Scissors	To cut the thread if needed
8.	Sterile gloves	To maintain aseptic condition
9.	Center hole towel	To expose the area for procedure
10.	Kidney tray	To discard the wastes

Preparation of the Mother

- Explain the procedure to the mother.
- Advise her to empty the bladder.
- Drape the mother exposing only the procedural site.

- Provide privacy to the mother.
- The mother should be placed in well ventilated and lighted area with all the needed articles placed nearby.

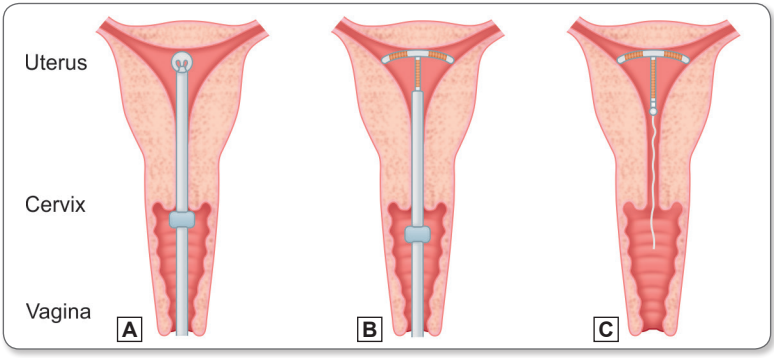
Procedure

S. No.	Steps	Rationale
1.	Explain the procedure to the mother	To reduce the fear
2.	Place the mother in supine position with flexed knees	To insert the IUCD easier
3.	Maintain aseptic techniques in the procedure	To prevent cross infection
4.	Examine the pelvic area of the mother prior to the insertion of IUCD	To rule out any infection
5.	Drape the mother appropriately	To maintain sterile technique
6.	Wash hands with soap and dry with towel	To prevent cross infection
7.	Wear sterile gloves	To prevent cross infection
8.	Clean the perineum and inspect the external genitalia	To rule out any infection
9.	Insert the speculum gently and observe the cervix	To monitor any signs of infection or erosion
10.	Clean the external cervical os with an antiseptic swab using the sponge holding forceps	To prevent infection
11.	Apply the vulsellum at the 12 o'clock position to grasp the lip of the cervix	To apply traction and to straighten the cervical canal
12.	Insert the uterine sound into the cervical canal by upward and downward direction and insert carefully into the uterine cavity	To measure the length of the uterine cavity and to find the position of the uterus
13.	Remove the uterine sound and assess the level of mucus and/or blood on the uterine sound	To determine the depth of the uterus
14.	Pick up the IUD and ensure that the blue flange is aligned with IUD arms and set at the distance the uterus is sounded	To check the condition of IUD
15.	Fold the arms of IUD into the insertion tube. Place the white inserter rod into the insertion tube at the end opposite to the arms	To keep the IUD in place

Contd...

S. No.	Steps	Rationale
16.	Gently and carefully advance the loaded inserter until the flange touches the cervix	To mark the depth of the uterus
17.	Pull back on the clear inserter tube by 2 cm to release the arms into a "T"	To ensure correct positioning
18.	Advance the inerter tube slowly back into uterus until flange touches the cervix	To ensure correct positioning
19.	Remove the insertion rod entirely by holding the insertion tube in place	To ensure correct positioning
20.	Cut the threads to 5 cm/2 inches from the cervix	To promote comfort for the mother
21.	Remove, wash and replace the articles	To be kept ready for another procedure
22.	Document the name of the mother, age, type of contraception, method adopted, time of insertion and complications, if any	To plan the further care and prevent complications in the near future

INSERTION OF THE INTRAUTERINE CONTRACEPTIVE DEVICE



Figs A to C: (A) IUD is inserted through tube into uterus; (b) Tube is removed; (c) IUD in place

Complications

- Bleeding
- Pain

- Pelvic infection
- Uterine perforation
- Pregnancy
- Expulsion of IUD
- Cancer and teratogenesis
- Syncope
- Menorrhagia
- Inter menstrual bleeding

Follow-up Care—Nurse's Responsibility

- The mother is instructed to intimate any unusual warning signs like delayed menstruation, spotting of blood, pain, any discharge from the vagina, fever, cold or any missing thread to the nearest health center as soon as possible.
- The mother is instructed to check the thread frequently.
- She should be counselled to avoid sexual intercourse within 24 hours after insertion of IUD.
- She should be informed well regarding the side effects and complications.
- Follow-up care is needed after a month of insertion.

REMOVAL OF INTRAUTERINE CONTRACEPTIVE DEVICE

Intrauterine Contraceptive Device must be removed at the expiry date or when the woman develops any complications or request or reverse of pregnancy.

Indications

- Desire of pregnancy
- Any infection
- Completed life span of IUCD
- Mother has conceived with the IUCD in situ
- Displacement of IUCD
- Pre-excisional/endometrial biopsy

Procedure

S. No.	Steps	Rationale
1.	Explain the procedure to the mother	To reduce the fear
2.	Position the mother in supine position with knees flexed	To visualize clearly
3.	Wash hands thoroughly with soap and dry with clean towel	To prevent cross infection
4.	Wear sterile gloves	To prevent cross infection
5.	Gently introduce the vaginal speculum	To visualize the cervix and IUD strings clearly
6.	Grasp the IUD strings with the forceps and apply steady gentle outward traction	To minimize injury for the proper removal
7.	Document the name of the mother, age, reason for removal, date and time of removal	To maintain the follow-up care

NURSE'S RESPONSIBILITY AFTER CARE

- Remove the speculum.
- Replace all the articles.
- Place the mother in a comfortable position.
- Reassure the mother and insist for the further follow-up care.

CHAPTER 15

Intranatal Care

INTRODUCTION

Childbirth is a normal physiological process, but complications may arise. Septicemia may result from unskilled and septic manipulations, and tetanus neonatorum from the use of unsterilized instruments. The need for effective intranatal care is therefore indispensable, even if the delivery is going to be a normal one. The emphasis is on the cleanliness. It entails clean hands and fingernails, a clean surface for delivery, clean cord care, i.e., clean blade for cutting the cord and clean tie for the cord, no application on cord stump, and keeping birth canal clean by avoiding harmful practices.

DEFINITION

Intranatal care means care taken during delivery. This consists of taking care of not only the mother but also the newborn.

NEED FOR INTRANATAL CARE IN HEALTHCARE SETTINGS

Hospitals and health centers should be equipped for delivery with midwifery kits, a regular supply of sterile gloves and drapes, towels, cleaning materials, soap and antiseptic solution, as well as equipment for sterilizing instruments and supplies. There are delivery kits available with the items needed for basic hygiene for delivery at home, where a midwife with a midwifery kit is not likely to be present.

AIMS OF INTRANATAL CARE

- For maintaining asepsis.
- Delivery with minimum injury to the infant and mother.
- Readiness to deal with complications such as prolonged labor, antepartum hemorrhage, convulsions, malpresentations, prolapse of the cord, etc.
- Care of the baby at delivery resuscitation, care of the cord, care of the eyes, etc.

DOMICILIARY CARE

Mothers with normal obstetric history may be advised to have their confinement in their own homes, provided the home conditions are satisfactory. In such cases, the delivery may be conducted by the female health worker or trained dai. This is known as "domiciliary midwifery service."

Fig. Domiciliary care

Advantages

- The mother delivers in the familiar surroundings of her home and this may tend to remove the fear associated with delivery in a hospital.
- The chances for cross infection are generally fewer at home than in the nursery/hospital.
- The mother is able to keep an eye upon her children and domestic affairs; this may tend to ease her mental tension.

Disadvantages

- The mother may have less medical and nursing supervision than in the hospital.
- The mother may have less rest.
- She may resume her domestic duties too soon.
- Her diet may be neglected. Strictly speaking, many homes in India are unsuitable for every normal delivery.

The argument that childbirth is a natural event and should take place at home does not guarantee that everything will be normal. Since 72.2% of India's population live in rural areas, most deliveries will have to take place in the home with the aid of female health workers or trained dais.

The danger signals during labor:

- Sluggish pains or no pains after rupture of membranes
- Good pains for an hour after rupture of membranes, but no progress
- Prolapse of the cord or hand
- Meconium-stained liquor or a slow irregular or excessively fast fetal heart
- Excessive 'show' or bleeding during labor
- Collapse during labor
- A placenta not separated within half an hour after delivery
- Postpartum hemorrhage or collapse, and
- A temperature of 38°C or over during labor.

There should be a close liaison between domiciliary and institutional delivery services.

INSTITUTIONAL CARE

About one per cent of deliveries tend to be abnormal and four per cent 'difficult', requiring the services of a doctor. Institutional care is recommended for all 'high-risk' cases, and where home conditions are unsuitable.

The mother is allowed to rest in bed on the first day after delivery. From the next day, she is allowed to be up and about. The current practice is to discharge the woman after 5 days lying-in period after a normal delivery.

Rooming-in

Keeping the baby's crib by the side of the mother's bed is called 'rooming-in'. This arrangement gives an opportunity for the mother to know her baby. Mothers interested in breastfeeding usually find there is a better chance for success with rooming-in. Rooming-in also allays the fear in the mother's mind that the baby is not misplaced in the central nursery. It also builds up her self-confidence.

CONCLUSION

The World Health Organization (WHO) recommendations on intranatal care for a positive childbirth experience is an up-to-date, comprehensive and consolidated guideline on essential intra partum care. The sustainable development goal is to ensure healthy lives and promote well-being to all expanding their focus to ensure women safety during delivery also.

CHAPTER

16

Cord Care

INTRODUCTION

The umbilical cord is a unique tissue, consisting of two arteries and one vein covered by a mucoid connective tissue and a thin mucous membrane. Before the baby is born, the umbilical cord brings nutrition and oxygen to the baby and removes waste. After the umbilical cord is cut at birth, a stump of tissue remains attached to the baby's belly button (navel). The stump gradually dries and shrivels until it falls off, usually 1–2 weeks after birth. It is important to keep the umbilical cord stump and surrounding skin clean and dry.

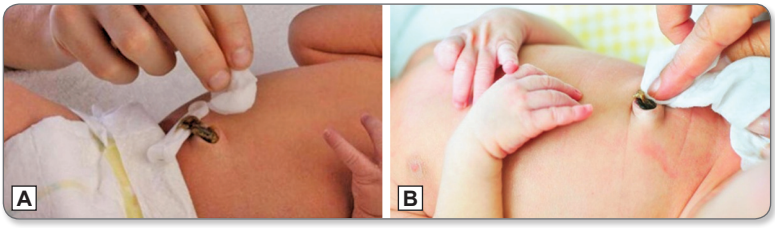
DEFINITION

Cord care is how to care for the baby's umbilical cord stump. Cord care can be defined as a technique to provide due care to the baby's umbilical cord stump.

Purposes

- To prevent infection
- It helps the stump to fall off and the navel to heal more quickly

Procedure



Figs A and B: Cord care

- Soak a cotton swab in warm water. Squeeze out the excess water. Gently wipe around the sides of the stump and the skin around it.

- Wipe away any wet, sticky or dirty substances.
- Gently pat dry the area with a soft cloth. Let the stump exposed to air.
- The stump usually falls off within 1–2 weeks, but sometimes it takes longer. Keep the area around the navel absolutely clean until the area has completely healed.

WARNING SIGNS OF INFECTION

- Pus (yellowish fluid) that is around the base of the cord and smells bad
- Red, tender skin around the base of the cord
- Fever
- A moist lump on the baby's navel that lasts for more than 2 weeks after the umbilical cord has fallen off.
- Bulging tissue around the navel.

