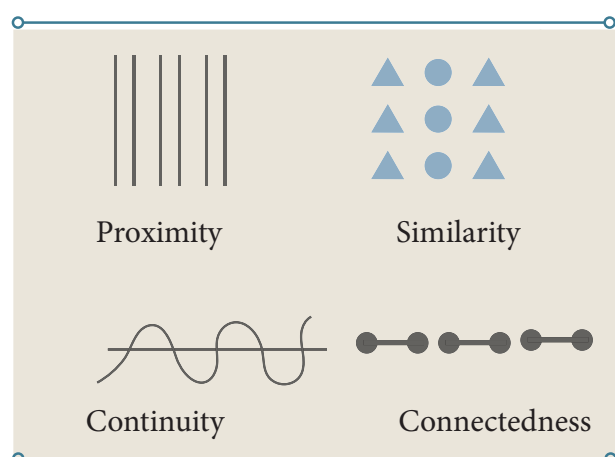
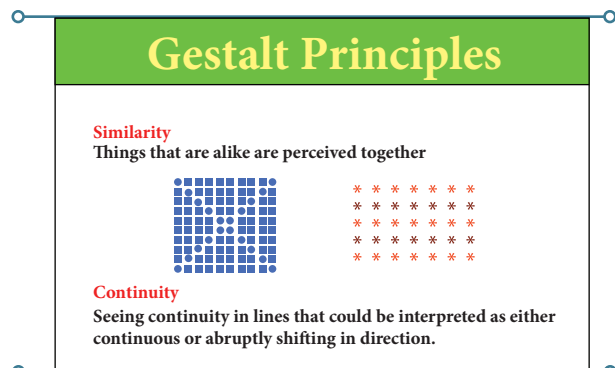
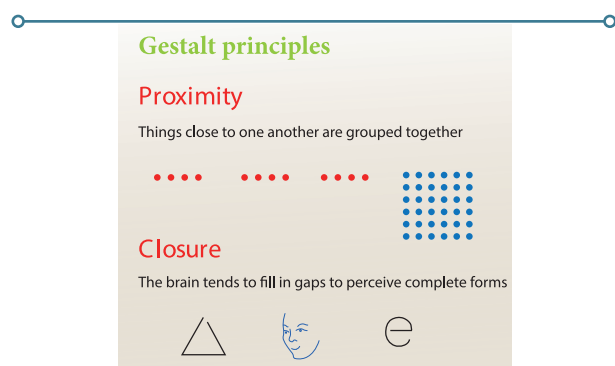


are followed by us in order to make our perception more meaningful.

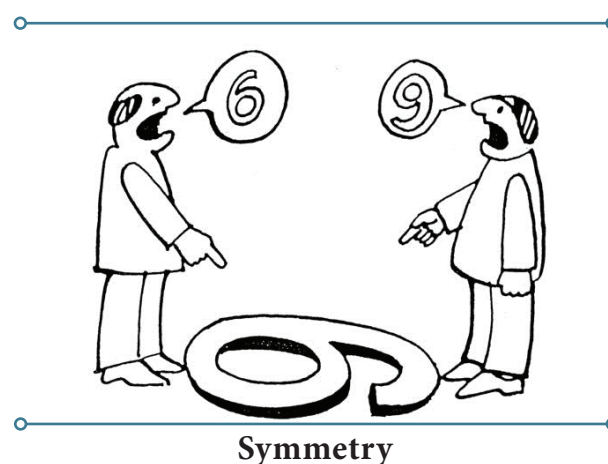
1. Proximity
2. Closure (connectedness)
3. Similarity
4. Continuity.

Examples of proximity and closure, similarity and continuity.



5. Symmetry: Items that form symmetrical units are grouped together.

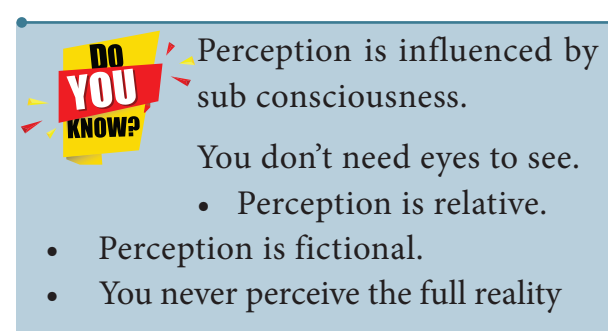
The perception is really based on our mind, and how we look at any object as described in following picture.



3.9 Perceptual Constancy:

This refers to stableness in perception. We have a tendency to perceive the objects as relatively stable and unchanging in shape and size, inspite of a change in the image that we receive.

For example, when we see a person from 5 fts distance, the size of the image in our eyes differs from the image of the same person from 100 fts distance.





Perceptual constancy depends upon several factors like past experience, expectancy, habits, motivations, cognitive styles, learning, imagination, etc.

Perceptual Constancy

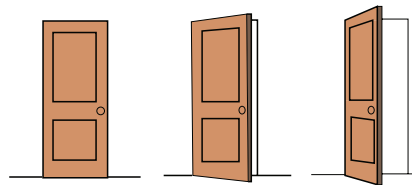
➤ Perceptual Constancy

Perceiving Objects as unchanging even as illumination and retinal image change.

➤ Color

➤ Shape

➤ Size



3.9.1 Types of perceptual constancy

There are different types of perceptual constancies. They are shape and size, brightness and colour, size etc.

3.9.2 Errors in Perception

- **Illusion** - Illusion is a false perception. Here the person will mistake a stimulus and perceive it wrongly. For example, in the dark, a rope is mistaken as a snake or vice versa. The voice of an unknown person is mistaken as a friend's voice. A person standing at a distance who is not known may be perceived as a known person. Most of our illusions is visual and auditory.

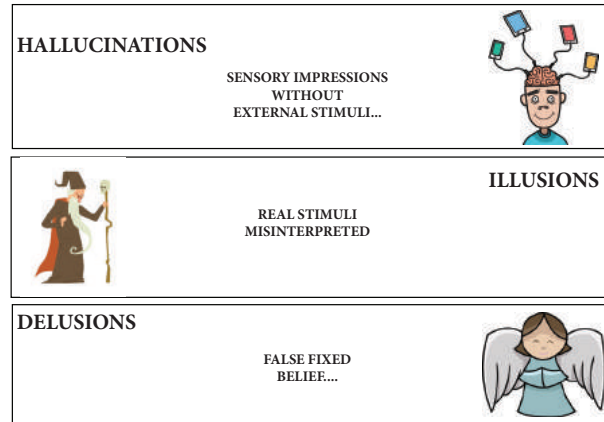


ERROR OF PERCEPTION

Hallucination - Perception without actual stimuli.

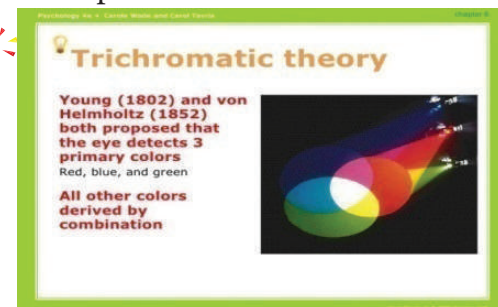
Illusion - An incorrect perception caused by a distortion of visual sensations.

- **Hallucination**- Sometimes we come across instances where the individual perceives some stimulus, even if it is not present. This phenomenon is known as hallucination.



3.9.3 Observation and Nurse:

Good and keen observational ability is an essential characteristic of a nurse. The most important activities of a nurse



include observation of changes in pulse, respiration, heart beat and blood pressure because they indicate general condition of a patient. The condition of the postoperative case, the emergency cases also require accurate observation.

Observation involves attention and perception. The nurse should always concentrate her attention on duties.

Distraction of attention may lead to serious consequences like death of a patient. Attention helps to understand the problems

of patient. At the same time, accurate perception helps the nurse to have a clear picture of the condition of the patient.

While attending the emergency cases, during operations and other serious conditions accurate perception of the situations help the nurse to deal with the situation in an effective manner.

3.9.4 Emotion-It is other factor which influences the behavior. Emotion “is a complex, not a simple elementary, mental state.



STUDENT'S ACTIVITY

Bring the students to the museum and let the students to observe the items and ask them to describe any one in writing or oral.

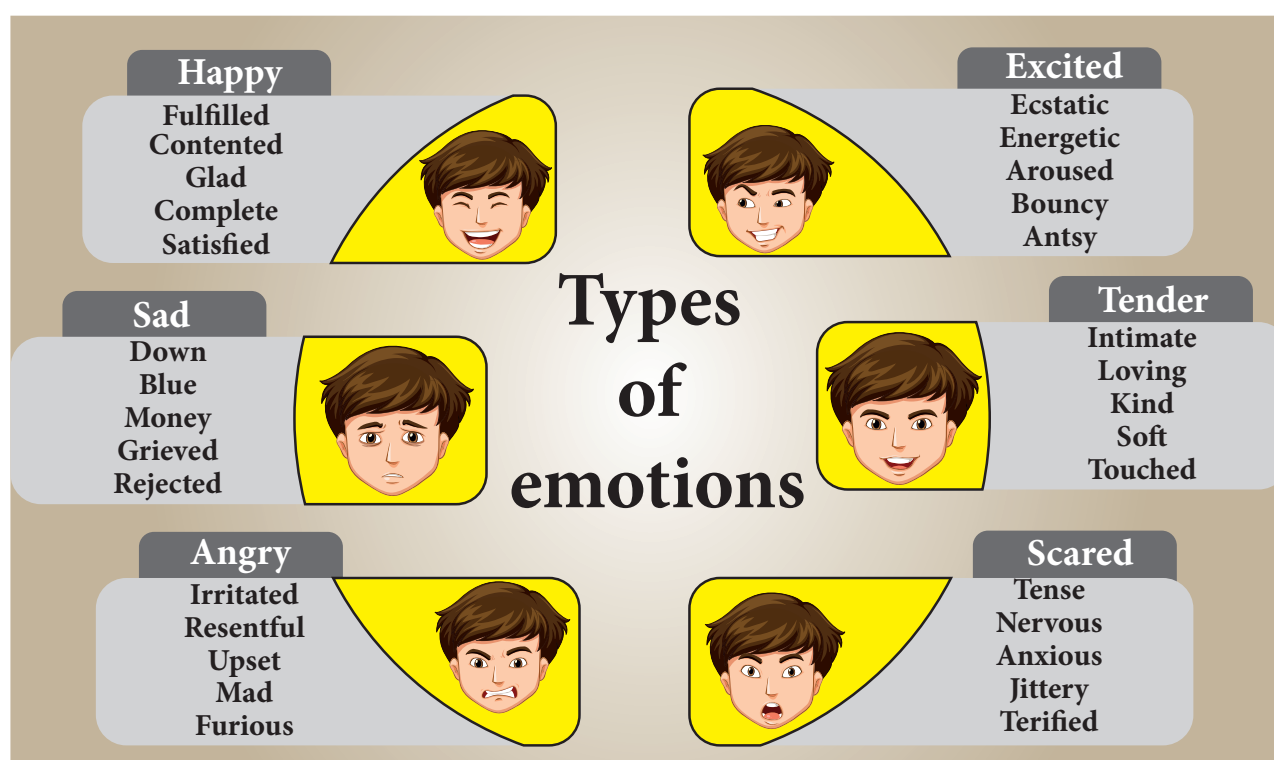
3.9.5 Definitions

- The psychologist **Kulpe** defines emotion as a fusion of feeling and organic sensations
- The emotion is defined as an affective state of consciousness in which joy, sorrow, fear, hate or like is experienced from cognitive state of consciousness.



- Emotions are quite physical, as different body parts react to different emotions. ...
- According to scientists, there are 8 primary innate emotions: joy, acceptance, fear, surprise, sadness, disgust, anger, and anticipation. ...
- If you are sarcastic, chances are you have a good creative flare.

3.9.6 Types of Emotions





3.9.7 Factors Influencing Emotions

Most of the physiological changes that occur during intense emotion, result from activation of the sympathetic division of the autonomic nervous system as it prepares the body for emergency action.

The sympathetic system is responsible for the following changes.

1. Blood pressure and heart rate increase
2. Respiration becomes more rapid
3. The pupils of the eye dilate.
4. Electrical resistance of the skin decreases.
5. Blood sugar level increases to provide more energy
6. The blood begins to clot more quickly in the case of wounds
7. Mobility of the gastro intestinal tract decreases or stops entirely. Blood is diverted from the stomach and intestines and sent to the brain and skeletal muscles.

8. The hairs on the skin erect causing a "Goose pimples. In emotion the sympathetic system also causes epinephrine (adrenaline) and non-epinephrine (noradrenalin). Nerve impulses with sympathetic system, which reach adrenal glands located on the top of the kidneys, trigger the secretion of hormones. They then get into the blood and circulate around the body.

Emotional stability and the nursing;

Nursing is a stressful job where traumatic situations are common. The ability to accept suffering and death without letting it gets personal as crucial.

That's not to say that there aren't heartwarming moments in nursing. Helping a patient to recover, reuniting families, or bonding with fellow nurses are special benefits of the job.



STUDENT'S ACTIVITY

- Let the student describe the feelings of joy, stress, and sad.
- Students can act out the emotions with facial expressions by creating face mask.

3.9.8 Motivation

It is the other factor which influence the behavior.

Definition - Motivation is an essential condition of learning process- **Melton**.

Concept of motivation

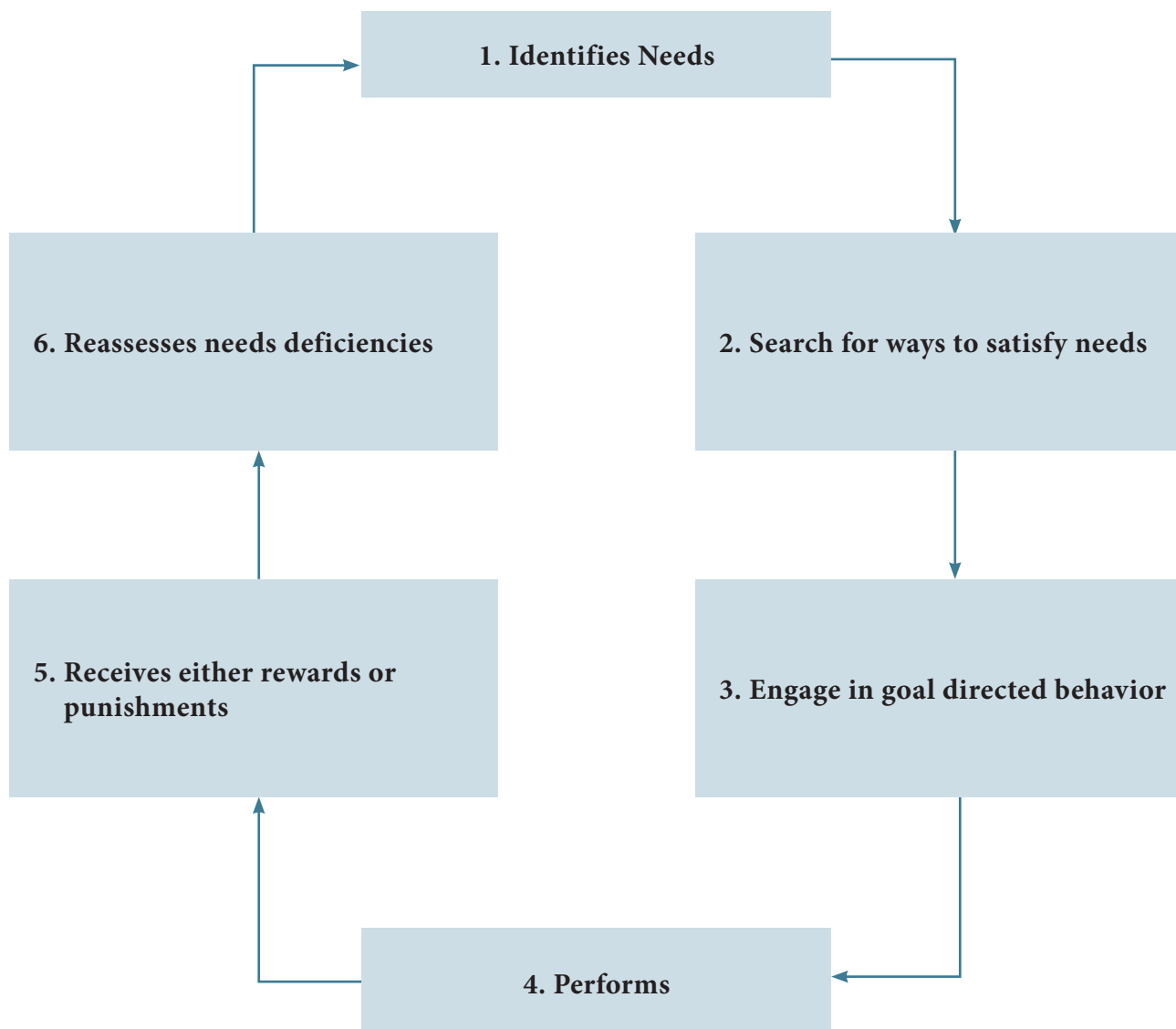
- Motivation is an art of attracting others towards oneself. Motivation is the result of processes of internal or external stimuli to the individual, that arouse enthusiasm and persistence to pursue a certain course of action”
- Motivation has become an art of giving incentives to others for doing something
- Motivation is an art of making appeals in order to attract others towards oneself. Needless to add that motivation is useful in nursing profession.