CHAPTER 17

Collection of Sputum for Culture

INTRODUCTION

Sputum samples can be obtained using a non-invasive or invasive method and ideally should be collected before antibiotics are started. It is very important that the sputum is coughed up from the lungs, and 'spit' from the mouth.

DEFINITION

Collecting sputum for a diagnostic procedure is the careful procedure of the healthcare providers to identify the predominant pulmonary disorders.

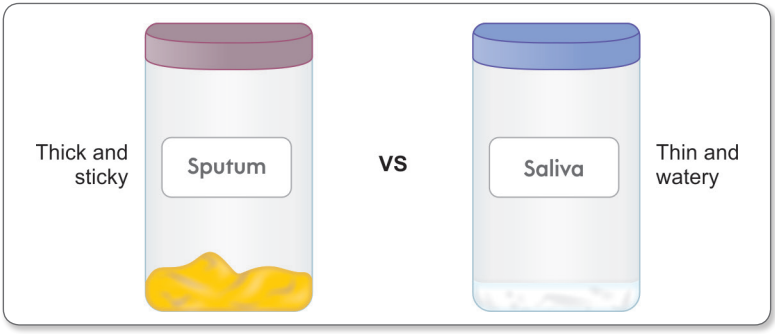
Principles

Sputum Specimen Collection

The aim of sputum collection is to identify the bacterial, viral or fungal cause of a suspected infection and its sensitivities to antibiotics. A specimen is indicated if client has:

- Clinical signs of infection including a productive cough and purulent sputum
- Signs of systemic infection
- Pyrexia of unknown origin

CHARACTERISTICS OF SPUTUM



Sputum may be described using the following terms which can aid diagnosis of the cause:

- Mucoid—containing or resembling mucous
- Purulent—containing pus
- Mucopurulent—containing pus and mucous
- Frothy—visible froth
- Viscous—thick and sticky
- Blood-stained—visible blood present
- Yellow, orange or green sputum—bacterial or viral infection
- Red sputum—presence of sputum suggests tuberculosis, bronchiectasis or cancer
- White frothy sputum—pulmonary edema.

Purposes

- To identify the organism responsible for lung infections
- To assess the efficacy of treatment to diseases such as TB

PREPARATION OF THE CLIENT

- Advise the client to drink enough fluids on the night before the test.
- Assess the general condition of the client
- Auscultate the lungs to confirm the presence of secretions
- Assess the timing of the last meal. Wait for 1–2 hours after eating.
- Instruct the client not to use any antiseptic mouthwash before collecting sputum in order to reduce the chance of false result.

Articles Needed

S. No.	Articles	Purpose
1.	Disposable gloves, if available	To prevent contamination
2.	Sputum container with proper labeling	To collect sputum
3.	Kidney tray	To keep the sputum container
4.	Paper tissues as required	To wipe the client's mouth

Procedure

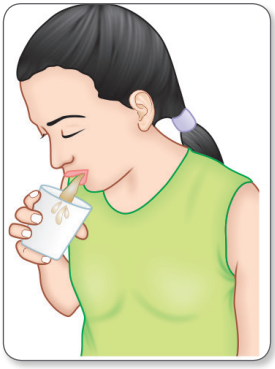


Fig. Sputum collection

S. No.	Steps	Rationale
1.	Explain the procedure to the client	To get cooperation
2.	Label the container	To reduce the error of wrong diagnosis
3.	Wash hands	Prevents cross infection
4.	Wear gloves	To prevent contamination
5.	Instruct the client to take three to four deep breaths, exhale slowly, and then to cough forcefully to bring out the sputum and to spit it into the sterile container directly without touching the inside of it	To bring out secretion from lower respiratory tract
6.	Close the container with the lid tightly	To prevent contamination
7.	Send it to the laboratory for analysis	To analyze and interpret
8.	Remove gloves; wash hands	To prevent cross infection
9.	Document the procedure	Serves as a legal document

CHAPTER 18

Pap Smear Test

INTRODUCTION

The Papanicolaou test or Pap smear test is a method of cervical screening used to detect potentially precancerous and cancerous processes in the cervix or colon. The test doesn't diagnose cancer, but rather looks for abnormal cervical changes (cervical dysplasia)—precancerous or cancerous cells that could indicate cancer. If any such cells are found, further testing, such as a colposcopy or biopsy, will be done in order to diagnose cancer.

DEFINITION

A Pap smear (or Pap test) is a quick, painless procedure that screens for cervical cancer. It involves examining cells taken from the cervix under a microscope.

Purposes

- To detect abnormal cervical changes
- It is done as a part of regular pelvic examination
- To identify the high risk strains of human papillomavirus (HPV)

Indications

- Women in the age group of 21–29 should have a Pap test every three years (but should not be tested for HPV)
- Women in the age group of 30–65 should have a Pap test and an HPV test (this is called co-testing) every five years
- Having a family history of cervical cancer
- A diagnosis of cervical cancer or a Pap smear that showed precancerous cells
- Infection by the human immunodeficiency virus (HIV)
- Weakened immune system due to many factors, such as organ transplant, chemotherapy, or corticosteroids
- Early onset of sexual activity (intercourse)
- Multiple sexual partners
- A sexually transmitted infection, such as genital herpes or chlamydia
- Previous cancer of the genital tract
- History of smoking

PREPARATION BEFORE THE TEST

- Make sure that the woman is not menstruating as menstruation can interfere with the results of the test.
- The best time to take Pap smear is one week after the end of the menstruation.
- Advise the woman not to engage in sexual intercourse before 48 hours of Pap test.
- Advise the woman to avoid douching 2-3 days prior to the test (it will rinse away the cells).

Articles Needed

S. No.	Articles	Purposes
1.	Disposable gloves	To prevent cross infection
2.	Vaginal speculum	To visualize the cervix
3.	Wooden spatula	To take sample outside the cervix
4.	Cytobrush	To collect sample from endocervix
5.	A container with cytology preservative container	To collect the smear sample
6.	A light source	To visualize the vagina and cervix

Procedure

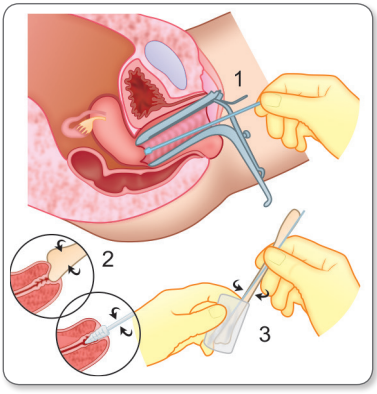


Fig. Pap smear test

S. No.	Steps	Rationale
1.	Explain the procedure to the woman and keep all the needed articles near the procedure site	To get the woman's cooperation and to perform the procedure with ease
2.	Place the woman in supine position with knees flexed (lithotomy position) and legs abducted	To visualize the vagina up to the level of cervix
3.	Wash hands. Wear gloves and examine the vagina for any abnormalities	To prevent cross infection
4.	Use the left hand to part the labia minora and insert the speculum with the screw facing sideways	To enter into the vagina and to reach the cervix
5.	As advancing the speculum, turn it so that the screw faces upward. Open the blades and fix them open with the screw. Ensure that the cervix is exposed well by adjusting the light source	To check for any gross pathology and identify the transition zone
6.	Using cytobrush, swab the endocervix by rotating it 180°	To collect sample from endocervix
7.	Using concave end of wooden spatula, swab carefully around the cervix by rotating it 360°	To take sample outside the cervix
8.	Remove the brush ensuring it does not wipe against anything. Tap the spatula on the edge of the container with the cytology medium. Label the container with proper details of the client	To preserve the Pap specimen and transport it to the laboratory
9.	Release the screw on the speculum and carefully remove it from the vagina, completing the examination	To mark the end of the procedure and to make the woman comfortable
10.	Make the woman comfortable and tell her to take rest for 10 minutes	To provide comfort
11.	Replace all the articles and record the procedure	To disinfect all the used articles and to maintain good documentation

INTERPRETATIONS OF PAP SMEAR FINDINGS

- Normal or negative means there is no identifiable infection.
- ASCUS—*Atypical squamous* cells of undetermined significance: It is not clear if it is related to HPV. It could be related to life changes like pregnancy, menopause, or an infection. The HPV test can help find out if the cell changes are related to HPV.

- **Abnormal:** An abnormal result means that cell changes are found on the cervix. This usually does not mean that the woman has cervical cancer. Abnormal changes on the cervix are likely caused by HPV. The changes may be minor (low-grade) or serious (high-grade). Most of the time, minor changes go back to normal on their own. However, more serious changes can turn into cancer if they are not removed. The more serious changes are often called 'precancer' because they are not yet cancer, but they can turn into cancer over time. In rare cases, an abnormal Pap test can show that the woman may have cancer.

NURSE'S RESPONSIBILITIES

The nurse should note the following nursing interventions after Pap smear:

- **Cleanse the perineal area.** Secretions or excess lubricant from the vagina are removed and cleansed.
- **Provide a sanitary pad.** Slight spotting may occur after the Pap smear.
- **Provide information about the recommended frequency of screening.** It is recommended that screening is necessary every three years for women aged 21–29 years and co-testing for HPV and cytological screening every five years for women aged 30–65 years.
- **Answer any questions or fears by the woman or family.** Anxiety related with the pending test results may occur. Discussion of the implications of abnormal test results on the client's lifestyle may be provided to the woman.

CHAPTER 19

Test for Refractive Error

INTRODUCTION

The result of refractive errors is blurred vision, which is sometimes so severe that it causes visual impairment. Refractive errors are diagnosed by using Snellen chart.

The Snellen eye chart is the familiar, classic chart of big and little letters. The chart consists of 11 lines of block letters, beginning with a large single letter on the top row. The number of letters on each row increases moving from top to bottom. The size of the letters progressively decreases, allowing for more letters on each subsequent line.

DEFINITION

Refractive error is a very common eye disorder. It occurs when the eye cannot clearly focus the images from the outside world.

COMMON REFRACTIVE ERRORS

- **Myopia (nearsightedness):** It causes difficulty in seeing distant objects clearly
- **Hyperopia (farsightedness):** It leads to in seeing close objects clearly
- **Presbyopia:** It leads to difficulty in reading or seeing at arm's length, it is linked to ageing and occurs almost universally.

TEST FOR REFRACTIVE ERRORS

Test for Myopia (Distance Visual Acuity)

- Hang the Snellen chart (numeric/letters/E chart) on a light-colored wall.
- Make the client to sit at 20-feet mark.

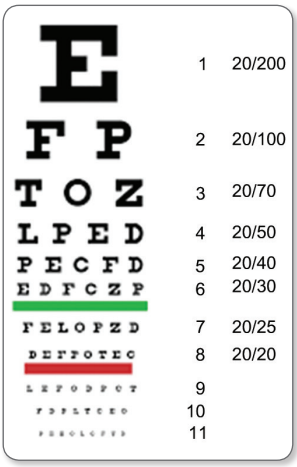


Fig. Snellen chart

- Instruct the client to cover one eye and read aloud the letters on the chart, beginning at the top and moving toward the bottom. The smallest row of letters that the client reads accurately determines visual acuity in the uncovered eye.
- The test is repeated with the other eye, and then with both eyes together.
- Visual acuity is sometimes expressed as 20/20, meaning the smallest letters accurately read on the chart.