Nature and characteristics of motivation

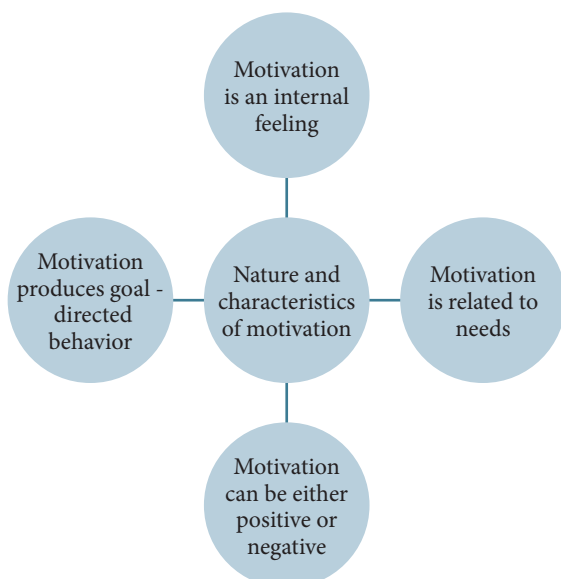
It is described in the diagram below:

1. Identifies Needs
2. Search for ways to satisfy needs
3. Engage in goal directed behavior
4. Performs
5. Receives either rewards or punishments
6. Reassesses needs deficiencies

Process of motivation

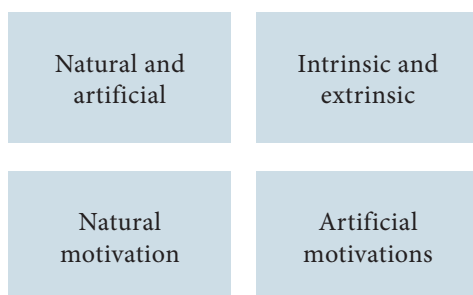


Nature and characteristics of motivation



3.9.9 Kinds of Motivation:

- Motivation can be divided into four types: intrinsic (internal) motivation and extrinsic (external) motivation.



- **Intrinsic motivation:**

Motivation that is driven by an interest or enjoyment in the task itself, and exists within the individual rather than relying on external pressures.

- **Extrinsic motivation:**

Extrinsic motivation comes from outside of the individual.

Eg. Monetary Rewards, punishment, Competition.

- **Natural motivation**

It occurs with Automatic actions and reflexes, habit, instincts, feelings, desire,

interests, suggestion, imitation are natural motivation.

- **Artificial motivation**

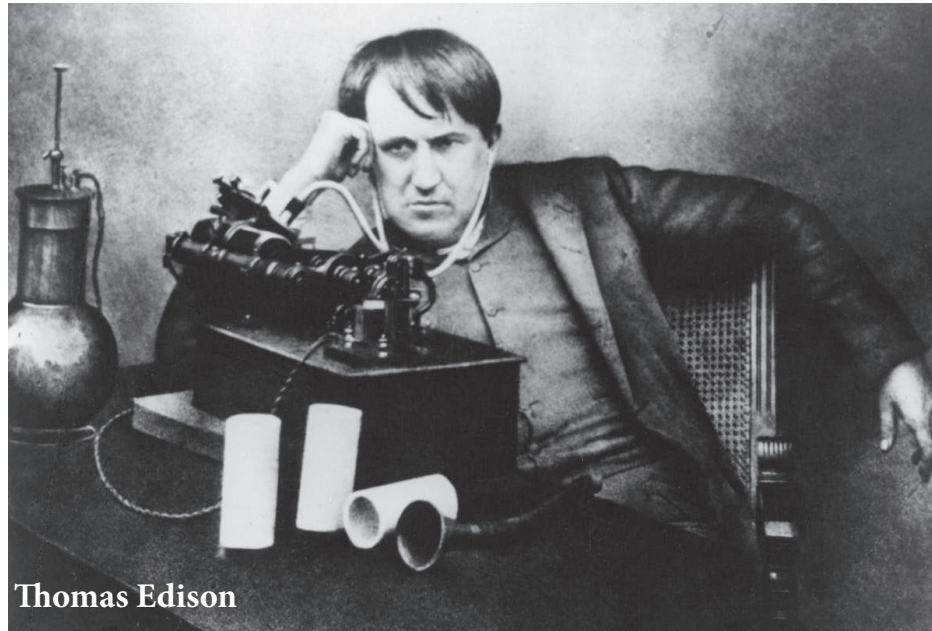
The action taken by the person to acquire knowledge, to win affection of the person, to obtain a post, to acquire confidence of others, to obtain leadership and popularity may be the **artificial motivations**

Motivation and nursing

Work motivation determines nurses' behavior and performance when providing high-quality nursing practice (Moody & Pesut, 2006) While motivation activates and guides all verbal and physical activities (Ryan & Deci 2000), at work, it determines how and to what extent a nurse commits and performs in nursing practice? (Moody & Pesut, 2006). There is an overall acknowledgment that highly motivated nurses perform better and are more productive (Awosusi & Jegede, 2011; Ayyash & Aljeesh, 2011; Yldiz et al., 2009).

CASE HISTORY OF INTRINSICALLY MOTIVATED PEOPLE

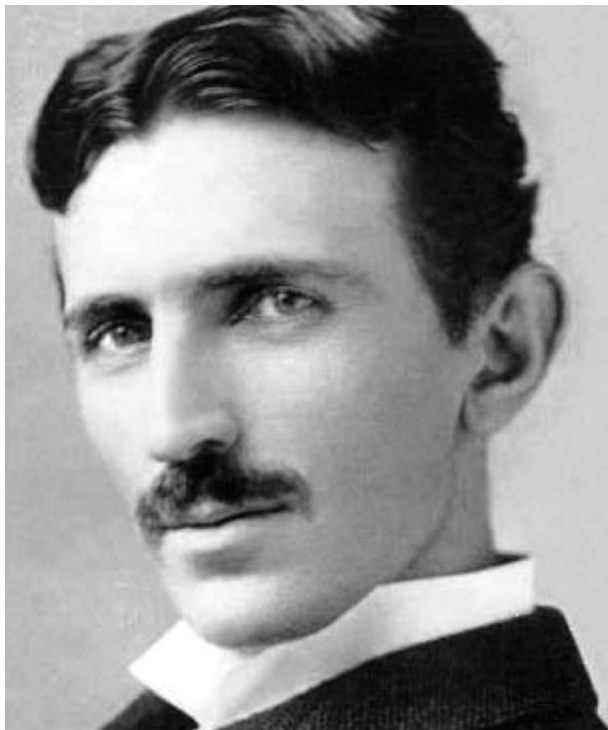
There are some examples of intrinsically motivated people. One of these is Thomas Edison. He was an inventor who lived between 1847 and 1931. He is credited with 1090 patents and also created the very first laboratory for industrial research. From his quotes, Edison indicates that he was motivated by the joy of completing tasks. For example, he indicated that he was able to invent due to a great imagination and the ability to see the potential in junk.



Thomas Edison

Nikola Tesla was also an intrinsically motivated person. He was an engineer and inventor who lived from 1856 to 1943. Nikola invented the AC motor and this created a firm foundation for an industrial revolution. He indicates that the greatest thrill that he ever felt was seeing one of his mental creations become a success.

Marie Curie was a chemist and physicist from Poland. She lived between 1867 and 1934. She was one of the pioneering minds in the field of radioactivity. She confessed that the sights and sounds of nature caused her to rejoice with child-like happiness and she felt as though a new world always opened up to her.



Nikola Tesla



Marie Curie



Individual differences

- All the living organism differ in size, shape, appearance, speed of reaction and innumerable other aspects of behavior. We can see that, some are healthy and jolly while others are weak and irreparable. Some learn quickly and others learn slowly. In this way differences exists.
- These differences between individuals that distinguish or separate them from one another and make one as unique individual in oneself are named as individual differences.
- Individuals differ in height, weight, colour, structure physically and people differ in intellectual abilities like reasoning and thinking power, power of imagination, creative, expression, concentration, etc.

What makes us unique?`

Personal qualities	Personality	Intelligence	Moral values	Mental health	Group identities	Race	Culture	Gender
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3.9.10 Factors causing individual differences:

- **Heredity and environment are not two independent factors.** They operate together and interact to make every person as unique
- **The environmental influences** prenatal, postnatal, period social and cultural are some factors are causing individual differences.
- **Bio chemical differences** between male and female-Sex role expectations incorporated into self-concept very early in life are some of the factors. Girls display greater social and emotional maturity at each age and boys show greater vitality, independence and initiative.
- The fact of individual differences implies that teachers have to meet wide variety of pupil' s needs such as needs of
 - Exceptional children
 - Gifted children
 - Slow learners or backward children,
 - Children with sensory and motor defects,
 - Clumsy children etc.

Teachers also face antisocial behavior of some children in their class. Common behavior problems are bullying, lying, stealing, destruction of common property and adolescent sexual misbehavior. Suitable reinforcement of acceptable conduct will generally eliminate such problem behaviors.



STUDENT'S ACTIVITY

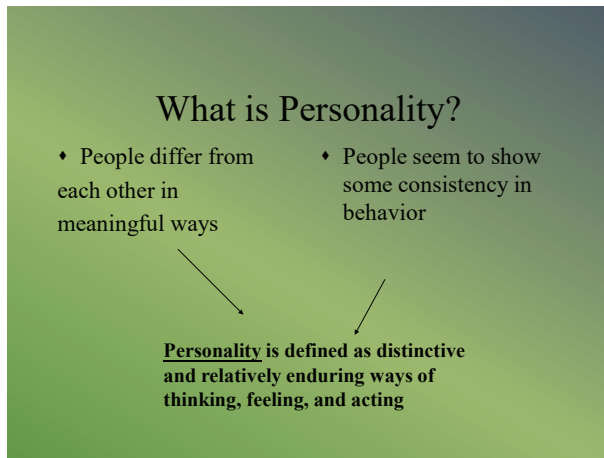
Each student can list out their interest and dislike events and habits to know the difference among them



3.10 Personality

Introduction

The word personality has been derived from the Latin word 'Persona' which was the mask which Greek actor wore while acting. This however is not the meaning taken in the modern word personality.



3.10.1 Definition of personality

- Personality refers to a person's unique and relatively stable pattern of thoughts, feelings, and actions
- **Gordon Allport defines**, "personality is the dynamic organization within the individual of those psychophysical systems, that determine his unique adjustment to his environment".

3.10.2 Categories of personality

H. J. Eysenck speaks of three basic categories of personality.

- Extroversion - introversion,
 - neuroticism - stability and
 - psychoticism - normality.
1. **Extroverts** are described as outgoing, uninhibited fond of activities, which bring them into contact with other

people. **Introverts** have the opposite traits.

2. **Neuroticism** is a personality trait that includes anxious and nervous behavior and a frequent feeling of fear or worry. In situations of worry, panicking, stress and over emotionality a high level of activity could affect performance adversely in academic work of pupils, resulting in learning disabilities. Stability is opposite of neuroticism
3. **Psychoticism** is a personality type that is prone to take risks, might engage in anti-social behaviors, impulsiveness, or non-conformist behavior. Normality is a opposite of that.

3.10.3 Personality Traits of Successful Nurses

Six important traits for a nurse to be successful is:

1. Tenacious

Nurses need to understand topics like chemistry, anatomy, psychology, and nutrition to do their jobs well. It takes a strong will to memorize all of the information and apply it in hectic environments.

2. Gregarious

Emergency rooms see nearly 130 million patients per day. Most of those patients and their loved ones will rely on nurses to get them through difficult times. Gregarious people who enjoy comforting and helping, however, can thrive in chaotic environments like ER (Emergency Room). But; it is helpful when working in any medical



environment since nurses are patient-facing.

3. Methodical

Nurses play a lot of different roles throughout a shift. Many of them fill out paperwork, take notes for medical records, and provide patient care. Only a methodical person could fill out insurance forms while talking with a patient. It is a rewarding job, but it is tough. If nurses do not have a methodical nature, he or she may need to develop some multi-tasking and organizational habits.

4. Optimistic

Nurses who have optimistic dispositions can set the proper mood for healing. It's hard for patients to keep their spirits up. It is even harder when their nurse has a negative perspective.

5. Patience

The average patient will actively participate in behaviors that worsen his or her condition. It's estimated that 60 percent of patients do not follow their doctor's orders when taking prescription medications. It takes a lot of patience to deal with people who either will not or cannot follow the basic instructions that could save their lives. Nurses who get frustrated easily will end their shifts with plenty of tension, headaches. Of course, nurses also need extreme patience when filling out endless streams of insurance documents and medical records.

6. Empathetic

Nurses see people in some of their worst states. Over the time, nurses



STUDENT'S ACTIVITY

The "Empty Your Pockets" Exercise to know the personality

This exercise is simple, but very effective as a way for students to get to know each other as well as learn about the personal meaning of the things we carry with us everyday.

Break the class down into small groups. The students take turns emptying their pockets (or pocketbooks, backpacks, etc.) to show their group what they are carrying with them.

No one is required to show anything that they would prefer NOT to show.

The person and the group then discuss what the objects say about the person. Does it reveal something about one's personality and lifestyle? Is there any one object that stands out as a reflection of some aspect of that person?

Sometimes what is MISSING also says something about the person.

can get desensitized to the disturbing things they have seen. A nurse who feels empathy for other people, becomes more in-tune with their patients and can provide better care. Empathy helps nurses to communicate with patients and better understand what they are going through. It is, perhaps, the most essential personality trait of a successful nurse.

Learning psychology (study of behavior) will help us to understand the factors affecting our behavior and also how to

maintain normal or balanced behavior to help patients.



3.11 SOCIOLOGY

Introduction

A French philosopher Auguste Comte is known as father of sociology. Because he was the first person to coin the word “sociology” in 1838, the word sociology

means, the “socio” derived from Latin and “Logos” derived from Greek language.

3.11.1 Definitions of sociology

1. Sociology is the science of society- G.A. Landberg (1939)
2. Sociology is the study of social groups- Kimball Young(1942)
3. Sociology is the study of social action, interaction and social relationships. -MaxWeber(1949)
4. Sociology is the study of social institutions. Emile Durkheim (1895)
5. Sociology is the study of social bonds, social processes, social structure, and so on





Do YOU KNOW?

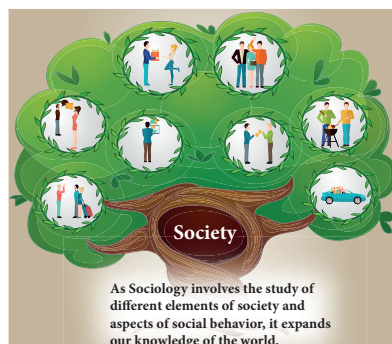
Father of Sociology

- Auguste Comte
- 1798 – 1857
- Inspired by French Revolution
- **Social statics (constants)**
- **Social dynamics (change)**



3.11.2 Importance of sociology

1. Sociology makes a Scientific of Society.
2. Sociology as a profession.



3. It gives the knowledge about social system and human behavior in different situations.
4. It helps us as a tourist guide to understand our daily life
5. It tells how we are interrelated with one another.
6. It is a useful preparation for our career as a teacher, social worker, social welfare officer, programmer, and Planner, etc.
7. It is helpful to know our personality and position in our society.

8. it is helpful to give the knowledge about different cultures of different



societies, positive points etc. which we adopt from various cultures.

9. It is helpful to solve the social problems because, it uses scientific method. It tells the causes of any problem and strategies to solve that problem.

3.11.3 Application of sociology in nursing

- Sociology includes in the curriculum of nursing because health is included in social component. Most of the illness has social causes and social consequences.