Test for Hyperopia (Near Visual Acuity)

- Near visual acuity is a measurement of how well the person can see close objects.
- Usually measured at about 16 inches, it is a good way to measure the ability to cope with tasks such as reading or sewing.
- In most cases, near visual acuity is measured with both eyes open. The client is asked to hold a near point card at 16 inches and to read the smallest line possible.

Test for Presbyopia (Intermediate Visual Acuity)

- It is a measurement of how well the person can see at an arm's length distance or somewhere between distance and near. Although not a typical measurement in an eye examination, it becomes more and more important for eye doctors to assess intermediate visual acuity because this is the distance where most computers are set.

CHAPTER 20

Care of Tuberculosis Client at Home

INTRODUCTION

Tuberculosis (TB) is spread from person to person through the air. When people with lung TB cough, sneeze or spit, they propel the TB germs into the air. A person needs to inhale only a few of these germs to become infected. About one-quarter of the world's population has latent TB, which means people have been infected by TB bacteria but are not (yet) ill with the disease and cannot transmit the disease.

DEFINITION

Tuberculosis (TB) is caused by bacteria (*Mycobacterium tuberculosis*) that most often affects the lungs. Tuberculosis is curable and preventable.

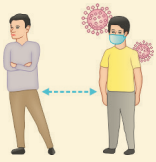
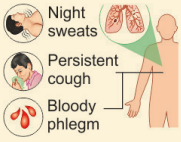
SYMPTOMS OF TUBERCULOSIS

People who have any of the following symptoms should be evaluated for TB disease:

- Persistent cough (3 weeks or longer)
- Chest pain
- Bloody sputum
- Weight loss or loss of appetite
- Fever
- Chills
- Night sweats
- Malaise
- Fatigue

CARE OF TB PATIENT AT HOME

The following instructions should be followed by the TB clients at home in order to prevent the spreading of infection to the family members.

Cover the mouth and nose tightly with a disposable tissue or handkerchief while coughing or sneezing		If there is no tissue paper, cover the nose and mouth with flexed elbow.	
Put the tissue in a plastic bag right away after use and/or put it in the waste basket		Wash the hands with water and soap	
Sleep alone in your own room and ventilate the room by opening windows in the morning and evening at least for 15 minutes.		Cloths and bed linens should be washed frequently	
Eat balanced diet		The used utensils should be washed as usual	
Avoid close contact with other people		Do outdoor exercises if it is not too strenuous	
Evaluate the resident for signs and symptoms of TB disease for early detection and treatment			

CHAPTER 21

Chlorination of Wells

INTRODUCTION

Wells are the main source of water supply in the rural areas. The need often arises to disinfect them, sometimes on a mass scale, during epidemics of cholera and gastroenteritis. Disinfection by chlorination is usually recommended if a water sample from the well has tested positive for bacteria. The most effective and cheapest method of disinfecting wells is the use of bleaching powder.

DEFINITION

Chlorination, or 'shock chlorination', is the process of flushing the well and water system with a chlorine solution to kill bacteria and other microorganisms

RECOMMENDATIONS FOR CHLORINATION

- Upon completion of a new well or when an unused well is returned to service.
- If annual water test results indicate the presence of bacteria.
- If a well system is opened for any installation, repair or maintenance.

- Whenever the well is surrounded by flood waters (standing water around or covering the well casing).
- If well water becomes muddy or cloudy after a rain.
- If the well has iron bacteria or sulfur-reducing bacteria symptoms, like slime (biofilm) or odor.

ACTION OF CHLORINE

When chlorine is added to water, there is formation of hydrochloric and hypochlorous acids. The hydrochloric acid is neutralized by the alkalinity of the water. The hypochlorous acid ionizes to form hydrogen ions and hypochlorite ions, as follows:

$$H_2O + Cl_2 = HCl + HOCl$$
$$HOCl = H + OCl$$

Chlorine acts best as a disinfectant when the pH of water is around 7 because of the predominance of hypochlorous acid. When the pH value exceeds 8.5, it becomes unreliable as a disinfectant because about 90 per cent of the hypochlorous acid gets ionized to hypochlorite ions. It is fortunate that most waters have a pH value between 6 and 7.5.

STEPS IN WELL DISINFECTION

Procedure

- **Find the volume of water in a well:**
  - Measure the depth of water column - (h) meter
  - Measure the diameter of well - (d) meter. Take the average of several readings of the above measurements.
  - Substitute hand d in : Volume (liters) = $\frac{3.14 \times d^2 \times h}{4} \times 1000$
  - One cubic meter = 1,000 L of water
- **Find the amount of bleaching powder required for disinfection:** Estimate the chlorine demand of the well water by "Horrock's Apparatus and calculate the amount of bleaching powder required to disinfect the well. Roughly, 2.5 grams of good quality bleaching powder would be required to disinfect 1,000 L of water. This will give an approximate dose of 0.7 mg of applied chlorine per liter of water.
- **Dissolve bleaching powder in water:** The bleaching powder required for disinfecting the well is placed in a bucket (not more than 100 g in one bucket of water) and made into a thin paste. More water is added till the bucket is nearly three-fourths full. The contents are stirred well, and allowed to sediment for 5–10 minutes when lime settles down. The supernatant solution which is chlorine solution, is transferred

to another bucket, and the chalk or lime is discarded (***Note:*** The lime sediment should not be poured into the well, as it increases the hardness of well water).

- **Delivery of chlorine solution into the well:** The bucket containing the chlorine solution is lowered some distance below the water surface, and the well water is agitated by moving the bucket violently both vertically and laterally. This should be done several times so that the chlorine solution mixes intimately with the water inside the well.
- **Contact period:** A contact period of one hour is allowed before the water is drawn for use.
- **Orthotolidine arsenite test:** It is good practice to test for residual chlorine at the end of one hour contact. If the 'free' residual chlorine level is <0.5 mg/L, the chlorination procedure should be repeated before any water is drawn. Wells are best disinfected at night after the day's draw off. During epidemics of cholera, wells should be disinfected every day.

CHAPTER
22

Methods to Avoid Droplet Infection

INTRODUCTION

The best way to help prevent spread of respiratory germs is to avoid contact with droplets or secretions of saliva, mucus and tears. Things that can help include the following: Minimize close contact with persons who have symptoms of respiratory illness, such as coughing or sneezing.

DEFINITION

Droplet infection is defined as the infection transmitted by airborne droplets of saliva or sputum containing infectious organisms.

DROPLET GENERATION AND SIZES

Naturally produced droplets from humans (e.g., droplets produced by breathing, talking, sneezing, coughing) include various cell types (e.g., epithelial cells and cells of the immune system), physiological electrolytes contained in mucous and saliva as well as potentially various infectious agents (e.g., bacteria, fungi and viruses).

The particle size above 5 microgram is considered to be infectious and tends to remain trapped in the upper respiratory tract, whereas droplets less than 5 microgram have the potential to be inhaled into the lower respiratory tract (the bronchi and alveoli in the lungs).

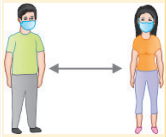
DROPLET-BORNE DISEASES

- COVID 19 (Corona virus disease)
- Severe acute respiratory disease (SARS)
- Meningococcal infection
- Hand, foot and mouth disease
- Rubella
- Mumps
- Viral conjunctivitis
- Influenza
- Pertussis
- Chickenpox

- Measles
- Pneumococcal disease

METHODS TO AVOID DROPLET INFECTION

Note: These methods are applied to avoid droplet infection by COVID19 too.

Methods			
Wear masks by covering the nose and mouth.		Perform frequent hand hygiene.	
Avoid sharing personal items such as eating or drinking utensils, tooth-brushes and towels with the sick persons at home.		Clean and disinfect the used items of the sick persons at home often.	
Cover the nose and mouth with kerchief while coughing with kerchief or tissue paper or keep the folded hands near the mouth while coughing.		Maintain social distancing. Stand with at least 1–2 meters distance with others while speaking.	
Using personal protective equipment (PPE) while caring the sick people like wearing masks, gowns, gloves and eye goggles if needed.		Keep the living room well ventilated.	
Avoid crowded places.		Avoid touching eyes, nose and mouth.	

CHAPTER 23

Common Health Needs and Problems for Various Age Groups

Needs	Common Health Problems
Newborn	
• Breastfeeding • Cord care • Immunization • Prevention of infection	• Thermoregulatory problems • Fever • Acute respiratory infection (ARI) • Low birth weight
Infant	
• Breastfeeding • Weaning • Immunization • Child safety • Environmental sanitation • Prevention of infection	• Fever • ARI • Diarrhea • Other communicable diseases
Under five children	
• Balanced diet • Personal hygiene • Immunization • Vitamin A prophylaxis • Periodical deworming • Child safety • Prevention of infection	• ARI • Fever • Malnutrition • Diarrhea • Worm infestation • Dental or cavities • Accidents and injuries • Child abuse • Other communicable diseases
School-age children	
• Balanced diet • Dental care • Deworming • Personal hygiene • Road safety • Prevention of infection • Menstrual hygiene • Good touch and bad touch • Mental health	• Dental caries • ARI • Worm infestation • Malnutrition • Skin and ENT problems • Diarrhea • Pediculosis • Accidents and injuries • Behavioral problems

Contd...

Adolescents	
• Well-balanced diet • Avoidance of junk food • Menstrual hygiene • Deworming • Personal hygiene • Road safety • Prevention of infection • Good touch and bad touch • Mental health	• Substance abuse • Menstrual irregularities • Poor academic performance • Behavioral problems • Obesity
Adult	
• Avoidance of junk foods • Health monitoring • Promoting physical fitness • Avoidance of risky habits • Stress management • Road safety • Personal hygiene • Exercises • Health monitoring • Therapeutic compliance • Mental health	• Vision problems • High risk behaviors • Obesity • Substance abuse • Stress • Maladaptive behaviors • Accidents and injuries • Communicable and non-communicable diseases
Geriatric	
• Personal hygiene • Easily digestible diet • Safety and security • Prevention of illness • Therapeutic compliance • Stress management • Prevention of falls • Psychological support	• Body pain • Joint pain • Fatigue • Risk for fall • Self-care deficit • Thermoregulatory problems • Sensory deprivation • Loss of spouse • Lowered immunity • Risk for infection • Psychological problems • Communicable and noncommunicable diseases
Antenatal mothers	

• Nutritional needs
  ▪ Balanced diet
  ▪ Iron and folic acid
  ▪ Vitamins and minerals
• Immunization
• Adequate rest and sleep
• Personal hygiene
• Counseling for warning signs
• Counseling for family planning methods
• Counseling on drugs and radiation
	• Morning sickness
	• Frequency of micturition
	• Regurgitation
	• Heart burn
	• Pica
	• Hemorrhoids
	• Constipation
	• Peripheral edema

Contd...

Postnatal mothers	
• Nutritional problems • Balanced diet • Adequate rest and sleep • Personal hygiene • Counseling for family planning methods • Postnatal exercises	• Pain • Constipation • Hemorrhoids • Pyrexia • Breast engorgement • Anemia • Excessive bleeding • Puerperal sepsis • Urinary tract Infection (UTI) • Subinvolution of uterus

CHAPTER 24

Anthropometric Measurements

INTRODUCTION

Anthropometric measurement is a system of assessment of physical built and nutritional status of children by using measurements such as weight, height, chest circumference (CC) and head circumference (HC).

DEFINITION

Anthropometric measurements are systematic measurements of the size, shape and composition of the human body. For example, body mass index or BMI, is a measurement of a person's weight-to-height ratio, and waist-to-hip ratio is a measure of the waist circumference divided by the hip circumference.