- Sociology gives knowledge to deal with patient and to understand his habits norms, culture and behavior etc.. The nurse has to understand the necessity of changing the environment or surrounding.
- The sociological knowledge will help the nurse to understand the factors of caste, faith, community, religion etc. Without a sociological knowledge a nurse cannot understand the community.
- Adjustment and services of the family members are important in the recovery process of the patient. So this knowledge of family is essential for the nurse.
- Sociological knowledge helps her to avoid prejudices and discrimination.
- A nurse should understand the social position, status and social responsibilities with regard to health field by studying sociology.
- She has to work in accordance with rules and norms of it by removing egoistic and impulse based behavior.
- It helps the nurse to approach the patient at various levels. – Emotional level – Cultural level – Intellectual level.

“NURSES ARE IN A UNIQUE POSITION THAT ALLOWS THEM TO INTEGRATE ALL ASPECTS OF PATIENT CARE, ENSURING THAT CONCERNS ARE ADDRESSED, STANDARDS ARE UPHELD AND POSITIVE OUTCOMES REMAIN THE GOAL”

- Social correlates of disease including demographic factors can be understood by the nurse with the knowledge of Sociology.

The example for Intervention measures: In the absence of social worker the Nurse may have to deal with family and other problems such as housing, finance, social, isolation and psychological disturbances of the patient.

3.11.4 Basic principles of sociology

These are the basic principles of sociology:

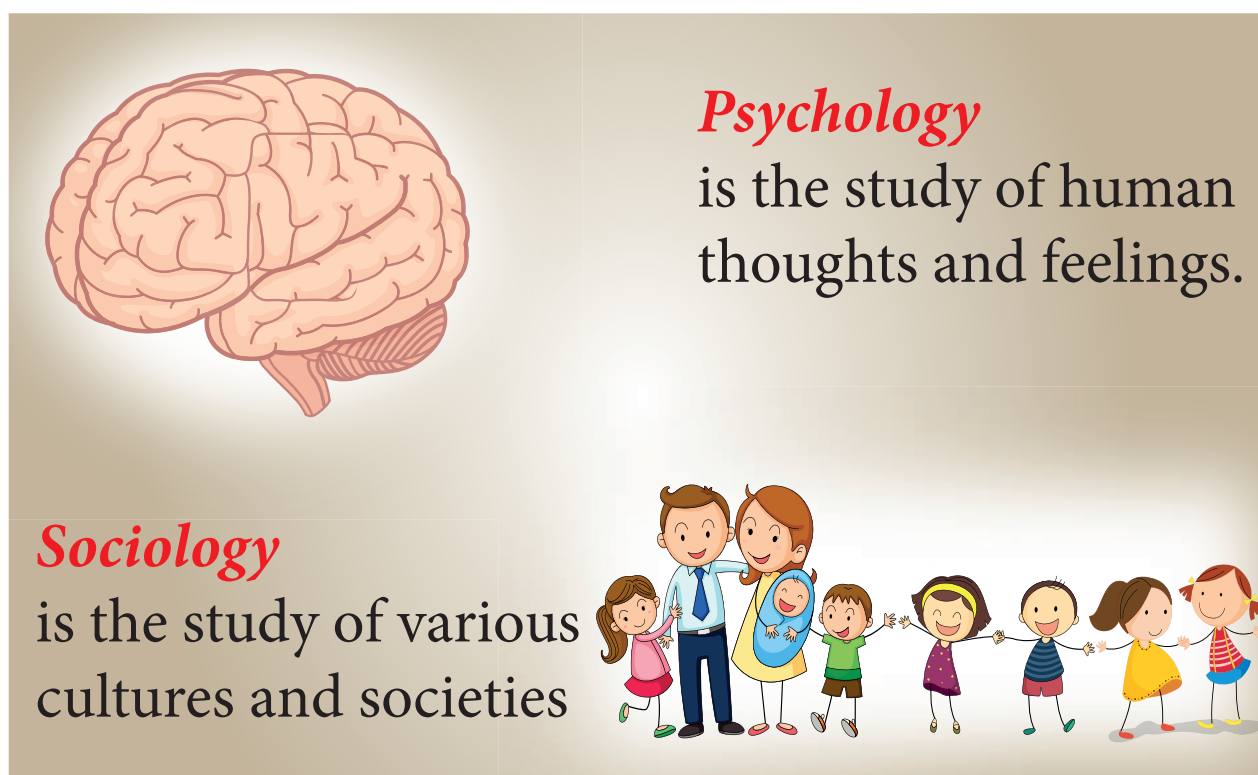
1. People behave differently in groups than they do as individuals.
2. People obey rules that are socially constructed.
3. People socially construct the rules.
4. There are rewards for following the rules and penalties for breaking the rules.
5. The rules of society can be studied scientifically.
6. Societies are organized into distinct social units (e.g. family, government, education, and religion) that tell us what the rules are.
7. Our patterns of behavior reveal unequal social relationships.
8. Social change is a necessary and essential part of our survival.
9. We must attempt to explain our social behavior.
10. We must strive to provide evidence that supports our claims about social behavior.

We can use our scientific work to improve the human social condition.

CONCLUSION

Where sociology mainly focuses on the interaction of people, psychology has a tendency to deal with human emotions. Ultimately, there are a thousand ways that psychology and sociology relate to and enhance each other to assist people in mastering why people behave and interact as they do. These two fields with different approaches will provide you a wide range of knowledge regarding human service, social work, healthcare, and even business.

In this chapter we have discussed about the psychology and sociology which will help the nurses to understand the patient and their families and help them to come out of the health problem. This aspect will meet the holistic nursing care component.





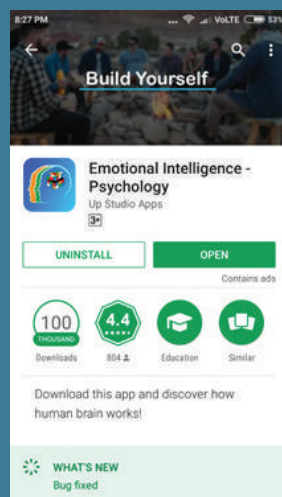
ICT Corner

Emotional Intelligence - Psychology

Lets Know: Emotional Intelligence - Psychology



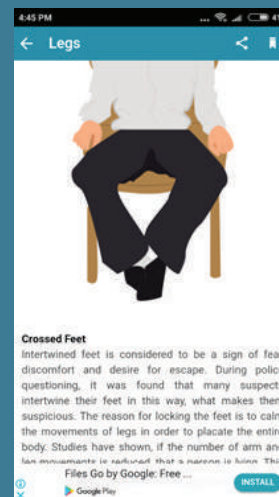
- Step 1:** This is an Android app activity. Open the Browser and type the URL given (or Scan the QR Code. (Or) search for “Emotional Intelligence” in google play store.
- Step 2:** (i) Install the app and open the app, (ii) click Any Menu say “LEARN”,
- Step 3:** In the opened page “Body Language” click any menu say “LEGS”.



Step 1



Step 2



Step 3

EMOTIONAL INTELLIGENCE - PSYCHOLOGY (ANDROID APP)

<https://play.google.com/store/apps/details?id=com.seasector.emotionalintelligence.generalsurgery>

*Pictures are indicative



B190_11_NUR_EM



ICT Corner

Neural Control and Coordination

Through this activity you will explore the Structure and various functions of the Nervous System.

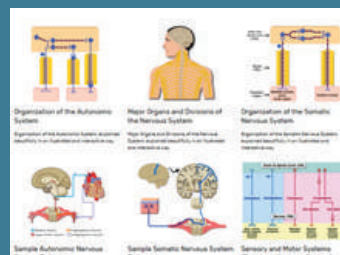


- Step 1:** Use the URL to reach the 'Nervous system' page. Surf the grid and select 'Nervous System organization' and explore the autonomic and somatic organizations of nervous system.
- Step 2:** Then reach the 'Nervous system' page by clicking back button on the top of the window or use the 'Backspace' key. Select 'Nerve cells' from the grid and explore the information.
- Step 3:** Follow the above steps and explore each and every parts and their functions of nervous system.
- Step 4:** Use the reference given below the page to acquire additional details about nervous system.

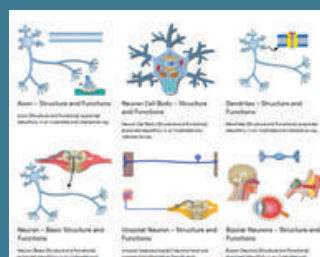
Step 1



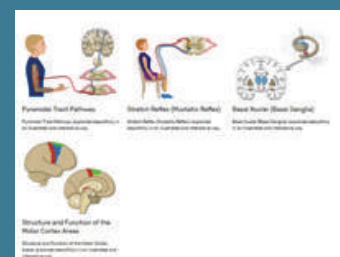
Step 2



Step 3



Step 4



NERVOUS SYSTEM'S URL:

<https://www.getbodysmart.com/nervous-system>

3D brain

<http://www.brainfacts.org/3d-brain#intro=false&focus=Brain&zoom=false>

3D Ear

<https://www.amplifon.com/web/uk/interactive-ear/index.html>

*Pictures are indicative



B190_11_NUR_EM



EVALUATION



I. Choose the correct answers (1 mark)

1. A study of human behavior is called as
 - a. Sociology
 - b. Psychology
 - c. Behaviorism
 - d. Behavior Theory
2. Studying psychology will help the nurse as follows EXCEPT
 - a. Understand patient
 - b. Understand self
 - c. Understand nursing
 - d. Understand human behaviour
3. If the person is adjusting to the world with maximum effectiveness is called as
 - a. Healthy person
 - b. Stable person
 - c. Adjustable person
 - d. Mentally healthy person
4. The mentally healthy person possess the following characteristics EXCEPT
 - a. Good self esteem
 - b. Solves problem
 - c. Talk loudly
 - d. Socially active
5. Factors influencing Mental health are
 - a. Age
 - b. Psychology
 - c. Behavior
 - d. Sociology
6. The mental activity by means of which knowledge, skill, attitude and ideas are acquired resulting in modification of behavior is called as
 - a. Education
 - b. Insight
 - c. Learning
 - d. Thinking
7. Classical conditioning Behavior theory was developed by
 - a. Skinner
 - b. Ivan pavlov
 - c. Kohler's
 - d. Gerald

II. Write short answers (3 marks)

1. Define insight with example
2. List the factors insight attention
3. What are the two mental attentions of observation?
4. What are the types of attention?
5. Explain the forms of distraction
6. What are the types of perceptions?
7. Define emotion
8. What is intrinsic motivation?
9. Give an examples for extrinsic motivation
10. Mention the three basic categories of personality

III. Write short notes (5 marks)

1. Explain perceptual constancy.
2. What are the errors in perception?
3. Explain the types of emotions.
4. What is the concept of motivation?
5. Elaborate the process of motivation.
6. What are the importance of society?

IV. Write an essay for the following questions (10 marks)

1. Explain the Gestalt principles of perception.
2. Describe the physiological changes due to emotions.
3. Write the nature and characteristics of motivation.
4. Explain the factors causing individual differences.
5. Write about the personality traits of successful nurse.
6. Write the principles of sociology.
7. What are the application of sociology in nursing?

A-Z GLOSSARY

Psychology – (மனநலம்)	- It is the science of the mind and behavior.
Behavior – (பண்புகள்)	- It is a response of an individual or group to an action, environment, person, or stimulus.
Learning – (கற்றல்)	- It is the process of acquiring new or modifying existing knowledge, behaviors, skills, values, or preferences.
Observation – (கூர்ந்து நோக்குதல்)	- It is the act of <i>observing</i> something or someone.
Attention – (கவனம்)	- It is the behavioral and cognitive process of selectively concentrating on a discrete aspect of information
Perception – (புலதிறன்)	- it is a belief or opinion, often held by many people and based on how things seem
Emotion – (உணர்ச்சி)	- Emotion “is a complex, not a simple elementary, mental state
Motivation – (ஊக்குவித்தல்)	- It is the process that initiates, guides, and maintains goal-oriented behaviors.
Personality – (தனித்திறன்(அ) தன்மை)	- It is the combination of qualities and characteristics of a person.
Individual differences – (தனிமனித வேற்றுமைகள்)	- These differences between individuals that distinguish or separate them from one another and make one as unique individual in oneself.
Sociology – (சமூகவியல்)	- It is the science of society



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Unit 4

PRINCIPLES AND PRACTICE OF NURSING



உற்றான் அளவும் பிணியளவும் காலமும்
கற்றான் கருதிச் செயல்.

— குறள்: 949

Kural 949:

The learned (Physician) should ascertain the condition of his patient, the nature of his disease, and the season (of the year) and (then) proceed (with his treatment).



LEARNING OBJECTIVES

At the end of this chapter, the student will be able to,

- Define the Nursing Process
- Know the Steps in Nursing Process
- Admission process
- Orient to the ward
- Care of belongings
- Discharge the patient
- Bed and Bed making
- Create a therapeutic environment
- Body mechanics and positioning
- Meet the Hygienic needs
- Meet the Safety and Comfort needs
- Know the Activity & Exercises, Rest & Sleep
- Do the Moving, Shifting & Lifting patients
- Meet the Oxygen needs
- Meet the Elimination Needs.

4.1 INTRODUCTION:

Nursing is a profession within the health care sector focused on the care of individuals, families, and communities so they may attain, maintain, or recover optimal health and quality of life. Nurses may be differentiated from other health care providers by their approach to patient care, training, and scope of practice. Nurses develop a plan of care, working collaboratively with physicians, therapists,

the patient, the patient's family and other team members, that focus on treating illness to improve the quality of life. Nurses may help coordinate the patient care performed by other members of a multidisciplinary health care team such as therapists, medical practitioners and dietitians. Nurses provide care both interdependently, for example, with physicians, and independently as nursing professionals. Nurses are ultimately the backbone of any health care delivery system.

4.2 NURSING PROCESS.

4.2.1 Introduction

Every mother has the role of nurturing and caring for her child. In the same way nurses have the vital role of taking care of the patients in the ward. To take care of the patient, the nurse has to systematically plan her work. This work which is systematically planned is known as Nursing Process.

4.2.2 Definition of Nursing Process

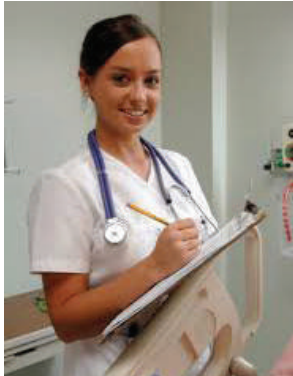
The nursing process is a scientific method used by nurses to ensure the quality of patient care.

This approach can be broken down into five separate steps.



4.2.3 An Example of the Nursing Process

Below is an example of the process from start to finish in a story like fashion:

Steps of Nursing Process.	Examples.
<p>Assessment Phase</p> <p>The first step of the nursing process is assessment. During this phase, the nurse gathers information about a patient's psychological, physiological, sociological, and spiritual status. This data can be collected in a variety of ways. Generally, nurses will conduct a patient interview, physical examination, referencing to the patient's health history, obtaining the patient's family history, and general observation is used to gather assessment data.</p> <p>"The individualization of learning fundamentally redefines the role of assessment."</p> <p>- Sebastian Thrun</p>	<p>Sanjay 54 year old man visits his general physician on Monday because he was feeling sick over the weekend. When he was called from the waiting room, the nurse takes his temperature, heart rate, and blood pressure. She then asks Sanjay a series of questions about how he has been feeling lately. The nurse notes his responses when he says he has been suffering with difficulty in breathing and has been feeling very tired. She also sees Sanjay's medical history that he has had previous problems with his blood levels and blood pressure. Sanjay also has a blood sample taken during his visit.</p> 



Diagnosing Phase

The diagnosing phase involves a nurse making an educated judgment about a potential or actual health problem with a patient. Multiple diagnoses are sometimes made for a single patient. These assessments not only include an actual description of the problem (e.g. sleep deprivation) but also whether or not a patient is at risk of developing further problems. The diagnoses phase is a critical step as it is used to determine the course of treatment.

“A plan is a list of actions arranged in whatever sequence is thought likely to achieve an objective.”

-John Argenti

The nurse looks over Sanjay's symptoms and notes that his heart-rate is higher than average and his blood pressure is elevated. She also considers that he's experienced fatigue and shortness of breath. The nurse determines that Sanjay is experiencing high levels of cholesterol, which is having high levels of fat within the blood. The nurse is also concerned that Sanjay is at risk for heart disease.