Purposes

- To appraise the physical well-being of the beneficiaries
- To detect disease in its early stages
- To determine the nature of the treatment or nursing care needed for the beneficiaries

ANTHROPOMETRIC MEASUREMENTS OF NEONATES, NEWBORNS AND INFANTS

Articles Needed

S. No.	Articles	Purpose
1.	Weighing machine	To weigh the client
2.	A scale	To mark the height point
3.	Measuring tape	To measure the height, HC, CC and MAC

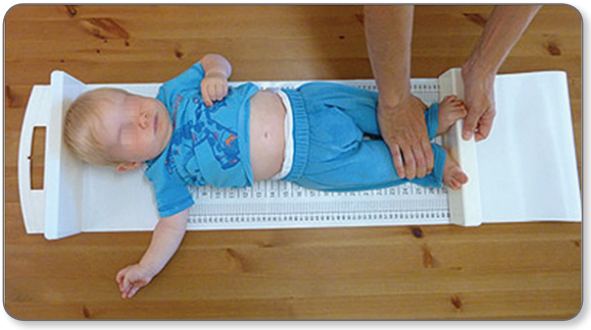
Measurement of Weight

Procedure

S. No.	Steps	Rationale
1.	Place the infantometer on the flat surface	To check the weight accurately
2.	Adjust the scale to zero level before weight is taken	To prevent zero error
3.	Weigh the child with minimum of clothing	Less clothing prevents accuracy of weight
4.	Place the child in the infantometer in a secured manner	To prevent falling
5.	Read the weight from a distance of one foot with the eye vertically at the level with the dial	To measure the reading accurately
6.	Record the weight clearly in the recording sheet/ proforma	Record is a legal document

$$\text{Expected weight formula for infant} = \frac{\text{Age in months} + 9}{2}$$

Measurement of Length



Procedure

S. No.	Steps	Rationale
1.	Spread the clean paper/plastic sheet over a flat plain surface	To provide clean area for the procedure
2.	Gently place the infant or child in supine position. Check to make sure that the child is looking up and that the head, body and toes are in a straight line.	To provide accurate measurement of height
3.	Hold the child's legs together just above the knees and gently push both legs down against the measuring board with one hand, fully extending the child.	To provide accurate measurement of height
4.	Place a mark over the newspaper at head end. With the other hand, slide the same cardboard against the child's feet until the heels of both feet touch the footboard with toes pointed upward. Place a mark over the newspaper at foot end.	To mark the accurate height
5.	Remove the baby out of the paper and place over the mat in a comfortable position. Read the measurement to the nearest centimeter in the paper.	To mark the accurate height
6.	Record the measured length of the newborn.	Record is a legal document

Head and Chest Circumference

Procedure

Steps	Rationale
Head circumference	
• Instruct the mother to hold the child properly	• It provides accuracy
• Check the circumference by encircling the head. A maximum circumference of the head in the occipitofrontal diameter	• To know the actual head circumference

Contd...

Steps	Rationale
Chest circumference	
• Check the circumference by encircling both the nipples of the chest	• To provide accurate measurement

ANTHROPOMETRIC MEASUREMENT OF PRESCHOOL CHILD

Preschool is the period between completions of 1 year and 5 years.

Measuring Weight of Children

If the child is more than 2-year-old, take the weight of the mother and baby (A), and then take the weight of the mother (B). Calculate the weight of the baby by using the following formula:

Weight of the baby = A – B

Expected weight formula for preschool child = Age in years × 2 + 8

Measuring Height of Children

Procedure

S. No.	Steps	Rationale
1.	Make the child to stand against a wall. Shoulders, back of head (occiput), heel and sacrum should touch the wall and keep the feet parallel	To provide accurate measurement of height
2.	Make a mark on the wall with the help of scale/board touching the top of the head horizontally. Make the child to move away and measure the length on the wall by using measuring tape	To provide accurate measurement of height
3.	Record the length/height in centimeters	Record is a legal document

Measuring Mid-arm Circumference

Procedure

Steps	Rationale
Mid-arm circumference	
Measure the length of upper arm from acromion process to olecranon fossa and take the median, then measure the MAC	It provides accuracy A color coded Shakir's tape is also used to measure mid-arm circumference which is marked as: • 13.5–16 cm: Green – normal; nutritional status (13.5 cm = 85%; 16 cm = 100%) • 12.5–13.4 cm: Yellow – mild malnutrition • Below 12.5 cm: Red – moderate to severe malnutrition

ANTHROPOMETRIC MEASUREMENT OF SCHOOL CHILD

School age is the period between 6 and 12 years.

Measuring Weight of Child

Procedure

S. No.	Steps	Rationale
1.	Explain the procedure to the schoolchild	To get cooperation
2.	Select an even surface and place the weighing scale	To provide accurate weight
3.	Check the zero error; if not, adjust the screw level, and make the reading at the zero level	To prevent zero error
4.	Instruct the child to stand on the weighing scale in a straight manner and note the weight	To measure the reading accurately

$$\textbf{Expected weight formula for school child} = \frac{\textbf{Age in years} \times 7 + 5}{2}$$

Measuring Height of School Child

Procedure

S. No.	Steps	Rationale
1.	Make the child to stand against a wall. Shoulders, back of head (occiput), heel and sacrum should touch the wall and keep the feet parallel	To provide accurate measurement of height
2.	Make a mark on the wall with the help of scale/board touching the top of the head horizontally. Make the child to move away and measure the length on the wall by using measuring tape	To provide accurate measurement of height
3.	Record the length/height in centimeters	Record is a legal document

Expected height formula for 1–12 years = Age in years × 6 + 77

Degree of Malnutrition

$$\text{Weight for age (\%)} = \frac{\text{Actual weight of the child}}{\text{Expected weight of the child}} \times 100$$

GOMEZ Classification

Weight for age (%)	Malnutrition
90% and above	Normal
75–89%	Grade I
60–74%	Grade II
Below 60%	Grade III

ANTHROPOMETRIC MEASUREMENT OF ADOLESCENT, ADULT AND OLD AGE

Measuring Weight

Procedure

S. No.	Steps	Rationale
1.	Explain the procedure to the client	To get cooperation
2.	Select an even surface and place the weighing scale	To provide accurate weight
3.	Check the zero error; if not, adjust the screw level, and make the reading at the zero level	To prevent zero error
4.	Instruct the client to stand on the weighing scale in a straight manner and note the weight	To measure the reading accurately

Measuring Height

Procedure

S. No.	Steps	Rationale
1.	Make the client to stand against a wall. Shoulders, back of head (occiput), heel and sacrum should touch the wall and keep the feet parallel	To provide accurate measurement of height
2.	Make a mark on the wall with the help of scale/board touching the top of the head horizontally Make the client to move away and measure the length on the wall by using measuring tape	To provide accurate measurement of height
3.	Record the height in centimeters	Record is a legal document

Formula for measuring weight

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m}^2\text{)}}$$

Interpretation (in kg/m^2)

BMI	Nutritional status
<18.5	Underweight
18.5–24.9	Normal weight
25.0–29.9	Overweight
30.0–34.9	Class I obesity
35.0–39.9	Class II obesity
>40	Class III obesity

CHAPTER

25 Physical Assessment for Various Age Groups

HEAD TO FOOT ASSESSMENT OF UNDER FIVE CHILDREN

Sequence	Characteristics
Head	
Size	Normal/microcephaly/macrocephaly/hydrocephalus
Scalp	Clean/scar/dandruff/pediculosis
Fontanel	**Anterior:** Closed/opened **Posterior:** Closed/opened
Hair	Even distribution of hair/thick hair with no signs of infection/dryness/brittleness **Color:** Black/brown/white
Face	Round/symmetric facial movements/high or low forehead
Eyes	
Size	Normal/microphthalmia/exophthalmos/wide spaced eyes
Eyebrows	Even distribution of hair/symmetrical alignment/asymmetrical
Eyelashes	No infection
Eyelids	No discoloration/no edema/lids close symmetrically
Eyeball	Normal/sunken/protruded/strabismus
Conjunctiva	Pinkish/pale/moist/dry
Sclera	White/yellowish discoloration
Pupils	Black in color/iris flat and round/equally react to light
Visual acuity	Normal/Abnormal (squint/myopia/hyperopia)

Contd...

Sequence	Characteristics
Ears	
External ear	Symmetrical/asymmetrical/no ear discharge/low set ears/irritation **Cerumen:** Present/not present
Hearing acuity	Normal/abnormal
Nose	
Nasal septum	Aligned straightly/septal deviation
External nares	**Crust:** Present/not present **Discharge:** Present/not present
Nasal mucosa	Pink/pale
Mouth	
Lips	Normal/redness/swelling/crusted/cyanosis/cleft lip
Gums	Pink/bleeding gums
Buccal mucosa	Pink/moist/bleeding/ulceration
Odor of the mouth	**Foul smelling:** Present/absent
Teeth	White to yellow in color/discoloration of teeth/dental carries
Tongue	Pink/moist/white-coated tongue
Palate	Dome shaped/flat roofed/cleft palate
Throat	
Throat and pharynx	Normal/enlarged tonsils/redness/pus collection
Neck	
Lymph nodes	Normal/enlarged/palpable
Thyroid gland	Normal/enlarged
Range of motion	Normal/limited
Chest	
Shape	Normal/barrel shape
Thorax	Symmetry expansion/asymmetry
Respiratory sound	Normal/abnormal sound (sigh/wheeze/rales)
Heart sound	Normal/cardiac murmurs
Abdomen	
Inspection	Normal/skin rashes/scar/hernia/ascites/distension
Auscultation bowel sounds	**Normal bowel sounds:** Present/absent
Palpation	**Liver margins:** Enlarged/not enlarged Palpable spleen/tenderness at the umbilical area/ umbilical/Inguinal hernia

Contd...

Sequence	Characteristics
Percussion	Presence of fluid
Extremities	
Clubbing of fingers	Present/absent
Nail buds	Normal/spoon shaped **Capillary refilling time:** <2 sec/>2 sec
Back/Spine	
Curves	Kyphosis/lordosis/scoliosis
Spina bifida	Present/not present
Genitalia and anus	
Inguinal lymph glands	Enlarged/palpable
For boys	Hypospadias/epispadias
For girls	**Patency of urinary meatus and anus:** Normal/ imperforated anus **Pseudomonarchia:** Present/absent

HEAD TO FOOT ASSESSMENT (SCHOOL CHILD TO OLD AGE)

Sequence	Characteristics
Head	
Scalp	Clean/scar/dandruff/pediculosis
Hair	Even distribution of hair/dryness/brittleness **Color:** Black/brown/white
Face	Round/symmetric facial movements
Eyes	
Size	Normal/microphthalmia/exophthalmos/wide spaced eyes
Eyebrows	Even distribution of hair/symmetrical alignment/ asymmetrical
Eyelashes	No infection
Eyelids	No discoloration/no edema/lids close symmetrically
Eyeball	Normal/protruded/strabismus
Conjunctiva	Pinkish/pale/moist/dry
Sclera	White/yellowish discoloration
Pupils	Black in color/iris flat and round/equally react to light
Visual acuity	Normal/abnormal (squint/myopia/hyperopia)

Contd...