Planning Phase

Once a patient and nurse agree on the diagnoses, a plan of action can be developed. If multiple diagnoses need to be addressed, the head nurse will prioritize each assessment and devote attention to severe symptoms and high risk factors. **Each problem is assigned a clear, measurable goal** for the expected beneficial outcome.

Apprehension, uncertainty, waiting, expectation, fear of surprise, do a patient more harm than any exertion.

-Florence Nightingale

The nurse sits down with him in a closed room and explains his cholesterol levels and high blood pressure. She suggests that Sanjay be put on medication to help lower these blood levels and recommends him to do exercise at least twice a week. The nurse also tells Sanjay he should stay away from salty foods and eat less red meat. Sanjay agrees with the nurse, and they set up a follow-up appointment two weeks later. The nurse reminds Sanjay to call or visit the hospital immediately if there is any changes in his condition, or if he starts to feel worse.





Implementation Phase

The implementing phase is where the nurse follows through on the decided plan of action. This plan is specific to each patient and focuses on achievable outcomes. Actions involved in a nursing care plan include monitoring the patient for signs of change or improvement, directly caring for the patient or performing necessary medical tasks, educating and instructing the patient about further health management, and referring or contacting the patient for follow-up. Implementation can take place over the course of hours, days, weeks, or even months.

Sanjay is prescribed the medication and takes it as recommended. One week later, he has a day where he feels especially sick and calls the doctor's office. The nurse explains that the medication could cause nausea as a side-effect and advises Sanjay to drink jeeragam water and avoid any foods that generally upset his stomach. Sanjay continues taking the medication and goes to the gym four times during the two week period. Once the two weeks has passed, he returns to the doctor's office for his follow-up appointment.



Evaluation Phase

Once all nursing intervention actions have taken place, the nurse completes an evaluation to determine if the goals for patient wellness have been met. The possible patient outcomes are generally described under three terms:

1. Patient's condition improved.
2. Patient's condition stabilized.
3. Patient's condition deteriorated, died, or discharged.

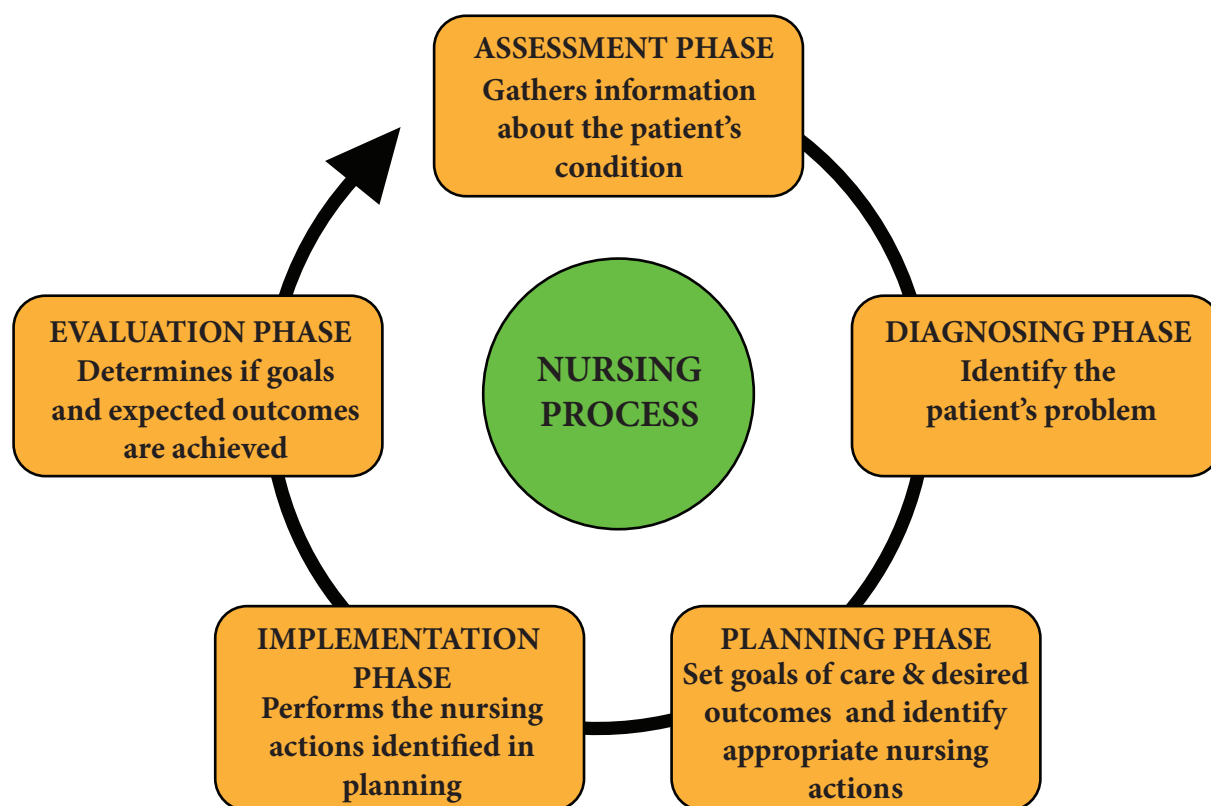
In the event the condition of the patient has shown no improvement, or if the wellness goals were not met, the nursing process begins again from the first step.



When Sanjay returns, the nurse asks him a series of questions about how he is feeling. Sanjay replies that he has been having an easier time breathing and feels significantly less tired since exercising and taking the medication. The nurse marks "Patient's Condition Improved" on his official medical records and congratulates Sanjay on his well being. She then advises him to remain on the medication for one more month and to continue his exercise.



4.2.4 Diagrammatic representation



All nurses must be familiar with the steps of the nursing process. If you're planning on studying to become a nurse, be prepared to use these phases everyday in your new career, it's easy and simple.

Highlight

Although there are calculated steps behind the nurse's approach, her methods are extremely friendly and warm. Care is taken to treat the patient like a human being. As you can see, the nursing process will feel like second nature/mother when put into real-world practice.



STUDENT'S ACTIVITY

Can practice the Nursing process by doing a Role play.



4.3 ADMISSION OF A PATIENT.

4.3.1 Introduction

Meena, a 14 year old child had pain in the right ear for the past 2 days and was crying continuously. Her father and mother were anxious about her condition and brought her to the hospital.



4.3.2 Definition:

Admission to a hospital means entrance of a patient to stay in the hospital for various health reasons like observation, investigations, and treatment.

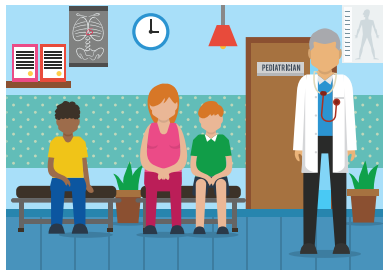


4.3.3 Purposes of admission.

1. For observation.
2. For doing investigations.
3. For treatment.



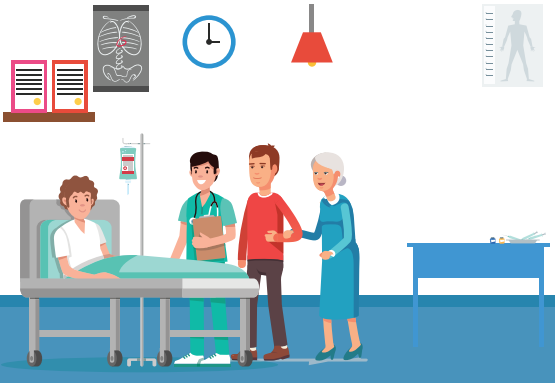
4.3.4 Types of admission.

1. Routine.
2. Emergency.




4.3.5 Patient admission procedure.

Procedure	Example
The entrance of a patient into a hospital or a private clinic is termed as admission. A patient enters the hospital by himself /herself or he/she may be brought to the hospital by his relatives, friends, neighbours or others.	 <p>Meena was brought to the hospital reception by her mother and father.</p>
The admission to a hospital can be either routine (outpatient department) or emergency/casualty (seriously ill).	<p>Meena was brought to the hospital as a routine admission.</p>
The doctor admits the patient to the ward if necessary depending upon the condition of the patient. The patient comes to the ward by walk, wheelchair or stretcher.	 <p>Meena is advised to be admitted in the ward for investigation. Meena enters the ward on a wheelchair.</p>
The first personnel, who meet the patients, is the nurse who should be polite and friendly and should have a courteous and sympathetic approach toward the patients.	 <p>Meena is received by Nurse Sumathy with a smile and warmth.</p>



<p>Due to sudden change and strangeness in the environment, patient can feel anxious, therefore, the nurse should take effective steps to establish interpersonal relationship.</p>		 <p>Nurse Sumathy checks her chart and admission slip, introduces herself to Meena and makes her comfortable and at ease.</p>
<p>Check the height, weight, temperature, pulse, respiration, and blood pressure. Check the personal hygiene of the patient, example, if the nail is cut, if the patient has taken bath etc.</p>		 <p>Nurse Sumathy checks Meena's height, weight, temperature, pulse, respiration, and blood pressure.</p>
<p>Provide a clean and safe environment, prepare the unit (bed making)</p>		 <p>Nurse Sumathy makes the bed and checks the important parameters for Meena. Then she gives her a clean hospital gown. Necessary required blankets and locker are handed over to the patient.</p>



<p>Orientation to the ward and routines: A patient may be coming to hospital for the first time. Proper orientation should be given to the patient. The patient who is not very ill, can be taken around the ward and can be introduced to the other patients and vice versa, and the nursing personnel working in the ward. Orient the patient to the whole ward, duty room, toilet room, explain about the time for meals serving, and the doctors visit timings. Explain the hospital policies, procedures, and routines to the patient and relatives. If the patient is seriously ill, the patient's relative can be given a special pass so that the relative will be able to stay with the patient in the hospital.</p>	 <p>Nurse Sumathy explains the hospital routine, the hospital rules, the general setup of the ward, the personnel working in the ward, the time of visiting hours and supplied her parents with visiting passes.</p>
<p>Record the admission and inform the doctor.</p>	<p>Details of Meena's parameters, her condition are written in the file and signed by Nurse Sumathy after which she informs the doctor that Meena has arrived.</p> 
<p>Care of belongings: It is always a good policy to discourage patients to keep / valuable things and money with them. Send the valuables home through their relatives. If he/she does not have anyone with him, enter the description of items in the register and send the valuables to the office for safe custody. Get the patient's signature or thumb impression in the register. However, inform the patient that he will get back his valuables on discharge.</p>	 <p>Meena was wearing a chain and gold stud which was handed over to her parents.</p>



STUDENT'S ACTIVITY

- Can practice the Admission Procedure by doing a Role play.
- Visit to the hospital.

Quote

"Every time you smile at someone, it is an action of love, a gift to that person, a beautiful thing." –**Mother Teresa**





A strong bond between two or more people refers to **interpersonal relationship**.

Attraction between individuals brings them close to each other and eventually results in a strong interpersonal relationship. This is an important character of the nurse.

செல்லாமை உண்டேல் எனக்குரை மற்றுநின்
வல்வரவு வாழ்வார்க்குரை.

— குறள்: 1151

Kural 1151:

If it is not departure, tell me; but if it is your speedy return, tell it to those who would be alive then.

4.4 DISCHARGE OF A PATIENT.

4.4.1 Introduction

After a one week stay in the hospital, Meena who had experienced pain in the right ear had completed all her investigations and treatment. She was better now and the doctor comes into her room and says those wonderful words, “You can go home today.” She was so excited and she wanted to get her home clothes on, grab her toothbrush and head out... yes? But it is not that easy. There are many things that have to be done before the patient can really leave the hospital safely.

4.4.2 Definition:

Discharge of a patient from the hospital means, preparation of a patient to depart or leave the hospital.

4.4.3 Purposes of discharge

1. To ensure continuity of care to the patient after discharge. (Follow up)

2. To assist the patient in discharge process.

4.4.4 Types of discharge

1. **Discharge to home:** The discharge to home is initiated by the doctor who advises the patient that he is well enough to leave the hospital.
2. **Discharge Against Medical Advice (AMA):** Patient leaves the hospital against the doctor's advice.
3. **Absconding:** When a patient escapes from the hospital without the knowledge of the hospital staff and he is treated as absconded in the records.

Fact

It can take up to two hours to complete the discharge process. It takes time for the nurses as they are working with the, pharmacies, billing department, dietary section, etc., to coordinate activities and responses to reach that one hour goal.










STUDENT'S ACTIVITY

Role play on the discharge procedure.







Statistics reveal that **70-80% of patients** admitted in a hospital are **emotionally upset** and they need the support of the nurses till discharge.

4.4.5 Patient Discharge Procedure.

Procedure		Example
The doctor has to write discharge orders in your chart.		 <p>Meena's discharge orders were written in her chart by the doctor.</p>
The doctor has to review all the medications and list what should be taken at home. The doctor gives the order to the nurse with the prescription orders.		<p>The doctor reviews Meena's condition and prescription orders with Nurse Sumathy.</p> 
The nurse informs the patient and the family about the discharge and makes an appointment for the follow up visit.		<p>Nurse Sumathy informs Meena and her family about the discharge and follow up visit.</p> 
Financial arrangements are reviewed and finalized.		<p>Meena's parents are informed about the amount of money to be paid for the hospital stay. (Hospital Fees)</p> 
Transportation is confirmed.		<p>Nurse Sumathy confirms the safe transport of Meena with her family home.</p> 
Discharge instructions are prepared and printed.(A summary of the hospital stay, a list of tests and surgeries performed, with results, a list of test results still pending, a list of tests needed after discharge, such as a repeat chest x ray, a list of medications the patient is being discharged with, including the dosage and frequency.)		<p>Discharge instructions for Meena was prepared and given to her parents in a printed format.</p> 
Any delays are updated to the patient and family.		<p>The bills will be followed up by Nurse Sumathy and updated to Meena and her family.</p> 



The nurse will review all the discharge instructions with the patient.	Nurse Sumathy reviews the checklist to see if everything is completed systematically so that nothing is missed out. 
The nurse will get the feedback on the discharge plan and discuss on any concerns or questions. Health education is given to the patient. Finally, the patient's belongings are handed over.	 The feedback from Meena and her parents are documented. Health education is given to the parents on how to take care of Meena at home. Her belongings are handed over to her parents.
The understanding of the instructions will be confirmed.	A caring talk will help the patient to depart from the hospital peacefully. 
Only after all of the above has been completed, the patient and the relatives will be helped to the vehicle.	Meena and her parents were helped until the vehicle head home safely. 

4.5 BED AND BED MAKING.

4.5.1 Introduction

A bed is a piece of furniture which is used as a place to sleep or relax. A clean, fresh, comfortable, bed is very important for people who have to spend time in bed during their illness. A standard hospital bed is made of metal. These are easy to handle, clean, strong, durable and simple in design. It is 200 cm long, 100 cm wide and 75 cm high from the floor.

4.5.2 Bed making Definition

Bed-making is the act of arranging the bed sheets and other bedding on a bed, to prepare

it for use. It is an art which has to be done skillfully and contributes materially to the patient's comfort. A comfortable bed uplifts one mentally, provides physical relaxation and can prevent serious complications.

Highlight

When the bed is not clean and comfortable, the patient would not have slept well, so he can develop minor problems like headaches, an altered attention span, irritability, unable to concentrate, and forgetfulness which can be very unpleasant.



4.5.3 Purposes

1. To provide clean and comfortable bed to the patient.
2. To observe and prevent patient's complications.
3. To save time, effort and material.
4. To provide a neat appearance of the ward/ unit.
5. To adapt to the needs of the patient.
6. To avoid patient exertion by making bed.

4.5.4 Principle for Bed making

- Prevents cross infection and multiplication of microorganism.

4.5.5 Types of beds

Types	Indications	Images
1. Open (simple) bed: This bed is prepared for an ambulatory patient. (walking.)	To provide a clean, smooth and comfortable bed for the patient.	
2. Closed (unoccupied) bed: This is an empty bed in which the top covers are arranged in such a way that all linen beneath the counter pane or bed spread is full. The bed is protected from dust and dirt until the admission of new patient. On arrival of the patient, this bed is converted to open bed.	Keep the bed ready for receiving the new patient.	
3. Occupied bed: This bed is prepared for bed ridden patient, lying in the bed.	Provides a clean and comfortable bed with the least disturbance of the patient in it.	





4.5.6 Special Beds

There are other types of special beds. They are:

1. Admission bed.
2. Post operative bed.
3. Fracture bed.
4. Plaster beds.
5. Amputation or stump bed.
6. Cardiac bed.
7. Rheumatism or renal bed.
8. Burns bed.