Sequence	Characteristics
Ears	
External ear	Symmetrical/asymmetrical/no ear discharge/low set ears/irritation **Cerumen:** Present/not present
Hearing acuity	Normal/abnormal
Nose	
Nasal septum	Aligned straightly/septal deviation
External nares	**Crust:** Present/not present **Discharge:** Present/not present
Nasal mucosa	Pink/pale
Mouth	
Lips	Normal/redness/swelling/crusted/cyanosis
Gums	Pink/bleeding gums
Buccal mucosa	Pink/moist/bleeding/ulceration
Odor of the mouth	**Foul smelling:** Present/absent
Teeth	White to yellow in color/discoloration of teeth/dental carries
Tongue	Pink/moist/white coated tongue
Throat	
Throat and pharynx	Normal/enlarged tonsils/redness/pus collection
Neck	
Lymph nodes	Normal/enlarged/palpable
Thyroid gland	Normal/enlarged
Range of motion	Normal/limited
Chest	
Shape	Normal/barrel shape
Thorax	Symmetry expansion/asymmetry
Respiratory sound	Normal/abnormal sound (sigh/wheeze/rales)
Heart sound	Normal/cardiac murmurs
Breast	
Size	Symmetrical/asymmetrical/cracked nipple
Contour	Smooth/rough/no mass

Contd...

Sequence	Characteristics
Abdomen	
Inspection	Normal/skin rashes/scar/hernia/ascites/distension
Auscultation bowel sounds	**Normal bowel sounds:** Present/absent
Palpation	**Liver margins:** Enlarged/not enlarged/palpable spleen
Percussion	Presence of fluid
Extremities	
Nail buds	Normal/spoon shaped **Capillary refilling time:** <2 sec/>2 sec
Range of motion	Normal/limited
Joints	Pain/swelling
Back/Spine	
Curves	Kyphosis/lordosis/scoliosis
Genitalia and anus	
For boys	**Penis:** Mass/nodules **Scrotum:** Mass/nodules
For girls	Patent urethral and vaginal opening/vaginal discharge/itching

ANTENATAL ASSESSMENT

I. General information

1. Name :
2. Age :
3. Husband's name :
4. Address :
5. Last menstrual period (LMP) :
6. Expected date of delivery (EDD) :
7. Obstetrical score :
8. Gestational week :

II. Anthropometric measurement

1. Weight (kg)
2. Height (cm)
3. BMI

III. Vital signs

1. Temperature
2. Pulse
3. Respiration
4. Blood pressure

IV. Obstetrical history

Date	Abortion	Preterm	Full term	Type of delivery	Gender	Alive or still birth	Inference

V. Head to foot assessment (including abdominal palpation)

Sequence	Characteristics
Head	
Scalp	Clean/scar/dandruff/pediculosis
Hair	Even distribution of hair/dryness/brittleness **Color:** Black/brown/white
Face	Round/symmetric facial movements/edema
Eyes	
Size	Normal/microphthalmia/exophthalmos/wide spaced eyes
Eyebrows	Even distribution of hair/symmetrical alignment/asymmetrical
Eyelashes	No infection
Eyelids	No discoloration/no edema/lids close symmetrically
Eyeball	Normal/protruded/strabismus
Conjunctiva	Pinkish/pale/moist/dry
Sclera	White/yellowish discoloration
Pupils	Black in color/iris flat and round/equally react to light
Visual acuity	Normal/abnormal (squint/myopia/hyperopia)
Ears	
External ear	Symmetrical/asymmetrical/no ear discharge/low set ears/irritation **Cerumen:** Present/not present
Hearing acuity	Normal/abnormal

Contd...

Sequence	Characteristics
Nose	
Nasal septum	Aligned straightly/septal deviation
External nares	**Crust:** Present/not present **Discharge:** Present/not present
Nasal mucosa	Pink/pale
Mouth	
Lips	Normal/redness/swelling/crusted/cyanosis
Gums	Pink/bleeding gums
Buccal mucosa	Pink/moist/bleeding/ulceration
Odor of the mouth	**Foul smelling:** Present/absent
Teeth	White to yellow in color/discoloration of teeth/ dental carries
Tongue	Pink/moist/white coated tongue
Throat	
Throat and pharynx	Normal/enlarged tonsils/redness/pus collection
Neck	
Lymph nodes	Normal/enlarged/palpable
Thyroid gland	Normal/enlarged
Range of motion	Normal/limited
Chest	
Shape	Normal/barrel shape
Thorax	Symmetry expansion/asymmetry
Respiratory sound	Normal/abnormal sound (sigh/wheeze/rales)
Heart sound	Normal/cardiac murmurs
Breast	
Inspection	
Size and shape	Symmetrical/asymmetrical
Nipple	Everted/inverted/flat/cracked/primary areola/ secondary areola/presence of montgomery's tubercles/distended breast vein/colostrum
Palpation	Presence of lump/mass/axillary lymph node enlargement
Abdomen	
Inspection	
Size	Appropriate to the gestational age or not

Contd...

Sequence	Characteristics
Shape	Round/ovoid
Contour	**Umbilicus:** Dimpled/elevated/flat/flank are full/ fetal movements
Skin changes	Linea nigra/striae gravidarum/signs of previous abdominal surgery
Measurements	**Fundal height (cm):** Appropriate to the gestational week or not **Abdominal girth (cm):** Appropriate to the gestational week or not
	Palpation
Fundal palpation	Cephalic/breech presentation
Lateral palpation	Position (LOA/ROA/LOP/ROP)
Pelvic palpation	**Grip I:** Convergent/divergent **Grip II:** Head engaged/not engaged
Auscultation	Regular fetal heart rate (110–160 beats/min)/ irregular fetal heart rate
	Extremities
Lower extremities	Pedal edema/ankle edema/varicosities
Nail buds	Normal/spoon shaped
Range of motion	Normal/limited
	Back/Spine
Curves	Kyphosis/lordosis/scoliosis
Genitalia	Vulval edema/warts/bloody mucoid discharge/ itching/pain

Abbreviations: **LOA**, left occiput anterior; **LOP**, left occiput posterior; **ROA**, right occiput anterior; **ROP**, right occiput posterior

POSTNATAL ASSESSMENT

I. General information

1. Name :
2. Age :
3. Husband's name :
4. Address :

II. Anthropometric measurement

1. Weight (kg) :
2. Height (cm) :
3. BMI :

III. Vital signs

1. Temperature :
2. Pulse :
3. Respiration :
4. Blood pressure :

IV. Obstetrical history

1. Obstetrical score :
2. Place of delivery :
3. Date of delivery :
4. Time :
5. Mode of delivery :
6. Gender of the baby :
7. Birth weight (kg) :
8. Family planning method adopted :

V. Head to foot assessment

Sequence	Characteristics
Head	
Scalp	Clean/scar/dandruff/pediculosis
Hair	Even distribution of hair/dryness/brittleness **Color:** Black/brown/white
Face	Round/symmetric facial movements
Eyes	
Size	Normal/microphthalmia/exophthalmos/wide spaced eyes
Eyebrows	Even distribution of hair/symmetrical alignment/asymmetrical
Eyelashes	No infection
Eyelids	No discoloration/no edema/lids close symmetrically
Eyeball	Normal/protruded/strabismus
Conjunctiva	Pinkish/pale/moist/dry
Sclera	White/yellowish discoloration
Pupils	Black in color/iris flat and round/equally react to light
Visual acuity	Normal/abnormal (squint/myopia/hyperopia)
Ears	
External ear	Symmetrical/asymmetrical/no ear discharge/low set ears/irritation **Cerumen:** Present/not present

Contd...

Sequence	Characteristics
Hearing acuity	Normal/abnormal
Nose	
Nasal septum	Aligned straightly/septal deviation
External nares	**Crust:** Present/not present **Discharge:** Present/not present
Nasal mucosa	Pink/pale
Mouth	
Lips	Normal/redness/swelling/crusted/cyanosis
Gums	Pink/bleeding gums
Buccal mucosa	Pink/moist/bleeding/ulceration
Odor of the mouth	**Foul smelling:** Present/absent
Teeth	White to yellow in color/discoloration of teeth/ dental carries
Tongue	Pink/moist/white coated tongue
Throat	
Throat and pharynx	Normal/enlarged tonsils/redness/pus collection
Neck	
Lymph nodes	Normal/enlarged/palpable
Thyroid gland	Normal/enlarged
Range of motion	Normal/limited
Chest	
Shape	Normal/barrel shape
Thorax	Symmetry expansion/asymmetry
Respiratory sound	Normal/abnormal sound (sigh/wheeze/rales)
Heart sound	Normal/cardiac murmurs
Breast	
Inspection	
Size and shape	Symmetrical/asymmetrical
Nipple	Everted/inverted/flat/cracked/bruised
Areola	Primary and secondary areola differentiated or not
Montgomery tubercle	Present/absent
Superficial vein	Distended/not distended
Palpation	Presence of lump/mass/tenderness

Contd...

Sequence	Characteristics
Abdomen	
Normal labor	
Palpation	Firm/rigid
	Involution of uterus: Fundal height (cm)
For LSCS	
Inspection	Pain/discharge
Palpation	Tenderness
Extremities	
Nail buds	Normal/spoon shaped
Range of motion	Normal/limited
Lower extremities	**Homan sign:** Positive/negative
Back/Spine	
Curves	Kyphosis/lordosis/scoliosis
Perineum	Vulval edema/vulval varicosities/pain
Lochia	**Color:** Dark red (rubra)/pinkish brown (serosa)/ whitish yellow (alba) **Odor:** Musty/foul **Amount:** Scanty/moderate/heavy
Episiotomy suture	**REEDA:** Redness/edema/ecchymosis/discharge/ approximation of the wound
Extremities	Pedal edema/ankle edema/varicosities

CHAPTER 26

Nutritional Assessment Format

I. Beneficiary's profile

1. Name
2. Age
3. Gender
4. Classification
5. Educational status
6. Occupational status
7. Address
8. Number of meals per day
9. **Common cooking method:** Steaming/boiling/deep/shallow frying/others
10. **Preparation of food:** Hygienic/unhygienic
11. **Storage of food:** Hygienic/unhygienic
12. **Presentation of food:** Open/covered
13. **Commonly consumed food items:** Cereals/pulses/vegetables/fruits/beverages/junk foods others

II. Anthropometric measurement

1. Head circumference (cm)
2. Chest circumference (cm)
3. Mid-arm circumference (cm)
4. Weight (kg)
5. Height (cm)

III. Degree of malnutrition (Gomez classification)

IV. 24-hour recall

Time	Food item	Quantity	Kcal	CHO	Protein	Fat	Calcium	Iron

V. Comparison of ideal intake with real intake

S. No.	Nutrients	Ideal intake	Real intake	Inference
1.	Kcal			
2.	CHO			
3.	Protein			
4.	Fat			
5.	Calcium			
6.	Iron			

VI. Recommended menu

Time	Food Item	Quantity
6.00 am	Coffee	150 mL
8.30 am	Idly Coconut chutney	4 Nos 1 cup
11.00 am	Butter milk	200 mL
1.00 pm	Rice	250 g
	Sambar	1 cup
	Beans poriyal	100 g
	Curd	1 cup
5.00 pm	Tea	150 mL
8.00 pm	Chapati Dal	3 nos 1 cup
9.00 pm	Milk	150 mL
6.00 pm	Coffee	150 mL

CHAPTER 27

Individual and Family Health Education

DEFINITION

Health education can be *defined* as the principle by which individuals and groups of people learn to behave in a manner conducive to the promotion, maintenance, or restoration of *health*.

There are plenty of opportunities for individual health education. Areas for individual health talk are:

- Home
- School
- Industry
- Health center, etc.