STUDENT'S ACTIVITY

- Demonstrate open bed making.
- Demonstrate closed bed making.
- Demonstrate occupied bed making.



Manual beds are generally less expensive in comparison to hydraulic and electric beds.

4.5.7. Special devices

Special devices.	Images.
Side rails: These are used to prevent the patient from falling out of bed, protect the restless patient, provide the patient support to grasp and hold when moving about.	
Hand cranks: These are located at the foot of bed and used to adjust the height of bed, raise or lower the head, foot or knee sections in order to maintain various bed positions for treatment or comfort. (Crankes are used to elevate the head and foot end of the bed.)	
Special attachments are the attachments of various poles, frames, foot pedals and equipment for traction which are used to modify the beds to meet the various needs of the patient for treatment and comfort. (Foot Pedals are used to raise the height of the bed from the floor.)	

4.6 THERAPEUTIC ENVIRONMENT

4.6.1 Introduction

Ramesh, a 30 year old man got admitted in the hospital with the complaints of injury to his right leg. He had to stay in the hospital for a month. He felt very insecure, lonely and dependent.

4.6.2 Definition

Therapeutic environment consists of more than just a hospital bed and random medical equipments. It refers to the physical, social, and psychological safe spaces that are specifically designed to be healing. It is specifically designed to increase safety, reduce anxiety, and promote independence.

4.6.3 Purposes

1. Maintaining and creating trustful supporting relationship in care of patients.
2. It is clearly and genuinely communicating and performing care activity.
3. Allowing the supportive group to care for the patients.
4. Acceptance of patient's feelings, and values and worthy as a whole.
5. Assist the patient and family in identifying supportive groups.
6. Maintaining a safe and secure environment.
7. Reinforce progress in behaviour or self care activities or terminating the relationship.
8. Encourage evaluation of progress between nurse and the patient.

4.6.4 Therapeutic Environment

1. Physically safe space.



Ramesh is given a clean, comfortable, safe and secured room.

2. Socially safe space.



Ramesh was able to talk and interact with others in the ward.

3. Psychologically safe space.



Ramesh is taken good care of by the doctors and nurses in the ward, therefore, he was less anxious and more independent.

Ramesh's stay in the hospital was an episode he will never forget as his one month stay was well taken care of by the nurses in the ward by creating a stress free therapeutic environment.



Highlight

The positive attitudes and positively-expressed emotions of the nurses towards patients lead to a well-organized therapeutic environment for patients who get hospitalized for a long duration of time.



Research proves that, having a solid social network has been shown to have an impact both physically and mentally, and it is often lauded as the key to a long and healthy life.



STUDENT'S ACTIVITY

Discuss with the students on how to consider creating a therapeutic environment (space) for the patient which is safe physically, socially, and psychologically.

system to maintain balance, posture, and alignment during moving, transferring, and positioning patients. Proper body mechanics allows individuals to carry out activities without excessive use of energy, and helps to prevent injuries for nurses and patients.



4.7.3 Purposes of good body mechanics and posture.

- (1) To provide maximum comfort and relaxation.

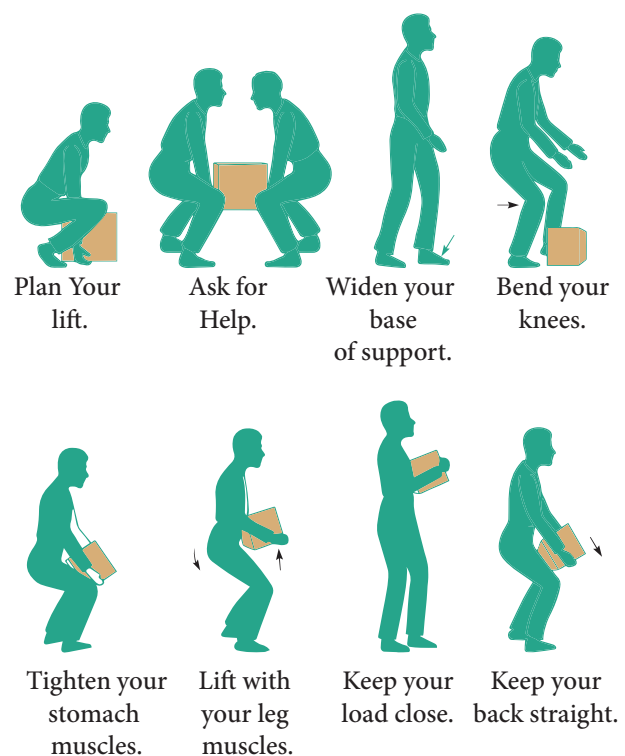
4.7 BODY MECHANICS AND POSITIONING

4.7.1 Introduction

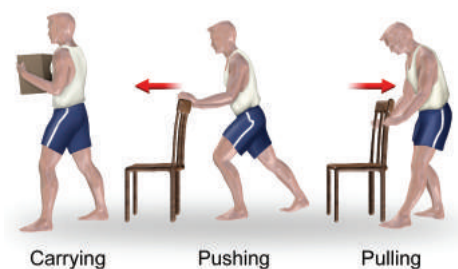
Nursing is a job that needs a lot of bending our backs, flexing our arms and legs and pushing and pulling patients. Because of this, many nurses are at risk for developing physical strain and back injuries or even fractures. One way to prevent these from happening is to practice proper body mechanics.

4.7.2 Definition

Body mechanics involves the coordinated effort of muscles, bones, and the nervous



(2) To aid in normal body function.



(3) To prevent contractures and neuromuscular deformities and complications.



(4) To conserve maximum possible energy by preventing unnecessary strain.



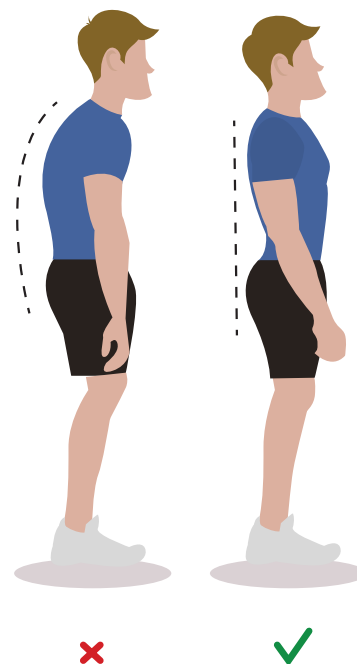
4.7.4 Normal positions.

Positions

1. Standing position:

In a standing position, the back should be straight; feet firmly on the ground, **about 4 to 6 inches apart to give an adequate base**

of support, with the toes pointing straight ahead or slightly toed out; head and rib cage held high; chin, abdomen, and buttocks pulled in; and knees slightly bent.



2. Sitting position:

In a sitting position, the back should be straight, with the weight resting equally on the buttocks and under surface of the thigh, but not on the base of the spine.





4.7.5 Positions used for patients.

Positions

1. *Dorsal position (Supine.):*

Patient is flat on the bed with legs extended and arms at the sides of the body. This is not a comfortable position, as the curves of the body are not supported.

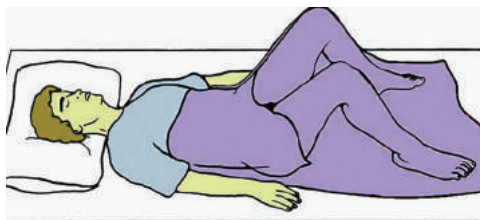


Indications

- Surgical procedures, it allows access to the peritoneal, thoracic and pericardial regions; as well as the head, neck and extremities.

2. *Dorsal recumbent position:*

Place patient flat on back with one pillow under head; have knees flexed and separated and feet flat on bed.



Indications

- Rectal, vaginal and pelvic examinations and treatments.
- Deliveries.

3. *Lateral Position:*

Patient lies on his side with spine straight. The knees are flexed; the upper knees are more flexed than the lower one. Pillows may be provided for the head, in between the

legs, and to support the back and abdomen. The lower arm is kept above the head and the upper arm is placed on a pillow in front.



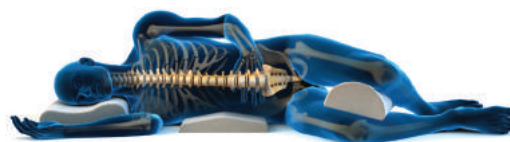
Indications

- General comfort, rest and relaxation.
- Back care.

The arms and legs do not bear the weight of the body.

4. *Sims or Left Lateral position:*

Place patient on left side somewhat obliquely across the bed with buttocks to edge of mattress. Incline the body forward, draw the left arm back under patient and place the right arm free in front. The thighs should be flexed upon the body, the right more than the left.



Indications

- Vaginal examinations.
- Perineal examination.
- Rectal examinations.
- Post operative, to maintain a clear airway.

5. *Jack knife position:*

Place patient on a prone position with the hips directly over the band of the examining table. Tip the table with the head lower than

the hips. Lower the foot part of the table so that the patient's feet are below the level of his head.



Indications

- For drainage after any procedures.
- Operation on the rectum and coccyx.

6. *Knee Chest Position:*

Place patient in the prone position, then assist her to kneel so that her weight rests on her chest and knees. Turn head to one side and flex her arms at the elbows extending, then to the bed in front of her. Be sure the thighs are perpendicular to the level of the head. Watch pulse and general condition of the patient.



Indications

- To obtain better exposure of the vagina, cervix, and rectum.
- To examine the bladder.
- To help correct retroversion of the uterus.
- To administer caudal and sacral anesthesia.
- Vaginal and rectal examinations.

- Operative procedures on the vagina, rectum and perineum.
- Operative deliveries

7. *Lithotomy Position:*

A position of the body for medical examination, pelvic or abdominal surgery, or childbirth in which the individual lies on the back with the hips and knees flexed and the legs spread and raised above the hips often with the use of stirrups.



Indications

- Abdominal surgeries.
- Childbirth.
- Pelvic examination.
- Urologic examination of the prostate.
- Male urethral surgery. Examination or operations on rectum and genital organs.

8. *Prone Position:*

Patient lies flat on his abdomen with head kept on a pillow and turned to one side and another pillow under the lower chest. Pillows are kept under the waist and under the lower legs. The arms are flexed at the elbow and kept above the head.





Indications

- For treatment on the back.
- To secure drainage of pus in front of the abdomen.
- When there is bed sore or burns or an injury at the back (spine.)
- Change of position for patients with fractured spine.

9. Sims position or semi prone position:

This is a modified left lateral position. The patient lies on the left side. Head, shoulders and chest are turned forward so that the chest rests on the pillow. The right knee is well flexed and rests on the bed in front. The left knee is slightly flexed and is positioned behind the right knee.

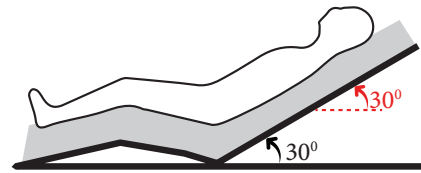


Indications

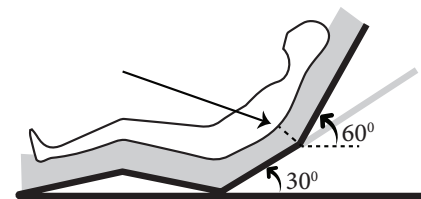
- Vaginal examination.
- For rest and relaxation.

10. Fowler's Position and Semi-Fowler's Position:

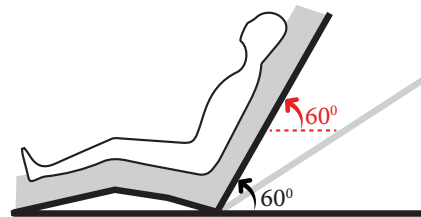
Patient is in a partially sitting position. The back of the bed is elevated to 45 degrees with the aid of a backrest and pillow or by adjustment of the cot. It can be elevated to 30 degrees as well as 90 degrees. Patient's back shoulder and head are supported well. The knees are flexed and supported with a pillow or by cot adjustment. A footrest is provided to prevent foot drop.



WT30°



UT60°



WT60°

Indications

- To obtain good drainage in the pelvis.
- To localize infection in the pelvis and prevent its spread to the peritoneum.
- To prevent strain of abdominal muscles.
- This position is used for patients with dyspnoea (difficulty in breathing), distended abdomen, abdominal surgery, cardiothoracic disorders and ascites.
- The position is also useful while passing Ryle's tube. And while performing tapping of ascites fluid.

11. Trendelenburg position:

The patient lies on his back with the foot at the bed elevated on wooden blocks. Patient's head and trunk are lower than the legs.

12. Reverse Trendelenburg Position:

The head and shoulders are at a higher level than the hips, legs and feet. This position is used for reducing intracranial pressure and for other treatment measure.



Indications

- Gynecological surgery and suprapubic prostatectomy cases.
- To prevent shocks.
- To prevent or relieve post-partum hemorrhage.

Highlight

Positioning will contribute to an improved healing process.



STUDENT'S ACTIVITY

- Demonstration of Postures.
- Demonstration of Positioning.



Proper ergonomic (Ergonomics is the study of how a workplace and the equipment used there can best be designed for comfort, efficiency, safety, and productivity.) is necessary to prevent repetitive strain injuries and other musculoskeletal disorders, which can develop over time and can lead to long-term disability.

4.8 SAFETY AND COMFORT NEEDS.

4.8.1 Introduction

Nurses must be safety conscious and they should take all efforts to prevent accidents in the hospital. She should report all accidents promptly and take measures to prevent them from happening. Physical comfort for a patient can get affected because of a bed which is dirty and wet. Therefore, it is the duty of the nurses to see that the patient is safe and comfortable.



4.8.2 Safety:

Safety means protection from possible injury.

Factors which contribute to the safety of the patients in the hospital:

1. The hospital buildings should be structurally sound for ensuring safety for patients.



2. The floors should be clean and dry.






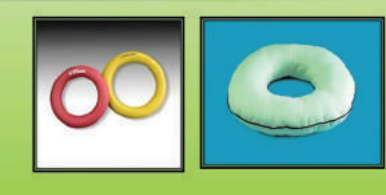

3. There should be mosquito mesh fixed in all the windows.
4. Fire extinguishers should be placed all over the building wherever necessary.







4.8.3 Comfort: Comfort is a sense of mental and physical well being.

Factors which can cause discomfort to the patients in the hospital:

1. High temperature and humidity.
2. Poor ventilation.
3. Too much noise.
4. Unpleasant odours.
5. Glaring or bright lightings.




4.8.4 Comfort & Safety Devices.	Images	Indications
1. Pillows:		Pillows can be used for giving support for the various part of the body.
2. Cotton rings:		They are used to relieve pressure on certain parts of the body like elbow and heels.
3. Air Mattress: Air mattresses can improve the quality of life (and potentially provide some measure of relief) for people who suffer with back pain. Having the ability to adjust the firmness of a mattress to accommodate different body shapes, sizes, and weights, can be a factor in the healing process.		Air mattresses are sometimes used to protect bedridden people from pressure sores, which can create life-threatening ulcers.