ADVANTAGES OF HEALTH TEACHING IN HOME SETTING

- It gives the nurse a chance to see home and family situation in action.
- People will be more relaxed in their home surroundings.
- It permits more realistic teaching in the actual situation.
- Other members of the family may be involved who can have greater influence and control on the individual.
- It gives chance for the nurse to look for new health problems.

Figs A and B: Health education

TOPICS FOR HEALTH EDUCATION

Antenatal Mother

- Process of conception
- Antenatal checkup
- Antenatal diet
- Antenatal exercises
- Avoidance of drugs
- Danger signs of pregnancy
- Preparation of safe delivery
- Family planning
- Breastfeeding
- Newborn care
- Postnatal hygiene
- Postnatal diet
- Contraception

Postnatal Mother

- Postnatal hygiene
- Postnatal diet
- Breast care
- Postnatal exercises
- Newborn care
- Immunization
- Prevention of infection
- Breastfeeding
- Weaning food
- Worm infestation
- Growth and development
- Acute respiratory infection
- Contraception

Mothers of under Five Children

- Immunization
- Balanced diet
- Prevention of ARI
- Prevention of diarrhea
- Prevention of malnutrition
- Play needs
- Child safety measures
- Worm infestations
- Acute respiratory infection
- Preschool diet
- Measles
- Scabies
- Growth and development
- Typhoid fever
- Chickenpox
- First aid measures
- Personal hygiene
- Environment hygiene

Adolescents

- Balanced diet
- Protein rich diet
- Iron rich diet
- Calcium rich diet
- Ill effects of smoking
- Ill effects of alcoholism
- Menstrual hygiene
- Anatomy and physiology of reproductive system
- Road traffic accidents
- First aid measures
- Mental health
- Sexual health
- Anemia

Adults and Elderly

- Typhoid fever
- Cholera fever
- Dengue fever
- Hypertension
- Diabetes mellitus
- Depression
- Peptic ulcer
- Anemia
- Arthritis
- AIDS
- Bronchial asthma
- Environmental hygiene
- Food sanitation measures
- Water-borne diseases
- Food-borne diseases

CHAPTER

28

National Immunization Schedule

Age of vaccination	Name of the vaccine	Dose	Route	Site	Prevention against
At birth (within 24 hours)	BCG	0.1 mL	ID	Left upper arm	TB
	OPV (0 dose)	2 drops	Oral	Oral	Polio
	Hep B	0.5 mL	IM	Antero-lateral side of mid-thigh	Hepatitis
6 weeks	OPV – 1	2 drops	Oral	Oral	Polio
	Pentavalent – 1 (DPT, Hep B, HiB)	0.5 mL	IM	Antero-lateral side of mid-thigh	DPT, Hep B, Hib
	IPV – 1	0.1 mL	ID	Upper arm	Polio
	Rota virus	5 drops	Oral	Oral	Diarrhea
10 weeks	OPV – 2	2 drops	Oral	Oral	Polio
	Pentavalent – 2 (DPT, Hep B, HiB)	0.5 mL	IM	Antero-lateral side of mid-thigh	DPT, Hep B, Hib
	Rota virus	5 drops	Oral	Oral	Diarrhea
14 weeks	OPV – 3	2 drops	Oral	Oral	Polio
	Pentavalent – 3 (DPT, Hep B, HiB)	0.5 mL	IM	Antero-lateral side of mid-thigh	DPT, Hep B, Hib
	IPV - 2	0.1 mL	ID	Upper arm	Polio
	Rota virus	5 drops	Oral	Oral	Diarrhea
9 months	MR – 1	0.5 mL	Subcutaneous	Right upper arm	Measles, Rubella
	Vitamin A – 1	1,00,000 IU	Oral	Oral	Blindness
	JE – 1	0.5 mL	Subcutaneous	Left upper arm	Japanese encephalitis

Contd...

Age of vaccination	Name of the vaccine	Dose	Route	Site	Prevention against
16–24 month	MR – 2	0.5 mL	Subcutaneous	Right upper arm	Measles, Rubella
	Vitamin A – 2	2,00,000 IU	Oral	Oral	Blindness
	JE – 2	0.5 mL	Subcutaneous	Left upper arm	Japanese encephalitis
	OPV booster	2 drops	Oral	Oral	Polio
	DPT 1st booster	0.5 mL	IM	Thigh	Diphtheria, pertussis, tetanus
24–60 months	Vitamin A - 24, 30, 36, 42, 48, 54, 60 (6 month interval), 2,00,000 IU				
5–6 years	DPT 2nd booster	0.5 mL	IM	Thigh	Diphtheria, pertussis, tetanus
10 years and 16 years	TT 1st and 2nd booster	0.5 mL	IM	Upper arm	Tetanus
11–12 years (1st dose)	HPV	0.5 mL	IM	Deltoid of the upper arm or thigh	Cancer
2nd dose (6–12 months after the 1st dose)	HPV	0.5 mL	IM	Deltoid of the upper arm or thigh	Cancer
Pregnancy	TT – 1st dose soon after confirmation and 2nd dose 4 weeks after the 1st dose.				

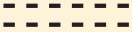
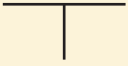
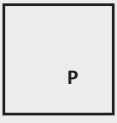
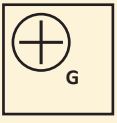
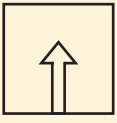
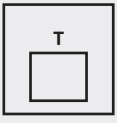
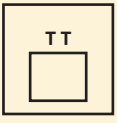
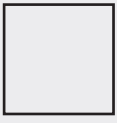
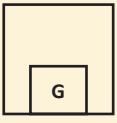
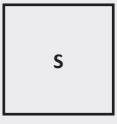
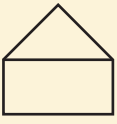
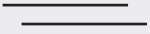
CHAPTER

29 Community Survey Format—Rural/Urban

1.	Name of the area	:	
2.	Ward	:	
3.	Name of the street	:	
4.	Door number	:	
5.	Type of house	:	
6.	Facilities available	:	
	a. Electricity	:	Yes/No
	b. Water facilities	:	Tap water/well water
	c. Latrine facilities	:	Closed type/open type
7.	Type of family	:	Nuclear/joint
	a. Number of persons in the family	:	
8.	Religion	:	
9.	Healthcare contact	:	Government/private/local

S. No.	Name of the family members	Relationship with the head of the family	Age in years	Sex	Education	Occupation	Classification	Immunization						AN/ PN	Any medical illness	Persons with disabilities
								OPV Zero	DPT/OPV			M	DT			
									I	II	III					

LANDMARKS/KEYS FOR AREA MAP

Overhead tank 	Household tank 	River 	Graveyard 
Tree 	Footpath 	Bus stop 	Public dustbin 
Public well 	Public tap 	Pond 	Government hospital 
Private hospital 	Health center 	Private clinic 	Living house hut 
Living house tiled 	Living house terraced 	Living house thatched 	Government high school 
Shop 	Cattle shed 	Road 	

Family Care Study Format

CHAPTER 30

I. Introduction

II. General information about the family

1. House number:
2. Name of the head of the family (HoF):
3. Address:
4. **Type of family:** Nuclear/joint/extended/separated/others
5. Family size:
6. Religion:
7. **Socioeconomic status:** High/middle/low
8. Family monthly income:
9. Mother tongue:

III. Student profile

1. Name of the student:
2. Course:
3. Class:
4. Date of care started:
5. Date of care ended:

IV. Family composition

S. No.	Name	Relationship with HoF	Year of birth	Gender	Marital status	Education (illiterate/primary/high school/higher secondary/Diploma/UG/PG)	Occupation (Skilled/unskilled/technical professional) with annual income	Immunization only for <15 years beneficiary	Health status

V. Floor plan: A floor diagram of the particular house which includes kitchen, washing area, drainage and cardinal directions (North/East/West and South)

VI. Environmental condition

- **Type of house:**
  - Own/rental,
  - Pucca/kutcha/tiled/mixed/others
- **Ventilation:** Natural/artificial/others
- **Lighting:** Electricity/kerosene lamp/others
- **Water supply:** Source-well/tap water-hand pump/pond/public supply/others
- **Latrine:** Service type/sanitary/open field defecation
- **Drainage:** Open/closed/soakage pit
- **Open space around the house:** Yes/no
- **Water stagnation:** Yes/no
- **Disposal of refuse:** Dump/manure pit/public corner/burning/others
- **Disposal of animal excreta:** Burial/manure/others
- Presence of stray dog
- Presence of domestic animals shelter
- Presence of mosquitoes and any control measures used
- Presence of rodents and any other control measures used
- Kitchen conditions
- **Type of fuel used:** Kerosene/LPG/biogas/wood/others

VII. Socioeconomic status

- **Owned properties:** Land/vehicle/house

VIII. Transport and communication

- Road facilities
- Transportation mode available at home and community
- Mass media
- **Type of communication:** Telephone/mobile/internet

IX. Nutritional assessment of the family

- **Dietary pattern:** Vegetarian/nonvegetarian
- Frequency of nonvegetarian food per week
- **Food habits:** Number of meals/day
- **Common cooking methods:** Steaming/boiling/deep frying/shallow frying/baking/others
- **Staple food:**
- **Common vegetables used:**
- **Food storage:** Healthy/unhealthy

X. Social relationship of the family members

- Relationship within the family members
- Relationship of the family members with the neighbors and friends and other healthcare personnel.

XI. Vital events (birth, marriage/death within a year)

XII. Personal history

XIII. Menstrual history/obstetrical history

XIV. Family health practices, attitude and belief

Concept of health:

- Personal hygiene
- Nutrition
- Exercise
- Immunization
- Environmental health
- Family welfare services

Concept of disease

- Cause:
- Spread:
- Treatment:
- Prevention:

XV. Epidemiological aspects: The student is expected to describe the natural history of disease (among the vulnerable beneficiaries in the family) with relevance to the identified needs and problems of the beneficiaries in comparison to the book picture)

XVI. Journal abstracts (evidence-based interventions): A review of current scientific/research studies relevant to the needs and problems to be highlighted.

XVII. Beneficiary details: All beneficiary details should be written based on priority.

- Name:
- Age:
- Gender:
- Classification:
  a. Physical examination
  b. Nutritional assessment:
     - 24 hour recall
     - Recommended dietary allowance
  c. Cooking demonstration (recipe, ingredients, preparation, method with nutritive value)

XVIII. Home visit plan

Days	Date	Name of the beneficiary	Needs	Problems	Short-term goal	Long-term goal	Level of prevention
Day 1	DD/MM/YY	Beneficiary 1					
		Beneficiary 2					
Day 2	DD/MM/YY	Beneficiary 1					
		Beneficiary 2					

XIX. Nursing process

Assessment	Diagnosis	Goal	Intervention	Implementation	Evaluation

XX. Health education

Days	Date	Topic with AV aid	Teaching points	Remarks
Day 1				
Day 2				

XXI. Recording the procedure

Days	Date	Name of the beneficiary	Classification	Procedure done	Signature
Day 1					

XXII. Summary

XXIII. Conclusion

OUR LADY OF HEALTH SCHOOL AND COLLEGE OF NURSING
3rd cross, Arulananda Nagar, Thanjavur -7
DEPARTMENT OF COMMUNITY HEALTH NURSING
FAMILY FOLDER AND HEALTH RECORD

Head of the family :
Address :

Contact number :
Environmental condition

Type of family: Nuclear/joint
Religion: Hindu/Muslim/Christian/Others
Food practice: Vegetarian/Nonvegetarian
Area: Rural/Urban

F.F. No :
No. of beneficiaries:

M	F	U_5 Ch

Type of house	Ventilation	Lighting	Sources of water supply	Type of fuel used	Kitchen garden	Disposal of refuse	Drainage	Type of latrine
• Own • Rental • Kutcha • Pucca • Any other	• Natural • Artificial	• Electricity • Kerosene lamp	• Well • Tap water • Hand pump • Pond • Public tap	• Fire wood • Kerosene • Gas • Cow dung	• Yes • No	• Dumping • Manure pit • Public carrier • Burning	• Open • Closed	• Sanitary • Open air

Record of Vital Events

Morbidity data		Mortality data (with 3 years)		Differently abled	
Name	Disease	Name	Disease	Name	Disease

Family Composition

S. No.	Name	Age in years	Gender	Relationship to the head of the family	Marital status	Education	Occupation	Income per month	Immunization on status	Family planning
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										

Record of Illness

Name	Age in years	Illness	Duration	Sign and symptoms	Investigations done	Treatment

Details of Antenatal Mother

Name	Age in years	Gravida	Number of living children	History of abortion if any	Type of marriage	Mode of previous delivery	Registered or not registered	Receiving iron and folic acid tablets

Record of Health Services

Name of the student	Year of study	Name of the client	Health problem	Date of Care started	Procedures done	Result	Referral services if any	Health education	Date of care ended

List of Community Health Nursing Field Visits

GNM I Year

- Water purification
- Sewage disposal
- Composting ground
- Orphanage
- Visually challenged school
- Geriatric home
- Market
- Hospital kitchen
- Hostel
- Laundry
- Institute of catering technology

GNM III Year

- TB clinic
- Leprosy clinic
- Communicable disease hospital
- Reproductive and child health (RCH) and immunization clinic
- Mobile ophthalmic unit
- Occupational health centers/industry
- Geriatric home
- Destitute/orphanage home
- Cancer hospital/research institute
- Special school—physically and mentally challenged
- Indigenous system of medicine center
- Sample registration and model registration registers
- Village administrative office (VAO) office supervision of records and registers

BSc (N) II YEAR

- Water purification plant
- Sewage treatment plant
- Slaughter house
- Milk dairy
- Communicable disease hospital

POST BASIC BSc (N) II YEAR

- Health and welfare agency
- Water purification plant
- Sewage disposal plant
- Infectious disease hospital
- Block development office

MSc (N) I Year

- Institute of alternative system of medicine
- District health office
- Block development office
- Site for waste management
- Municipality/corporation office

MSc (N) II Year

- Community health center
- Child guidance clinic
- Institute/unit of mentally challenged
- Institute/unit of physically challenged
- District TB center
- Sexually transmitted infection (STI)/reproductive tract infection (RTI) clinic
- Leprosy clinic
- Community-based rehabilitation unit
- AIDS control society
- Home for social rehabilitation (juvenile home)
- Industrial visit
- ESI unit
- Cancer institute
- Palliative care center
- Old age home
- De-addiction center
- International health agency
- Red cross society
- Food analysis

LIST OF COMMUNITY HEALTH NURSING FIELD VISITS

GNM I Year

- **Water purification**
  - To know about the infrastructure of water purification area.
  - To outline the organizational setup.

- To know about the difference between slow sand and rapid sand filters.
- To understand about the collection and sedimentation process.
- To have knowledge regarding filtration process.
- To have an idea regarding chlorination and the distribution of the water.
- To identify the methods of waste water disposal after purification of water.

- **Sewage disposal**
  - To know about the infrastructure of sewage disposal area.
  - To outline the organizational setup.
  - To have knowledge regarding the health and structural risks that occur due to dumping of sewage.
  - To understand the methods of sewage disposal and the mode of treatment of sewage.
- **Composting ground**
  - To know about the infrastructure of composting ground area.
  - To outline the organizational setup.
  - To have knowledge regarding the health risks that occur due to composting of wastes.
  - To understand the methods of waste disposal and the mode of treatment of wastes.
- **Orphanage**
  - To know about the infrastructure of the orphanage.
  - To outline the organizational setup.
  - To understand the mode of admission of orphans, the care given to the children, medical, education and job opportunities.
  - To have knowledge regarding the financial support areas of the orphanage.
  - To know about the food pattern, recreational and other functions of orphanage home.
- **Visually challenged school**
  - To know about the infrastructure of the visually challenged school.
  - To outline the organizational setup.
  - To understand the mode of admission of students, the care given to the children, medical, education and job opportunities.
  - To have knowledge regarding the financial support areas of the school.
  - To know about the food pattern, recreational and other functions of the school
- **Geriatric home**
  - To know about the infrastructure of the geriatric home.
  - To outline the organizational setup.
  - To understand the mode of admission of students, the care given to the children and other facilities.

- To have knowledge regarding the financial support areas of the geriatric home.
- To know about the food pattern, recreational and other functions of the geriatric home.

- **Market**
  - To know about the infrastructure of the market.
  - To outline the organizational setup.
  - To understand the methods of collection, marketing, storing and distribution of the things in the market.
  - To analyze the financial matters with regard to purchase and distribution of market.
  - To have information regarding the health risks due to improper collection and distribution of vegetable wastes.
- **Hospital kitchen**
  - To know about the infrastructure of the hospital kitchen.
  - To outline the organizational setup.
  - To understand about the methods of cooking, preservation of food and grocery items, serving methods, distribution of food to the in clients and the disposal of wastes out of the kitchen.
  - To identify the different types of therapeutic diet inside the hospital.
- **Hostel**
  - To know about the infrastructure of the hostel.
  - To outline the organizational setup of the hostel.
  - To understand the sanitation measures taken inside and around the hostel.
  - To know about the preventive measures of diseases, routines of the hostel, methods of caring the sick students, spiritual, study timings, food pattern and recreational facilities.
- **Laundry (hospital)**
  - To know about the infrastructure of the laundry of the hospital.
  - To outline the organizational setup of the laundry.
  - To understand the types of linen to be cleaned and the methods of collection of the used cloths by the hospital laundry services.
  - To have the knowledge regarding the treatment methods of the used linen.
  - To understand about the storage facilities of used linen.
  - To have an outlook on the safety measures undertaken inside the laundry area for the workers.
- **Institute of catering technology**
  - To know about the infrastructure and facilities of the institution.
  - To outline the organizational setup of the institution.
  - To know the vision and mission of the catering institution.
  - To understand the academic programs of the catering institute.
  - To know the monthly activities and the functions of the catering institute.

- To have a bird's eye view on the job opportunities of the students in national and international level.

GNM III YEAR

- **TB clinic**
  - To know about the infrastructure of the clinic.
  - To outline the organizational setup of the TB clinic.
  - To have an idea regarding the out-client clinic, mode of admission of the clients, in client treatment plans and the follow-up of the clients.
  - To have knowledge regarding the DOTS treatment regimen followed in the TB clinic as per the revised national tuberculosis program.
  - To understand about the future plans and the current research activities of the clinic.
- **Leprosy clinic**
  - To know about the infrastructure of the clinic.
  - To outline the organizational setup of the leprosy clinic.
  - To have an idea regarding the out-client clinic, mode of admission of the clients, in client treatment plans and the follow-up of the clients.
  - To have knowledge regarding the leprosy treatment regimen followed in the clinic as per national leprosy eradication program.
  - To understand about the future plans and the current research activities of the clinic.
- **Communicable disease hospital**
  - To know about the infrastructure of the hospital.
  - To outline the organizational setup of the hospital.
  - To have an idea regarding the out-client clinic, mode of admission of the clients, in client treatment plans and the follow-up of the clients.
  - To have knowledge regarding the diagnosis, treatment and the preventive aspects of the diseases as per the national programs.
  - To understand about the future plans and the current research activities of the hospital.
- **Reproductive and child health (RCH) and immunization clinic**
  - To know about the infrastructure of the RCH and immunization clinic.
  - To outline the organizational setup of RCH and immunization clinic.
  - To have an idea regarding the RCH clinic activities and the immunization schedule and organization of the immunization clinic.
  - To have knowledge regarding the entire functions of RCH and immunization clinic.
  - To understand about the future plans and the current research activities of the clinic.
- **Mobile ophthalmic unit**
  - To know about the infrastructure of the mobile ophthalmic unit.
  - To understand about the organizational pattern of the unit.

- To know about the features and the functions of the unit.
- To list down the areas under which the mobile ophthalmic unit is carrying out its functions.
- To identify the future research areas of the unit.

- **Occupational health centers/industry**
  - To know about the infrastructure of the occupational health center.
  - To outline the organizational setup of the occupational health center.
  - To understand the requirements of the health-related functions.
  - To have a knowledge regarding the screening, diagnosis and treatment procedures of the diseases.
  - To have an idea regarding the financial management of the center.
  - To identify the mode of health examination for the workers.
  - To understand about the maintenance of preparedness for first aid and participation in emergency preparedness.
- **Geriatric home**
  - To know about the infrastructure of the old age home.
  - To outline the organizational setup of the old age home.
  - To understand the mode of admission of old age people, the care given to them and other facilities.
  - To have knowledge regarding the financial support areas of the old age home.
  - To know about the food pattern, recreational and other functions of the old age home.
- **Destitute/orphanage home**
  - To outline the organizational setup.
  - To understand the mode of admission of orphans, the care given to the children, medical, education and job opportunities.
  - To have knowledge regarding the financial support areas of the orphanage.
  - To know about the food pattern, recreational and other functions of orphanage home.
- **Cancer hospital/research institute**
  - To know the infrastructure of the research institute.
  - To outline the organizational setup.
  - To know about the functions of the hospital/research institute.
  - To understand about the education and research activities of the hospital/research institute.
  - To know about the job opportunities and the medical services hospital/research institute.
- **Special school—physically and mentally challenged**
  - To know the infrastructure of the school.
  - To outline the organizational setup of the school.
  - To know about the care and protection measures of the physically/mentally challenged children.

- To know about the medical services of the physically/mentally challenged children.
- To know about the financial budget of the physically/mentally challenged school.
- To have knowledge regarding education and recreational measures of the physically/mentally challenged school.

- **Indigenous system of medicine center**
  - To know the infrastructure of the center.
  - To outline the organizational setup of the center.
  - To understand about the origin, diagnostic measures, medical management, surgical management and follow-up measures of ayurveda.
  - To understand about the origin, diagnostic measures, medical management and follow-up measures of Siddha.
  - To understand about the origin, diagnostic measures, medical management, surgical management and follow-up measures of Unani.
  - To understand about the origin, diagnostic measures, medical management and follow-up measures of homeopathy.
  - To understand about the origin, diagnostic measures, medical management, types and follow-up measures of yoga.
- **Sample registration and model registration registers**
- **Village administrative Officer (VAO) office supervision of records and registers**
  - To know about the infrastructure and organizational setup of VAO office.
  - To understand the methods of maintenance of sample registration, model registration, birth and death registers.
  - To have knowledge regarding the areas of birth and death registration.

BSc (N) II Year

- **Water purification plant**
  - To know about the infrastructure of water purification area.
  - To outline the organizational setup.
  - To know about the difference between slow sand and rapid sand filters.
  - To understand about the collection and sedimentation process.
  - To have knowledge regarding filtration process.
  - To have an idea regarding chlorination and the distribution of the water.
  - To identify the methods of waste water disposal after purification of water.
- **Sewage treatment plant**
  - To know about the infrastructure of sewage disposal area.
  - To outline the organizational setup.