<p>4. Water Mattress:</p> <p>Water has been known to increase blood flow, stimulate blood circulation and properly support all areas of the body evenly and comfortably, allowing the person to wake up feeling more rested and better able to start the day. Most waterbeds can be heated and temperature controlled, so the person can set it to whatever temperature they find desirable.</p>		<p>Patients suffering from Arthritis, Rheumatism, Fibromyalgia, Lupus, and other joint, bone, and muscular conditions, the elderly, and anyone with chronic back pain can get significant benefits from sleeping on a water mattress.</p>
<p>5. Air cushion:</p> <ul style="list-style-type: none"> • Protective and void filling materials, including block and brace, corner protection, wrapping, interleaving, top and cross layering. • Water resistant seat cushion. • Inflatable bags. 		<p>Air cushion can be used for giving support for the various part of the body.</p>
<p>6. Bed bars (side rails):</p> <p>are used to prevent patients from falling out of bed.</p>		<p>Patients who require this safety measure are post operative patients, unconscious, semiconscious mentally disturbed, sedated, blind, children or old patients.</p>
<p>7. Back rest:</p> <p>These are usually made of wood or metal.</p>		<p>These are used to support the back of the patient in an upright position.</p>





<p>8. Over bed table:(Cardiac table):</p> <p>The table such as the cardiac table is placed in front of the patient and the top of the table is adjusted to the desired height. Pillows can be arranged on the top of the table so that the patient can lean forward on it for support.</p>		<p>When he wants to take food, read or write.</p>
<p>9. Footboards/Foot rests:</p> <p>These are made of wood and are L shaped, so that one end can be slipped under the mattress to hold the other end in a firm upright position. The patient is placed in supine position to rest the bottoms of the feet flat against the surface of the footboard (covered with sheet).</p>		<p>These are used to prevent foot drop by maintaining good alignment.</p>
<p>10. Sandbags:</p> <p>These are canvas, rubber or plastic bags filled with sand and are 1,5 and 10 lbs in weight.</p>		<p>These are used to immobilize the body part, placing them snugly next to the part. eg. The sand bags can be placed on either side of the feet to maintain the position of the feet on the foot board, to immobilize the fractured limb.</p>
<p>11. Blocks (shock blocks):</p> <p>These are made of wood, may be high or low.</p>		<p>These are placed under the foot of the bed for various reasons. Eg. Surgical shock, traction and postural drainage. This may be placed under the head of bed to promote drainage and improve cerebral circulation.</p>



<p>12. Hand rolls: These are made of cloth that is rolled into a cylinder about 45 inches long and 23 inches in diameter and stuffed firmly.</p>		<p>These are used to keep the fingers from being held in a tight fist leading to flexion contracture in patients who are unable to move the hands due to paralysis, injury or disease.</p>
<p>13. Thigh rolls (Trochanter rolls): These are made by folding a sheet to a desired length of 23 feet and then rolled into a tight cylinder. These are used to support the hips and thighs, preventing the limbs from outward rotation and keeping the feet in good alignment.</p>		<p>In case of paralysis, fracture of the femur or hip surgery. To use the roll, place the loose end (flap) under the patients hips and thighs with the roll under the flap end and then tucking snugly along the hip and thigh.</p>
<p>14. Cradle: These are mostly semicircular in shape, made of wood or metal. These are used to prevent the weight of top bedclothes on patient's feet and toes. To use the cradle. Place it over the bottom bedclothes and the top bedclothes are then brought over the cradle.</p>		<p>These are used for patients affected by burns.</p>
<p>15. Restraints: The forcible confinement or control of a patient.</p>		<p>Are used to prevent agitated patients, persons who get out of bed at night in their sleep and small children, from falling out of bed.</p>



4.8.5 Other Safety Precautions to be taken in the hospital:

- Patients should be safeguarded from fire accidents and from careless application of heat.
- Fire accidents occur mainly due to allowing patients to smoke in the bed.
- Improper use of electric appliances and careless use of oxygen cylinders.
- Patient may get injured from careless application of hot water bags, electric pads and application of medications on the skin.
- Poisonous drugs should be kept under lock and key with specific red label.

4.8.6 Other causes of infection in the hospital are:

1. Bacteriological sources.
2. Rodents.
3. Food and water
4. Insects.



STUDENT'S ACTIVITY

Demonstration of safety and comfort devices.

Fact

A Hospital-Acquired Infection (HAI), is also known as a **nosocomial infection**. It is an infection that is acquired in a hospital or other health care facility.



Patient safety is a serious global public health issue. There is a **1 in 300** chance of a patient being harmed during health care.(WHO, 2017)

4.9 ACTIVITY AND EXERCISES.

4.9.1 Introduction

Bhuvana, a 36 year old lady got admitted with the complaints of fracture of the left leg, head of femur. She was operated and has to be mobilized after 2 weeks. She needs to resume her normal activity. Nurse Rekha, helps her with her daily activities and also helps her with the exercises she needs.

4.9.2 Importance of Activities of daily living:

Activity and exercise are necessary for healthy living. Activities usually performed in a day are eating, dressing, grooming, bathing, brushing etc. These activities are called activities of daily living. It is essential for meeting the day to day needs of an individual.

When a patient is not able to meet his basic needs, it is the nurse's responsibility to help the patient to meet their needs. According to their health status of the patient, the degree of assistance required will vary according to the needs of the patients. Exercise is the performance of physical exertion for improvement of health or the correction of physical deformity.

4.9.3 Benefits of exercise:

1. Exercise strengthens muscles.
2. Helps to prevent constipation.
3. Increases appetite.
4. Improves sleep.
5. Stimulates blood circulation.
6. Improves lung ventilation.
7. Prevents obesity.
8. Promotes physical and mental well being.
9. Promotes urinary function.
10. Regulates body temperature.

4.9.4 Types of exercises.

I. Active exercise	Indications	Example
Active exercise is a type of physical activity accomplished by the patient without assistance. These exercises help the patient to attain the normal physiological function of the body.	(1) Deep breathing and coughing exercise for complete lung expansion usually done by post operative patient. The patient can do it thrice in a day.	Nurse Rekha helped Bhuvana to do the deep breathing exercises as shown in the figure.

1.

BREATHING EXERCISE

1. Stand, sit or lie down comfortably in a quiet place.

2. Close your eyes and loosen any tense muscles make sure to relax your shoulders.

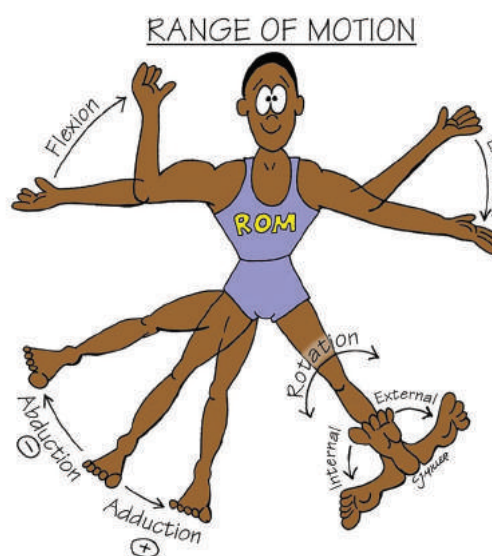
3. Place one hand on your chest and another on your belly button.

4. Breathe in slowly through your nose for three seconds. Feel your stomach expand. your chest should remain still.



5. Breathe out slowly through your mouth for three seconds. your stomach move back.

6. Repeat steps 4 and 5. Gradually increase the time you take to breathe in and out. Four seconds in and four seconds out, five seconds in and five seconds out....

2. Exercise of the limbs through full range of motion which include flexion, extension, adduction, abduction and rotation.





3. Moving in bed to change the position.	
4. Foot exercise to prevent foot drop and toe deformities.	
5. Abdominal and gluteal contraction exercises.	The abdominal and gluteal contraction exercises are shown in the figure below.



Breath



Hip Roll



Normal



Bridging



Standing
Rotation



Hand via
knees





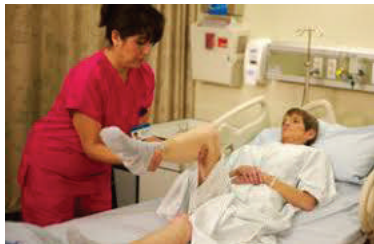

Seated knee
tucks



Supermans





2. Passive exercise	Indications	Example
In passive exercise the movements or activity is carried out by another person and the patient makes no voluntary effort to assist or resist the action. The passive exercises are usually carried out by the physiotherapist or the nurse.	The performance of certain nursing procedures such as bathing the patient, giving back care and changing the position etc., provides some passive exercise for the patient.	 <p>Bed bath was given by Nurse Rekha.</p>
	<p>Passive exercise is useful for patient with restricted movements, and deformities. Can be given for an unconscious patient.</p> 	 <p>Other passive exercises were also given by Nurse Rekha. Bhuvana had the feeling of being cared for and was happy over her recovery.</p>
	Bhuvana was discharged after 2 weeks and went walking home with the help of a walker.	

Highlight

Being active and doing regular physical exercises can prevent major chronic diseases such as heart problems, diabetes, high blood pressure, back pain, osteoporosis, joint pains, obesity, and even some forms of cancer.



STUDENT'S ACTIVITY

Demonstration of safety and comfort devices.



Exercise prevents signs of aging.


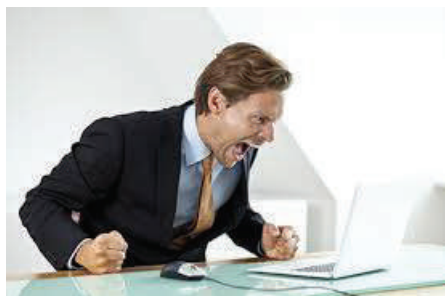


4.10 REST AND SLEEP.

4.10.1 Introduction

Getting adequate rest and sleep is an important component of overall health and quality of life. Sleep is one thing that is universal to people. It is vital for optimal psychological and physiological functioning. Sleep is essential to conserve energy, prevent fatigue, and to restore the mind and the body. Sleep is an often overlooked essential for optimal health and well-being.

Difference between rest and sleep:

Rest	Sleep
When we give our body a period for relaxation, we relax our muscles, and sometimes close our eyes for comfort. But, our brain is running its functions actively during resting phase too. We have our full consciousness about the surrounding during resting time.	In this condition our brain does not work actively. We do not have our full consciousness about the surroundings. Our brain takes rest as well as our body muscles do.
<p>Amount of Sleep Needed. Each individual's sleep needs vary. In general, most healthy adults need an average of <i>eight hours of sleep</i> at night.</p> <p>Normal sleep : 8 hours <i>Adequate sleep provides only positive, healthful benefits.</i></p>	
Lack of Sleep	Images
Irritability and moodiness are some of the first signs a person experiences from lack of sleep.	

Circadian Rhythm and Sleep.

Circadian rhythm is an ingrained biological clock that regulates the timing periods of tiredness and wakefulness throughout the day. The clock is calibrated by natural light in a 24-hour period. The functions of your circadian rhythm are based in the brain. (hypothalamus) It is responsible for regulating many body functions that revolve around the 24-hour cycle including: body temperature, heart rate, blood pressure, and the release of hormones such as melatonin which helps us with sleep.





If a person is deprived of sleep, the person may then start to experience apathy, slowed speech, flattened emotional responses, impaired memory, and an inability to be creative or multitask. Sleeplessness also makes the person forgetful, gain weight, can increase risk of death and impairs judgment.



4.10.2 Causes of Sleep Problems.

Sleep disorders can have abnormalities in various systems, such as:

Physiological systems

- Brain and nervous system.
- Cardiovascular system.
- Metabolic functions.
- Immune system.

Furthermore, unhealthy conditions, disorders and diseases can also cause sleep problems which includes:

- Pathological sleepiness, insomnia and accidents.
- Hypertension and elevated cardiovascular risks. (Heart attack, stroke)
- Emotional disorders. (depression, bipolar disorder)
- Obesity, metabolic syndrome and diabetes.
- Alcohol and drug abuse.

4.10.3 Factors affecting sleep.

1. Stress.
2. Job-related pressures.
3. Family or marriage problems.

4. Serious illness or death in the family.
5. Drinking alcohol or beverages containing caffeine in the evening.
6. A room that is too hot or cold.
7. A room that is too noisy or too bright light.
8. Comfort and size of the bed.

4.10.4 Six benefits of good sleep.

1. It enhances learning and memory.
2. Helps in metabolism and maintain weight.
3. Prevent Accidents.
4. Avoids irritability and mood swings.
5. Improves cardiovascular health.
6. Enhances immunity.

4.10.5 Factors that can promote sleep in patients.

1. Sleep rituals and habits.
2. Restful environment.
3. A warm drink before going to bed.
4. A warm bath before bedtime.
5. Activities like reading and listening to soft music.

6. Instruct the patient to avoid daytime naps.
7. Avoid talking about stressful events before bedtime.
8. Avoid excessive physical exertion 3 hours before bedtime.
9. Heavy meals should be avoided 2-3 hours before bedtime.
10. Spicy foods should be avoided before bedtime.
11. Use of loose-fitting night clothes.
12. Slow and deep breathing techniques for few minutes can alleviate tension and induce calmness.
13. Yoga, imagery and medication can also promote sleep.
14. Medication is the last resort to induce sleep.

Highlight

Over time, a lack of sleep can place a person at higher risk for heart problems, diabetes, weight gain and obesity, and Alzheimer's disease. In addition to physical effects, a lack of rest and



particularly Rapid Eye Movement (REM sleep) has also been shown to impair decision making, reaction times, mood, motivation, learning and may also affect memory.



You spend **one third** of your life on your bed sleeping. For example, if a person life span is 60 years, then the person would have slept for 20 years.

4.11 MOVING, SHIFTING AND LIFTING PATIENTS.

4.11.1 Introduction

As nurses, we may have to move and lift patients. An important point nurses have to bear in mind while moving patients is that they must observe correct body mechanic for the patients as well as for themselves.

While lifting heavy objects, it is wise to stand with your feet wide apart and firmly on the floor. The weight should be lifted close to the body. Flex your knees so that the strong muscles of the legs bear the weight of the object.

4.11.2 Purposes:

1. To perform the task efficiently.
2. To avoid the patient from unnecessary effort.
3. It prevents nurses from strain and back injuries.
4. To promote circulation and muscular tone.

4.11.3 General Considerations Prior to Action:

- Know the weight of the patient and consider the mode of transportation.
- Know your own limitations and be realistic. If the patient cannot be safely moved. Get help.

- Have a plan of action. Whether you are working alone or with a partner, know how to plan on moving the patient, what steps to be taken, and what to do if Plan A does not work.
- Communicate, both with the colleague and with the patient. When everyone is on the same plan, injuries are minimized and all efforts are more efficient. Use verbal commands, and know when to stop.

4.11.4 Types of moving, shifting and lifting patients:

1. Moving upward or downward:

Two nurses are required to do this. One nurse places her one hand under the patient's shoulder and the other hand under the lumbar region. The other nurse stands on the other side of the bed and does the same as the first nurse. The patient, if he is able, is asked to flex the knee and push against the matters with his heels. Both nurses together bring the patient up. *See the figure below.*



2. Turning on one side:

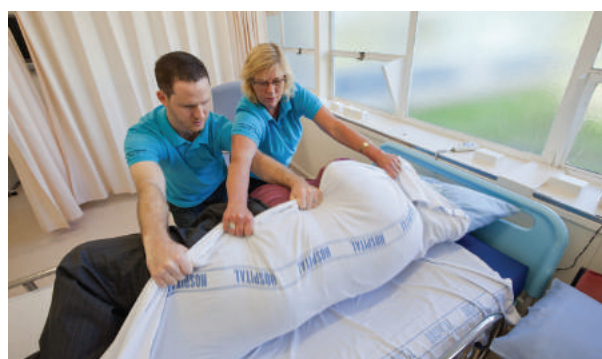
Before turning move the patient a little away from the centre. If he is to be turned on the left side, the nurse must stand at his left. Keep his right arm crossed on the chest and right leg crossed over the left leg. Flex the right knee slightly, keep one hand on the patient's right shoulder and the other on his

right hip and gently roll him to left lateral position.



3. Moving from one side of bed to another:

Move pillows towards the side of the bed. Place your one arm under the shoulders and the other under the lumbar region. *See the figure above.*



4. Move upper part of the body to the side of the bed:

Then keep one arm under the lumbar region and the other under the thighs and move the middle part of the body of the side of the bed. Lastly place one arm under the things and the other under the ankles and move the lower part of the body to the side of the bed. See whether the whole body is straight and in good alignment.

5. Moving patients from stretcher to bed:

Keep the head of the stretcher at right angles to the foot of the bed. Three nurses are needed. All stand on the same side of the stretcher one nurse places her arms under the patient's head and shoulders, another



keeps her arms under the hips, the third has her arms under the thighs and legs. All together lift the patient, turn and place him on the bed. The lifters observe body mechanics for themselves. They keep their backs straight, flex their knees and place their one foot forward while transferring the patient.

6. Transferring from the Bed to Wheelchair:

7. Sit the patient up:

Lock the wheelchair. Help the patient turn over onto his or her side, facing you. Put an arm under the patient's neck with your hand supporting the shoulder. Put your other hand behind the knees. Swing legs over the edge of the bed, helping the patient to sit up.

8. Stand the patient up:

Have the patient scoot to the edge of the bed. Put your arms around the patient's chest and clasp your hands behind his or her back. Support the leg farthest from the wheelchair between your legs, lean back, shift your weight, and lift.

9. Sit the patient down:

Have the patient pivot toward the chair, as you continue to hold on. Always transfer toward the person's stronger side. As the patient bends toward you, bend your knees and lower the patient into the back of the chair.





Highlight

Strongest nurse stands beside patient's head & shoulders, or beside female patient's hips.



STUDENT'S ACTIVITY

Demonstration of moving, shifting and lifting methods on each other.

Fact.

In one recent study, people who took **12 weeks of yoga classes** had fewer symptoms of low back pain.