- To have knowledge regarding the health and structural risks that occur due to dumping of sewage.
- To understand the methods of sewage disposal and the mode of treatment of sewage.

- **Slaughter house**
  - To know about the infrastructure and organizational setup of the slaughter house.
  - To understand about the slaughtering techniques and the methods of meat inspection of the animals.
  - To know about the methods of meat distribution.
  - To understand the sanitation measures of the slaughter house.
- **Milk dairy**
  - To know about the infrastructure and organizational setup of the milk dairy.
  - To understand the methods of pasteurization of milk.
  - To have knowledge regarding the collection, storage, analysis and processing of milk and milk products.
  - To understand about the methods of packing and distribution of milk and milk products.
  - To know the milk hygiene and sanitation methods of dairy farm.
- **Communicable disease hospital**
  - To know about the infrastructure of hospital.
  - To outline the organizational setup of the hospital.
  - To have an idea regarding the out-client clinic, mode of admission of the clients, in client treatment plans and the follow-up of the clients.
  - To have knowledge regarding the communicable diseases' treatment regimen followed in the clinic as per national health program and policy.
  - To understand about the future plans and the current research activities of the hospital.
  - To have an idea regarding the outreach activities of the hospital.

Post Basic BSc (N) II Year

- **Health and welfare agency**
  - To know about the infrastructure and organizational setup of agency.
  - To understand the methods of maintenance of records and registers.
  - To have a knowledge regarding the health and welfare activities of the agency.
  - To understand the conduction of national health and family welfare programs.
- **Water purification plant**
  - To know about the infrastructure of water purification area.
  - To outline the organizational setup.

- To know about the difference between slow sand and rapid sand filters.
- To understand about the collection and sedimentation process.
- To have knowledge regarding filtration process.
- To have an idea regarding chlorination and the distribution of the water.
- To identify the methods of waste water disposal after purification of water.

- **Sewage disposal plant**
  - To know about the infrastructure of sewage disposal area.
  - To outline the organizational setup.
  - To have knowledge regarding the health and structural risks that occurs due to dumping of sewage.
  - To understand the methods of sewage disposal and the mode of treatment of sewage.
- **Infectious disease hospital**
  - To know about the infrastructure of hospital.
  - To outline the organizational setup of the hospital.
  - To have an idea regarding the out-client clinic, mode of admission of the clients, in client treatment plans and the follow-up of the clients.
  - To have knowledge regarding the infectious diseases' treatment regimen followed in the clinic as per national health program and policy.
  - To understand about the future plans and the current research activities of the hospital.
  - To have an idea regarding the outreach activities of the hospital.
- **Block development office**
  - To know about the infrastructure and organizational setup of office.
  - To understand the methods of maintenance of records and registers.
  - To have a knowledge regarding the functions of block development officer and the job description of various other workers inside BDO.

MSc (N) I Year

- **Institute of alternative system of medicine**
  - To know the infrastructure of the center.
  - To outline the organizational setup of the center.
  - To understand about the origin, diagnostic measures, medical management, surgical management and follow-up measures of ayurveda.
  - To understand about the origin, diagnostic measures, medical management and follow-up measures of Siddha.
  - To understand about the origin, diagnostic measures, medical management, surgical management and follow-up measures of Unani.

- To understand about the origin, diagnostic measures, medical management and follow-up measures of homeopathy.
- To understand about the origin, diagnostic measures, medical management, types and follow-up measures of yoga.

- **District health office**
  - To know about the infrastructure and organizational setup of agency.
  - To understand the methods of maintenance of records and registers.
  - To have a knowledge regarding the health and welfare activities of the office.
  - To understand the conduction of national health and family welfare program.
- **Block development office**
  - To know about the infrastructure and organizational setup of office.
  - To understand the methods of maintenance of records and registers.
  - To have a knowledge regarding the functions of block development officer and the job description of various other workers inside block development office.
- **Site for waste management**
  - To know about the infrastructure of sewage disposal area.
  - To outline the organizational setup.
  - To have knowledge regarding the health and structural risks that occur due to dumping of sewage.
  - To understand the methods of sewage disposal and the mode of treatment of sewage.
- **Municipality/corporation office**
  - To know about the infrastructure and organizational setup of office.
  - To understand the methods of maintenance of records and registers.
  - To have a knowledge regarding the functions of the municipality/corporation and the job description of various other workers inside the office.

MSc (N) II Year

- **Community health center**
  - To know the infrastructure of the community health center.
  - To outline the organizational setup of the community health center.
  - To understand the functions and daily activities of the community health center.
  - To know about the records, reports and registers of the community health center.
  - To have knowledge regarding the activities with related to the conduction of national health programs.
- **Child guidance clinic**
  - To know the infrastructure of the child guidance clinic.
  - To outline the organizational setup of the child guidance clinic.

- To know about the care, protection, diagnosis and treatment modalities for the needy children.
- To know about the medical and counseling services of the children.
- To know about the financial budget of the child guidance clinic.
- To have knowledge regarding education and recreational measures of the child guidance clinic.

- **Institute/unit of mentally challenged**
  - To know the infrastructure of the school.
  - To outline the organizational setup of the school.
  - To know about the care and protection measures of the mentally challenged children.
  - To know about the medical services of the mentally challenged children.
  - To know about the financial budget of the mentally challenged school.
  - To have knowledge regarding education and recreational measures of the mentally challenged school.
- **Institute/unit of physically challenged**
  - To know the infrastructure of the school.
  - To outline the organizational setup of the school.
  - To know about the care and protection measures of the physically challenged children.
  - To know about the medical services of the physically challenged children.
  - To know about the financial budget of the physically challenged school.
  - To have knowledge regarding education and recreational measures of the physically challenged school.
- **District TB center**
  - To know about the infrastructure of the district TB center.
  - To outline the organizational setup of the district TB center.
  - To have an idea regarding the out-client clinic, mode of admission of the clients, district center activities and the follow-up of the clients.
  - To have knowledge regarding the tuberculosis treatment regimen followed in the clinic as per national tuberculosis eradication program.
  - To understand about the future plans and the current research activities of the district TB center.
- **STI/RTI clinic**
  - To know about the infrastructure of the STI/RTI clinic.
  - To outline the organizational setup of the STI/RTI clinic.
  - To have an idea regarding the out-client clinic, mode of admission of the clients, treatment plans and the follow-up of the clients.
  - To have knowledge regarding the STI/RTI treatment regimen followed in the clinic as per national STI/RTI eradication program.

- To understand about the future plans and the current research activities of the STI/RTI clinic.

- **Leprosy clinic**
  - To know about the infrastructure of the clinic.
  - To outline the organizational setup of the leprosy clinic.
  - To have an idea regarding the out-client clinic, mode of admission of the clients, in client treatment plans and the follow-up of the clients.
  - To have knowledge regarding the leprosy treatment regimen followed in the clinic as per national leprosy eradication program.
  - To understand about the future plans and the current research activities of the clinic.
- **Community-based rehabilitation unit**
  - To know about the infrastructure of the community-based rehabilitation unit.
  - To outline the organizational setup of the community-based rehabilitation unit.
  - To understand about the features and policies of the unit.
  - To know about the rehabilitation measures of the community-based rehabilitation unit.
  - To have knowledge regarding disability and rehabilitation in emergencies.
  - To know about the assistive devices and technologies of the community-based rehabilitation unit.
- **AIDS control society**
  - To know about the infrastructure of AIDS control society.
  - To outline the organizational setup of AIDS control society.
  - To understand the program objectives, vision and mission of AIDS control society.
  - To have knowledge regarding the laboratory services, blood transfusion services and IEC methods of AIDS control society.
  - To know about the counseling (ICTC) services, target initiatives and financial support management of AIDS control society.
  - To understand about the future initiatives and the publications of AIDS control society.
- **Home for social rehabilitation (juvenile home)**
  - To know about the infrastructure of the juvenile home.
  - To outline the organizational setup of the juvenile home.
  - To understand about the services provided to the youth in juvenile home, like mental health, special education, etc.
  - To know about the medical, financial, safety and health measures of the youth inside juvenile home.
- **Industrial visit**
  - To know about the infrastructure of the industry.
  - To outline the organizational setup of the industry.

- To understand the requirements of the health-related functions.
- To have knowledge regarding the screening, diagnosis and treatment procedures of the diseases spreading for the workers.
- To have an idea regarding the financial management of the industry in the prevention of diseases.
- To identify the mode of health examination for the workers.
- To understand about the maintenance of preparedness for first aid and participation in emergency preparedness.

- **ESI unit**
  - To know the infrastructure of the Employees State Insurance unit.
  - To outline the organizational setup of the ESI unit.
  - To know about the objectives and achievements of ESI unit.
  - To understand about the benefits and medical care facilities provided under ESI unit.
  - To know about the ESI hospitals, out-client and in-client services of the ESI unit.
  - To understand the reimbursement expenditures of the ESI unit.
- **Cancer institute**
  - To know the infrastructure of the research institute.
  - To outline the organizational setup.
  - To know about the functions of the hospital/research institute.
  - To understand about the education and research activities of the hospital/research institute.
  - To know about the job opportunities and the medical services hospital/research institute.
- **Palliative care center**
  - To know the infrastructure of the palliative care institute.
  - To outline the organizational setup palliative care institute.
  - To know about the functions, diagnosis and treatment modalities of the palliative care institute.
  - To understand about the education and research activities of the palliative care institute.
  - To know about the job opportunities and the medical services of the palliative care institute.
- **Old age home**
  - To know about the infrastructure of the old age home.
  - To outline the organizational setup of the old age home.
  - To understand the mode of admission of old age people, the care given to them and other facilities.
  - To have knowledge regarding the financial support areas of the old age home.
  - To know about the food pattern, recreational and other functions of the old age home.

- **De-addiction center**
  - To know about the infrastructure of the de-addiction center.
  - To outline the organizational setup of the de-addiction center.
  - To know about the functions of de-addiction center.
  - To understand about the treatment modalities, counseling services and follow-up of the de addiction center.
- **International health agency**
  - To know about the infrastructure of the international health agency.
  - To outline the organizational setup of the international health agency.
  - To know about the objectives, admission rules of the international health agency.
  - To know about the functions and follow-up activities of international health agency.
  - To have an idea regarding other training programs publications and future initiatives of international health agency.
- **Red Cross Society**
  - To know about the infrastructure of the Red Cross Society.
  - To outline the organizational setup of the Red Cross Society.
  - To know about the objectives, training program, volunteer activities, blood donation and education programs of Red Cross Society.
  - To understand about the funding, current initiatives and future plans of the Red Cross Society.
  - To have knowledge regarding the junior Red Cross activities and the organizations involved in the same.
- **Food analysis unit**
  - To know about the infrastructure of the food analysis unit.
  - To outline the organizational setup of the food analysis unit.
  - To understand about the methods of analysis of food analysis unit.
  - To know about the laboratory and product analysis services of food analysis unit.
  - To know about the supportive services of food analysis unit.

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Salient Features

- This manual is an amalgamation of various concepts derived from the vast ocean of knowledge in the field of Community Health Nursing
- This manual has been written in simple and easy-to-digest language that will help the nursing students grasp the procedures easily
- A fully-colored manual extensively covering all the procedures with their respective rationales for real time implementation
- A number of figures and images have been incorporated to complement the learning process
- All the relevant information regarding procedures in Community Health Nursing practice have been included.

About the Authors

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