4.12 OXYGEN NEEDS.

4.12.1 Introduction

Oxygen is administered whenever there is deficiency in the blood and is shown by cyanosis. Patients with respiratory dysfunction are treated with oxygen therapy to relieve anoxaemia or Hypoxemia. The normal amount of oxygen in the blood must be in the range of 80 to 100 mm of Hg. If it falls below 60 mm of Hg, irreversible physiological effect may take place. The brain cells receive 20 percent of the body's oxygen supply and can live only for 3 to 5 minutes if the oxygen supply is cut off.

4.12.2 Purpose

- To supply oxygen in conditions when there is interference with the normal oxygenation of the blood.

4.12.3 Indications for Oxygen Inhalation

- Breathlessness due to asthma, pulmonary embolism, emphysema, cardiac insufficiencies etc.
- Obstructed airway due to growth, and enlarged thyroid.
- Cyanosis.
- Shock and circulatory failure.
- After severe haemorrhage.
- Anaemia.
- Patients under anaesthesia.
- Asphyxia due to any reason e.g. drowning, inhalation of poisonous gases, hanging etc.
- Poisoning with chemicals that alter the tissues ability to utilize oxygen e.g. cyanide poisoning
- Carbon monoxide poisoning.
- Postoperative chest surgery and thyroidectomies.
- Insufficient oxygen in the atmosphere.
- Air hunger.

4.12.4 Methods of Oxygen Administration.

Administration of oxygen depends upon the condition of the patient, the concentration desired, the facility available and the preference of the doctor. It can be given by the following ways:

Methods

1. Oxygen by nasal catheter/cannula:

This is the usual method of administering oxygen to the patients in the ward. The nasal



catheter is inserted into the nostril reaching upto the uvula. The catheter is taped on the forehead to keep it in place. The nasal catheter permits free movement for the patient and nursing care may be given with much more ease.



2. Nasal prongs:

This is another method of administering oxygen to the patients in the ward.



3. Oxygen by B. L. B. Mask:

When oxygen concentration of over 25% is needed or when oxygen is given under pressure, the mask is used. If the mask does not fit snugly over the face, oxygen will be lost from the mask. It is useful for the patients who are unable to breathe through the nose. Flow of 8 to 12 litres oxygen will be sufficient to maintain the concentration of oxygen from 25 to 60%. B. L. B. [Boothby, Lovelace and Bulbalian] is a rubber mask. It is made to fit over the nose or nose and mouth. The reservoir bag is attached to it.



4. Oxygen by Tent:

It consists of a canopy over the patient which may cover the patient partially or totally. It is connected to a supply of oxygen. The canopies are transparent, so that the nurse can observe the patient. The lower portion of the canopy is tucked under the bed to prevent the escape of oxygen.



4 (a) oxygen hood:

This is used for infants to administer oxygen

5. Oxygen cylinders and accessories:

Oxygen is supplied in cylinders or tanks. It is stored under a pressure of 2200 lbs /1000 kg per sq. inch. Oxygen is stored in the oxygen cylinder are low pressure about 50 to 60 lbs per sq. inch. The oxygen cylinders are painted black with white neck. The Wolf's bottle has two holed rubber cork in which two glass tubes are inserted one short and one long. The long tube is attached by rubber tubing to the oxygen cylinder. The short tube is attached by the rubber tubing



and glass connection to a nasal catheter. The large valve of the cylinder is opened with keys. There is a regulator to regulate the flow. See the figure below.



4.11.5 Care of oxygen cylinders:

1. Handle the cylinder with care.
2. Oxygen stand should be used to prevent falling and causing injury to someone or to the equipment.
3. It should be always placed at the head end of the bed.
4. Oxygen does not cause fire but it supports combustion.
5. Visitors and other patients may need to be reminded not to smoke. Hang "No smoking" board to the oxygen cylinder.
6. Oxygen cylinders should be stored in a cool temperature, because high temperature can cause expansion of the gas with consequent loss of gas through the safety valve.
7. Do not use electric appliances close to oxygen.
8. Oil or grease should not be used on the regulator, because in the presence of high oxygen concentration, oil is likely to catch the fire and the cylinder may explode.

9. Mark empty cylinder, replace protection cap, and set aside from full cylinders.
10. Inspect the apparatus at frequent intervals and make sure that it is in working condition. The nurse should learn the working of cylinders, its regulators etc. before handling the apparatus.

4.12.5 Precautions to be taken when using the oxygen cylinder:

1. Giving oxygen is an emergency procedure, so it should be ready for 24 hours.
2. The nurse should see that the cylinders are full and all the apparatus is in working condition, the key is attached with the cylinder in a bag.
3. There should not be any leakage in the rubber tubings.
4. There should be written order for O₂ inhalation and specific dose must be prescribed to avoid oxygen toxicity.





5. Use regulator to reduce the pressure of the oxygen in the cylinder to a safer level.
6. Measure the flow in litres per minute. Adjust the flow of oxygen 2 to 4 litres per minute for adults when the nasal catheter is used.
7. Use sterile or disposable nasal catheters to avoid infection.
8. The catheter should be changed at least every 8 hourly to avoid blockage of catheter.
9. The catheter may be taped to the forehead for the comfort of the patient and to keep it in place.
10. Patient's nostrils should be lubricated with petroleum jelly, (Vaseline) if there is any sign of irritation.
11. Oxygen administration must never be stopped until the cause of hypoxia is reversed.
12. If the nurse is leaving the patient for a short period, leave a call bell near the patient.
13. The premature babies should be given oxygen inhalation only for a short time and at a very low concentration to avoid retrolental fibroplasia. (an unusual eye disease occurring in premature infants, usually from being given high concentrations of oxygen, which causes abnormal formation of fibrous tissue behind the lens and often results in blindness.)
14. Observe the patient, receiving oxygen inhalation continuously to detect early signs of oxygen toxicity.
15. Since oxygen helps in combustion, fire precautions are to be taken when the oxygen is on flow.

Highlight

Oxygen is a gas that is needed for the cells in your body so that it can work properly. The air we breathe normally contains 21% oxygen. We can receive up to 100% oxygen.



STUDENT'S ACTIVITY

- Demonstration of the various methods of oxygen administration.



- Oxygen is a chemical element with symbol "O" and atomic number 8. By mass, oxygen is the third-most abundant element in the universe, after hydrogen and helium.
- The new born baby can have birth asphyxia, (brain damage) which happens within 3 to 5 minutes without oxygen.

4.13 ELIMINATION NEEDS.

4.13.1 Introduction



Elimination of the body's waste products is essential for life and comfort. The body eliminates wastes in several ways. The lungs eliminate carbon dioxide and water; the skin eliminates water and sodium; the kidneys eliminate fluids and electrolytes; the intestines discharge solid wastes and fluids. If the body should inappropriately allow wastes to accumulate, many serious conditions can result.

4.13.2 Definition:

It is the process by which waste products are removed from the bowel and bladder by means of faeces and urine.



4.13.3 Description of physiology of elimination:

Bowel movements.		Bladder.
<p>The digestive system is uniquely designed to turn the food you eat into nutrients, which the body uses for energy, growth and cell repair. Food passes from the mouth, throat, oesophagus, stomach, small intestine, large intestine, and rectum and then finally expelled as faeces.</p>		<p>The urinary system is a group of organs in the body concerned with filtering out excess fluid and other substances from the bloodstream. The substances are filtered out from the body in the form of urine. Urine is a liquid produced by the kidneys, collected in the bladder and excreted through the urethra. Urine is used to extract excess minerals or vitamins as well as blood corpuscles from the body.</p>
<p>About 75% of fecal weight is made up of water. The other 25% is composed of solid matter which contains :</p> <ul style="list-style-type: none">• Undigested fiber and solidified components of digestive juices (30%)• Bacteria (30%)• Fat (10% to 20%)• Inorganic matter (10% to 20%)• Protein (2% to 3%) <p>Feces usually has a brown color, ranging from a tan hue to a darker-brown color. Bilirubin is passed out in the bile and the action of bacteria and air in the gut breaks it down into stercobilin and urobilin, which gives stool its typical color. Additionally, certain foods with a strong colorants or other staining agents may also influence the color of feces.</p>		<p>Urine color generally ranges from a pale-yellow color to deep amber. Urine naturally has an odor, but it is usually not very strong smelling.</p> 
<p>The odor of feces may differ among people and is influenced significantly by the foods that are consumed. The gas byproducts of bacterial action in the colon largely accounts for the odor of the feces. Hydrogen sulphide is one of the most prominent odoriferous compounds responsible for the characteristic smell of the stool. Other compounds like indole, skatole and mercaptans are also responsible for the odor.</p>		

4.13.4 Factors affecting bowel and bladder elimination:

- | | |
|---------------------------|-------------------------------------|
| 1. Age. | 6. Pain. |
| 2. Dietary intake. | 7. Pregnancy. |
| 3. Fluid intake. | 8. Surgery. |
| 4. Physical activity. | 9. Anaesthesia and diagnostic test. |
| 5. Psychological factors. | 10. Position during defecation. |

4.13.5 Common bowel elimination problems

- | | |
|------------------|--|
| 1. Constipation. | 5. Flatulence. |
| 2. Impaction. | 6. Haemorrhoids. |
| 3. Diarrhoea. | 7. Bowel diversion. |
| 4. Incontinence. | 8. Common bladder elimination problems: Incontinence, and urinary retention. |

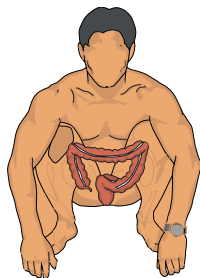
4.13.6 Position of elimination.

The best method is squatting, the Indian way of defecation.

administer medications to relieve diarrhea or constipation.

4.13.7 Nurses responsibilities.

1. The nurse may help the patient to



eliminate faeces by giving an enema, catheterizing the person, or assisting with dialysis.

2. The nurse can assist with surgery to eliminate a bowel obstruction and

4.13.8 Elimination devices.

Bedpans

Urinals





The best method of elimination is by squatting, rather than sitting as it eliminates any form of colon cancers.

CONCLUSION

1. Nursing is the process of recognizing, understanding and meeting the health needs of any person or society and is based on a constantly changing body of scientific knowledge.
2. There are five steps in nursing process. They are assessment, diagnosis, planning, implementation, and evaluation.
3. Application of nursing process.
4. The entrance of a patient into a health care agency is termed as admission.
5. Nurses are responsible for the admission and discharge which takes place in the ward.
6. Skilful bed making contributes materially to the patient's comfort.
7. Beds are of two type of beds, ordinary, and special beds.
8. Body mechanics means the coordinated use of the body parts to produce motion and maintain equilibrium in relation to both internal and external forces.
9. The hygiene refers to the science of health and its maintenance, the prevention of disease, and sanitary practices.
10. Comfort is a sense of mental and physical well being.
11. Restraints are used to prevent agitated patient's who get out of bed at night in their sleep and small children, when falling out of bed.

Highlight

A bowel obstruction, bladder cancer, kidney disease, and gallbladder disease disrupt normal elimination. Difficulty in breathing, poor circulation, acid-base imbalance, allergies, cuts, wounds, diabetes, and infection also hinder adequate elimination.



12. While lifting heavy objects flex your knees so that your strong muscles of the legs bear the weight of the object.
13. Patients with respiratory dysfunction are treated with oxygen therapy to relieve “anoxaemia or Hypoxemia”. The normal amount of oxygen in the blood must be in the range of 80 to 100 mm of Hg.
14. Oxygen can be administered by the ways of nasal catheter/cannula, nasal prongs, B.L.B. mask, and an oxygen tent.
15. Elimination is the process by which waste products are removed from the bowel and bladder by means of faeces and urine.
16. Exercise is the performance of physical exertion for improvement of health or the correction of physical deformity.
17. Getting adequate rest and sleep is an important component of overall health and quality of life.



ICT Corner

Skeletal System

Through this activity you will explore the Skeletal System.

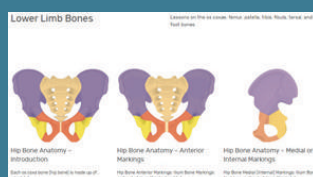


- Step 1:** Use the URL to reach the 'Skeletal System' page. Surf the grid and select 'Skeleton Organization' and explore the skeleton's general anatomical arrangement and functions.
- Step 2:** Then reach the 'Skeleton Organization' page by clicking back button on the top of the window or use the 'Backspace' key. Select 'Upper Limb Bones' from the grid and explore the anatomy and functions of the clavicle, scapula, humerus, radius, ulna, carpal, and hand bones.
- Step 3:** Follow the above steps and explore each and every parts and their functions of Skeletal System.
- Step 4:** Use the reference given below the page to acquire additional details about Skeletal System.

Step 1



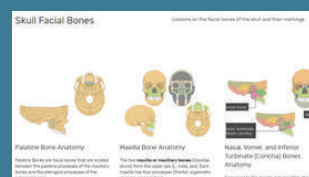
Step 3



Step 2



Step 4



SKELETAL SYSTEM'S URL:

<https://www.getbodysmart.com/skeletal-system>

*Pictures are indicative



B190_11_NUR_EM



EVALUATION



I. Choose the correct answers (1 mark)

1. The second step of the nursing process is:
 - a. Nursing Diagnosis.
 - b. Assessment.
 - c. Planning.
2. When a patient's condition is improved and stabilized, it represents which phase of the nursing process?
 - a. Evaluation Phase.
 - b. Implementation Phase.
 - c. Planning Phase.
3. The purpose of making a closed bed is:
 - a. For receiving the new patient.
 - b. Prepared for an ambulatory patient.
 - c. Prepared for a bed ridden patient.
4. How will you position the patient for child birth?
 - a. Supine.
 - b. Lithotomy.
 - c. Lateral.
5. The number of hours needed for a normal human being to sleep is:
 - a. 6 hours per day.
 - b. 10 hours per day.
 - c. 8 hours per day.
6. A urinal is used to collect the:
 - a. Pus.
 - b. Urine.
 - c. Faeces.
7. Which is the best position for defecation ?
 - a. Sitting on the commode.
 - b. Squatting.
 - c. Standing.

II. Write short answers (3 marks)

1. Diagrammatically represent the Nursing process.
2. What are the purposes of admission of a patient to the hospital?
3. What is bed making?
4. What are the purposes of bed making for a patient?
5. List out any 3 types of special devices used for patients.
6. What is a psychologically safe space for a patient?
7. What is body mechanics?
8. What are the purposes of good body mechanics and posture?
9. What are the uses of the Fowlers position?
10. List the factors which can cause discomfort to the patients in the hospital.



11. List out the causes of infection in the hospital.....
12. What are some of the common bowel elimination problems?.....

III. Write short notes (5 marks)

1. Explain the types of discharge of a patient.
2. What are the purposes of the therapeutic environment?
3. Enlist the benefits of exercise.
4. Write about the active exercises.
5. Write briefly on causes of sleep problems.
6. How can you help the patient transfer from the bed to wheelchair?
7. Write about the indications for oxygen inhalation.
8. What are the precautions to be taken when using the oxygen cylinder?

IV. Write an essay for the following questions (10 marks)

1. Explain the admission procedure of Mr.X to the hospital.
2. Explain the discharge procedure of Mr.X to the hospital.
3. Explain the comfort devices for the patient.
4. Identify the factors that can promote sleep in patients.
5. Discuss on the types of moving, shifting and lifting patients.
6. Discuss the care of the oxygen cylinders.

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2. Patricia, P. (2009) *Fundamentals of Nursing*, 7th Edition, Mosby Company, St.Louis Missouri.
3. Virginia, H. (1997) *Basic Principles of Nursing Care*, 2ndEdition, 0965836002.

INTERNET LINKS

- https://openlibrary.org/books/OL6179888M/Textbook_of_the...
- [books.google.com.au › Medical › Nursing › Fundamentals & Skills](https://books.google.com.au/Medical/Nursing/Fundamentals%20&%20Skills)
- www.worldcat.org/title/principles-and-practice-of-nursing/oclc/...

A-Z GLOSSARY

Nursing Process – (செவிலிய செய்முறை)	- To take care of the patient, the nurse has to systematically plan her work. This work which is systematically planned is known as Nursing Process.
Potential	- Possible, as opposed to actual.
Cholesterol – (கொழுப்பு)	- That is, having high levels of fat within the blood.
Discharge Against Medical Advice. (AMA) – (மருத்துவ ஆலோசனைக்கு எதிராக)	- Patient leaves the hospital against the doctor's advice.
Absconding – (தலைமறவாதல்)	- When a patient escapes from the hospital without the knowledge of the hospital staff, he is treated as absconded in the records.
Body mechanics – (உடல் இயக்கம்)	- It involves the coordinated effort of muscles, bones, and the nervous system to maintain balance, posture, and alignment during moving, transferring, and positioning patients.
Deformities – (அங்க குறைபாடு)	- An abnormally formed part of the body.
Alzheimer's disease – (அல்சிமா நோய்)	- It is a progressive disease that destroys memory and other important mental functions.
Retrolental Fibroplasia – (ரீட்ரோலெண்டல் பைபிரோ பிளேசியா)	- An unusual eye disease occurring in premature infants, usually from being given high concentrations of oxygen, which causes abnormal formation of fibrous tissue behind the lens and often results in blindness.
Oxygen toxicity – (ஆக்சிஜன் நச்சு)	- It is a condition resulting from the harmful effects of breathing molecular oxygen at increased partial pressures.
Anoxaemia or Hypoxemia – (இரத்தத்தில் ஆக்சிஜன் குறைதல்)	- It is an abnormally low level of oxygen in the blood.
Cyanosis – (நீலம் பாரித்தல்)	- It is defined as the bluish or purplish discolouration of the skin or mucous membranes due to the tissues near the skin surface having low oxygen saturation.
Haemorrhage – (இரத்த ஓழுக்கு)	- Bleeding, or hemorrhage, is the name used to describe blood loss.



Anaemia –

(இரத்த சோகை)

Patients under

anaesthesia –

(நோயாளி மயக்க

நிலையில் இருத்தல்)

Asphyxia –

(சுவாசத்திணறல்)

Cyanide poisoning –

(சயனைடு நச்சு)

Thyroidectomy –

(தைராய்டு சுரப்பியை

எடுத்தல்)

- It happens when the number of healthy red blood cells in your body is too low.
- Anesthesia is a state of temporary induced loss of sensation or awareness.
- Or asphyxiation is a condition of severely deficient supply of oxygen to the body that arises from abnormal breathing.
- Is poisoning that results from exposure to a number of forms of cyanide.
- Is an operation that involves the surgical removal of all or part of the thyroid gland.

Unit 5

PERSONAL HYGIENE



புறந்தூய்மை நீரான் அமையும் அகந்தூய்மை
வாய்மையால் காணப் படும்.

– குறள்: 298

Kural 298:

Purity of body is produced by water and purity of mind by truthfulness.



LEARNING OBJECTIVES

At the end of this chapter the student is be able to:

- Do oral hygiene.
- Care the skin.
- Administer therapeutic bath.
- Do give hair wash.
- Care of the eyes.
- Administer foot and nail care.
- Oral hygiene.
 - Measures to maintain oral hygien:
 - Dentures.
- Skin care.
 - Importance of skin care.
 - Decubitus ulcer.
 - Definition.
 - Causes.
 - Preventive measures.
 - Management.
 - Back care, Bath & Therapeutic Bath.
- Care of hair.
- Pediculosis & Dandruff.
 - Definition.
 - Causes.
 - Preventive measures.
 - Management.
- Care of eyes.
 - Unconscious patient.
 - Exercises.
- Care of foot and nails.
 - Method of nail cutting.
 - Foot care management.
 - Common foot and nail problems.
 - Definition.
 - Causes.
 - Preventive measures.
 - Management.

5.1 INTRODUCTION

Personal hygiene may be described as the principle of maintaining cleanliness and

grooming of the external body. People have been aware of the importance of hygiene for thousands of years. The ancient Greeks

spent many hours bathing, using fragrances and make up in an effort to beautify themselves and be presentable to others.

Maintaining a high level of personal hygiene will help to increase self-esteem and confidence, while minimising the chances of developing imperfections.

5.2 PERSONAL HYGIENE

Keywords: *Personal hygiene, factors, cleanliness.*

5.2.1 Introduction

The word hygiene refers to “The science of health and its maintenance, the prevention of disease, and sanitary practices”.

5.2.2 Definition

Personal hygiene is the activity of self-care, including bathing and grooming. This includes the care of the skin, hair, nails, mouth, teeth, eyes, ears, nasal cavities, perineal and genital area.

Cleanliness is a fundamental basic human right. Therefore, if an individual became unwell, either physically or mentally and were unable to meet their own hygiene needs, they may require someone else to assist them in such needs, this is where the nurse's responsibility is vital for the patient.

Personal Hygiene



5.2.3 Factors influencing personal hygiene practices.

1. **Development level:** Children learn most of their hygiene practices at home and in their personal environment. They modify their behaviour with other family members. Many of these behaviours stick with them throughout life. The advancing age, hormonal levels and changes in the integumentary system often require hygienic practices.
2. **Cultural background:** Norms related to hygiene practices differ from culture to culture. For example, some cultures place a high value on personal cleanliness. Generally people have a habit of bathing daily where as people from some culture may or may not consider bathing as a daily practice.
3. **Social benefits:** Poor personal hygiene is considered offensive or a sign of illness. Caring for your body regularly can reduce bad odour and improve your personal appearance, subsequently improving others' perceptions of you.
4. **Socio economic status:** Financial status often affects a person's ability to purchase hygiene products, eg. soap, shampoo, tooth brush.
5. **Religion:** Some religions observe specific rules related to personal hygiene. For example, certain rules for women during their menstrual periods.
6. **Health status:** Persons who are ill are often unable to attend to the personal hygienic activities, either because they have a low energy supply or a specific physical deficit.



Highlights.

Many infections, like colds and the stomach flu, (diarrhoea, cramps, nausea, vomiting and fever.) are the result of bringing germ-filled, unwashed hands into contact with the mouth. Other infections are caused when you eat food that has been contaminated by the dirty hands of other people.

Fact

Soaps are water-soluble sodium, potassium or salts of fatty acids. Soaps are made from fats, oils, or fatty acids, by treating them chemically with a strong alkali.

Quote

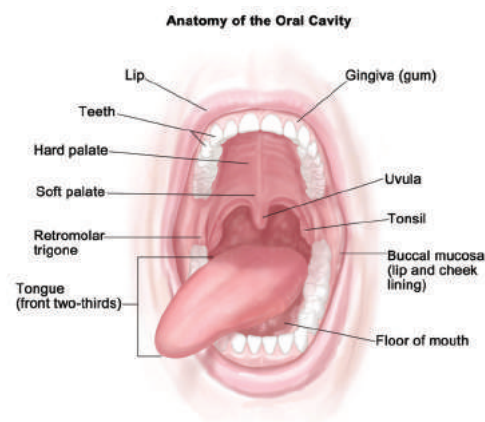
“Cleanliness is next to Godliness.”

5.3 ORAL HYGIENE

5.3.1 Introduction

In human anatomy, the mouth is the first portion of the alimentary canal that receives food and produces saliva. A nurse needs to maintain the oral hygiene of the patient in order to promote his appetite so that his nutritional needs are met.

5.3.2 Anatomy of the Oral cavity



The oral cavity represents the first part of the digestive tube. Its primary function is to serve as the entrance of the alimentary tract and to initiate the digestive process by salivation and propulsion of the alimentary bolus into the pharynx. It consists of the teeth, soft palate, tongue, uvula and tonsil. The oral cavity is lined with mucous membrane and continuous with the skin. The mucous membrane is an epithelial tissue that lines and protects organs, secretes mucous which keeps the passage of the digestive system moist and lubricated, and absorbs nutrition.

5.3.3 Oral hygiene

Definition: Oral hygiene is the practice of keeping one's mouth clean and free of disease and other problems (e.g. bad breath) by regular brushing and cleaning between the teeth. It is important that oral hygiene be carried out on a regular basis to enable prevention of dental disease.





Everyone wants to have a **great smile** that is why good oral hygiene is important! Having poor oral hygiene can lead to a variety of dental and medical problems in the future such as gum disease, infection, bone loss, heart disease, strokes and more. Regular checkups and cleanings can prevent these problems as well as provides with good oral hygiene.

5.3.4 Purposes of Oral Hygiene.

- 1) Helps maintain the healthy state of the mouth, teeth, gums and lips.
 - 2) Brushing cleanses the teeth of food articles, plaque and bacteria.
 - 3) Brushing massages the gums.
 - 4) Brushing relieves discomfort resulting from unpleasant odours and tastes.
 - 5) Oral hygiene gives a sense of well being.
 - 6) Proper oral hygiene stimulates appetite.
 - 7) It improves taste.
- 3) To prevent tooth decay, reduce the intake of carbohydrates, especially sweet snacks between meals.
 - 4) Brushing the teeth at least **two times a day** is basic to an effective oral hygiene. (after meals and at bed time)
 - 5) Tooth brushes should be replaced every **three months**.
 - 6) After brushing, thorough rinsing is important to remove dislodged food particles.
 - 7) Flossing helps remove plaque and tartar from between teeth to reduce the gum inflammation and infection.
 - 8) Going for regular dental checkup is important.
 - 9) Most dental professionals agree that a **soft-bristled brush** is best for removing plaque and debris from your teeth.
 - 10) **Salt water** is a good mouth wash solution. It is made by dissolving 1–0.5 teaspoon of table salt into a cup of hot water and rinsing the mouth. Saline has a mechanical cleansing action and an antiseptic action as it is a hypertonic solution in relation to bacteria, which undergo lysis.

5.3.5 Measures to maintain Proper Oral Hygiene.

- 1) Cleanliness, comfort, and moisturizing the mouth structures prevents oral disease and tooth destruction.
- 2) Brushing, flossing and irrigation are necessary for proper cleansing.

5.3.6 Food and Fluids maintain proper oral hygiene.

1. **Vitamin C** is needed for healthy gums, to prevent scurvy. (Gum disease.)
2. Eating a balanced diet and limiting snacks can help prevent tooth decay and periodontal disease.
3. Raw vegetables, plain yogurt, or fruit are beneficial.

4. Milk and cheese are also rich in calcium and phosphate.
5. Foods high in fiber may help to increase the flow of saliva.
6. Chocolates can cause damage to the teeth and cause dental cavities. Other carbohydrates, especially cooked starches, e.g. crisp potato chips can also damage to the teeth
7. Drinking orange juice or carbonated drinks like (cola, sprite, etc.) throughout the day raises the risk of dental cavities tremendously.
8. Chewing ice can cause chipping which can lead to a severe damaging effect in the teeth and tooth fracture.
9. Drinking dark coloured beverages such as wine, beer or alcohol may stain the teeth. Drinking high-concentration alcohol can lead to a dry mouth,


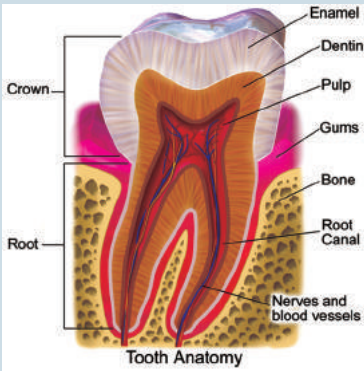
which affect the teeth with plaque and bacteria.

5.3.7 Risk factors for Oral problems.





- 1) Patients who are paralyzed or seriously ill.
- 2) Unconscious patients.
- 3) Diabetic patients.
- 4) Patients undergoing radiation therapy.
- 5) Patients receiving chemotherapy.
- 6) Patients having oral surgery and trauma.
- 7) Patients with immunosuppressant drug.

5.3.8 Common Oral problems

The two major types of oral problems are dental caries (cavities) and periodontal disease. (Pyorrhoea)






Oral problems	Images
1) Dental caries is the most common oral problem of younger people. The development of the cavities involves the destruction of tooth enamel through decalcification.	 



Oral problems	Images
2) Periodontal disease (Pyorrhoea) is the disease of the tissue around the tooth . It is an inflammation of the periodontal membrane.	
3) Halitosis (Bad breath) is a common problem of the oral cavity.	
4) Cheilosis is the disorder which involves cracking of the lips especially at the angle of the mouth.	
5) Stomatitis is an inflammatory condition of the mouth.	





Oral problems	Images
6) Glossitis is an inflammation of the tongue resulting from an infectious disease or injury such as burn or bite.	
7) Gingivitis is an inflammation of the gums usually resulting from poor oral hygiene.	
8) Scurvy is a disease resulting from lack of Vitamin C. It can lead to anemia.	
9) Oral malignancies: Lumps or ulcer appears in or around the mouth. The most common site is at the base of the tongue. 	

5.2.9 Dentures

Dentures:

Dentures (also known as false teeth) are prosthetic devices constructed to replace missing teeth; they are supported by the surrounding soft and hard tissues of the oral cavity.





Highlights.

Toothpaste contains the following ingredients: binders, abrasives, suders, humectants, flavors (unique additives), sweeteners, fluorides, tooth whiteners, a preservative, and water.

Fact



With proper care, dentures should last **five to seven years**.



STUDENT'S ACTIVITY






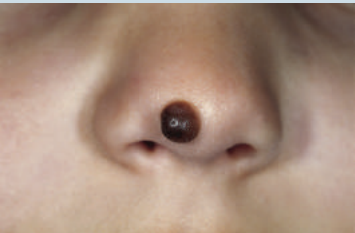
- Can review the types of teeth and the structure of the mouth using the chart/model of the mouth.

5.4.2 Common skin problems.

Skin problem	Image	Treatment
1. Shingles (Herpes Zoster): A rash of raised dots that turns into painful blisters, shingles causes the skin to burn, itch, tingle, or become very sensitive.		<ul style="list-style-type: none">• Creams for your skin.• Antiviral drugs.• Steroids.• Antidepressants.
2. Hives (Urticaria): Hives look like welts and can itch, sting or burn. They vary in size and sometimes join together.		<ul style="list-style-type: none">• Antihistamines.• Skin creams.





Skin problem	Image	Treatment
3. Psoriasis: Thick, red patches of skin covered with white or silvery scales are signs of psoriasis.		<ul style="list-style-type: none">• Creams.• Ointments.• Light therapy.• Medications taken by mouth, injection, or IV.
4. Eczema: Eczema means inflamed, red, dry, and itchy skin.		<ul style="list-style-type: none">• Several medications treat eczema.• There are tablets, creams and injections available.
5. Cold Sores (Fever Blisters): The herpes simplex virus causes small, painful, fluid-filled blisters on the mouth or nose.		<ul style="list-style-type: none">• It can be treated with antiviral pills or creams.
6. Skin Tags: This small flap of flesh-colored or slightly darker tissue hangs off your skin by a stalk.		<ul style="list-style-type: none">• These are treated by cutting, freezing, or burn them off.
7. Acne: Acne breaks out when a pore clogged with oil and dead skin cells gets inflamed.		<ul style="list-style-type: none">• Keep oily areas clean and don't squeeze (this may cause infection and scars).
8. Moles: Moles, which are usually brown or black, can be anywhere on the body.		<ul style="list-style-type: none">• No medication, but pay close attention to any change, with irregular borders, or has an unusual or uneven color, bleeding, or itching.



5.4.3 Skin care.


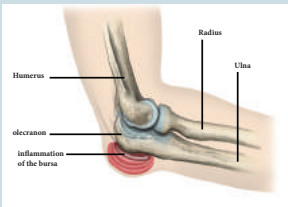



Skin care is the range of practices that support skin integrity, enhance its appearance and relieve skin conditions.

Importance of maintaining proper skin care.


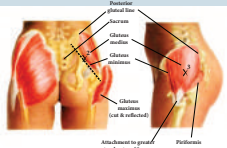
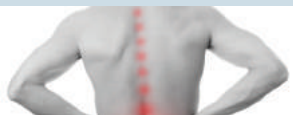


1. Proper nutrition.
2. Avoidance of excessive sun exposure.
3. Appropriate use of emollients.

5.4.4 Areas which are likely to be affected

All or any of the *protuberant parts* of a bedridden patient may become liable to pressure sores.

Areas liable for pressure sores	Images
Heels (Calcaneus) in the leg.	
Sacrum Elbows (Olecranon Process) in the hand.	
Scapula of the shoulder.	
Back of head. (Occipital bone)	
Malleolus (medial and lateral) of the ankle and the foot.	

4. Use of cosmetics, botulinum, exfoliation, fillers, laser resurfacing, microdermabrasion, peels, retinol therapy.
5. Skin care is a routine daily procedure in many settings, such as skin that is either too dry or too moist, and prevention of dermatitis and prevention of skin injuries.
6. Skin care is a part of the treatment of wound healing, radiation therapy and some medications.

Areas liable for pressure sores	Images
Knee. (medial and lateral condyles)	
Greater trochanter of the femur.	
Ilium (hip bone).	
Shoulder. (acromial process)	
Side of head. (parietal and temporal bones.)	
Ear.	