ELCT-SD ILEMBULA INSTITUTE OF HEALTH AND ALLIED SCIENCES

GUIDELINE FOR WRITING A CASE STUDY OF A PATIENT WITH MENTAL ILLNESS

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ABBREVIATIONS

IIHAS- Ilembula Institute of Health and Allied Sciences

GMHS- Global Mental Health Statistics

MOH-Ministry of Health

NACTVET; The National Council For Technical And Vocational Education And Training

DEFINITION OF TERMS

Case study: is a self-contained story about the patient, this include the collected information about the patient and interventions done to solve health problem

Case study format; this is a framework that every nursing student should adhere when writing a case study of a patient with mental illness.

CHAPTER 1 INTRODUCTION

Introduction

This guide comprise the following sections the background, purpose of developing the guide, case study format, the complete physical and mental status examination assessment guide.

1.1 Background

According to Global Mental Health Statistics (2022) it has been found that mental illness continue to be a public health concern. 970 million people around the world struggle with some mental illness or substance abuse and approximately 8 million (14.3%) deaths are attributed to mental disorder. Many efforts are needed to overcome this problem.

1.2 Purpose

This guide is developed to assist nursing students on how to write a case study of a patient with mental health problem. The case study is written based on interventions carried out during caring a patient with mental health problems from admission to discharge.

The guide outlines the components of a case study that every nurse student should adhere when writing it to ensure consistence and uniformity of a case study report.

The target audience for this guide is Nursing Students at IIHAS. The guide indicates the important information, which must be included in the case study. Assessment skills are also found which enable students during to obtain the required information, which help will them to plan care and come-up with suitable nursing interventions for better and quality care.

CHAPTER 2 : A CASE STUDY STEPS AND FORMAT

Students shall adhere to the following format when writing a case study ;

Cover page

About the cover page; There shall be a cover page not limited to the following:

a) **Name of Institution**.

The name of institution shall be **ELCT-SD ILEMBULA INSTITUTE OF HEALTH AND ALLIED SCIENCES**

b) Name of student and his/her NACTVET Registration Number and Name of Facilitator;

The name of Author/student should appear near to the margin of the paper in left side and that of the facilitator to the right side Part. Refer sample of cover page as shown in the appendix 01

Table of Content

A case study shall have a table of content after the cover page

Page Numbering:

Page numbering shall start with roman number from the cover page, table of content, acknowledgement, abbreviations and definition of terms. However, page 1 and other respective pages shall start at introduction and the respective sections.

Abbreviations, definition of terms and acknowledgement

There shall have abbreviations, definition of terms and acknowledgement. In addition, these shall appear after the table of content.

Document Formatting

This contain font selection shall be Times New Roman, Font Size 12, spacing should 1.5, margins 4cm, alignment shall be justify

Chapters

A case study shall comprise five chapters; chapter one introduction, chapter two history taking, chapter three physical examination and laboratory investigations, chapter four mental status examination, chapter five disease profile and nursing management as shown here under:

Chapter 1 Introduction

Chapter 1 shall entail the following:

1.1 Introduction,

1.2 Background

1.3 Methodology of The Study.

Chapter 2 History Taking

Chapter 2 shall be the History Taking; The history Taking must embrace and not limited to the following sections;

2.1 Demographic Information
2.2 Informant
2.3 Chief Complaints
2.4 History Of Present Illness
2.5 Past Medical History
2.6 Past Psychiatric History
2.7 Personal History
2.8 Premorbid Personality

Chapter 3 Physical Examination and Laboratory Investigations

Chapter 3 shall contain;

3.1 **Physical Examination Shall Comprise General Physical Examinations**

3.1.1 General Physical examination

3.1.2 Vital Signs

3.1.3 Head-to- toe Assessment

3.1.4 Laboratory Investigations

3.2 **Laboratory Investigations**

Chapter 4 Mental Status Examination

Chapter four shall comprise Mental status Examination with and not limited to the following mental functioning

4.1General Appearance and Behavior

4.1.1 General Appearance
4.1.2 Attitude towards Examiner
4.1.3 Comprehension
4.1.4 Gait and Posture
4.1.5 Motor Activity
4.1.6 Social Manner
4.1.7 Rapport
4.2 Speech
4.2.1 Rate and Quantity
4.2.2 Volume and Tone
4.2.3 Flow and Rhythm
4.3 Mood and affect
4.4 Thought
4.4.1 Stream and Form
4.4.2 Content
4.5 Perception
4.6 Cognition
4.6.1 Consciousness
4.6.2 Orientation
4.6.3 Attention
4.6.4 Concentration
4.6.5 Memory
4.6.6 Intelligence
4.6.7 Abstract thinking
4.7 Insight
4.8 Judgement
4.9 Formulation of Diagnosis

Chapter 5. Nursing Management/Interventions

Nursing management shall comprise;

5.1 A disease profile

5.2 Nursing care plan in a format as shown in appendix 04

References

A case study shall have references presented in APA style

Appendices

Where necessary a case study shall have appendices

CHAPTER 3 : PHYSICAL ASSESSMENT, HISTORY TAKING AND MENTAL STATUS EXAMINATION GUIDE

Section 1. History Taking

Demographic Information

- Name of the patient …….
- Age ……..
- Sex ……
- Place of resident……..
- Marital status …….
- Occupation ……

Informant: *Patient/parent, close relative*

Chief Complaints

- *Ask and Report (the reason(s))what made the patient to seek treatment*

Put the chief complaint in the patient's own words eg "I wanted to kill myself"or "I felt headache vomiting and dizziness" or don't know Or the patient was reported to be aggressive, violent, biting other people destructing family properties etc

History of the Present Illness

- *When the problem /symptoms emerged and how have progressed, what factors precipitated/aggravated the onset of the problem and treatment received if any.*

Past Psychiatric History

- *Is there any previous history of mental illness from the respective client. If yes what were the treatment given / state the medications prescribed.*

Past Medical History

- *Is there any history of disease which associated with central nervous system eg malaria, encephalitis, head injury, syphilis, HIV/AIDS, meningitis*
- *Did the patient had a hx of being admitted at any health facility and diagnosed the mentioned diseases above?*
- *Did the patient had surgery which involved brain*
- *What treatment received on respective diagnosis*

Family History

- *Is there any history of mental illness from the parents (father, mother) and siblings), describe about the occupation of parents (father and mother)*
- *Siblings describe about education, interaction with others and school performance*

Personal History

➢ Obtain the following:

- Prenatal

✓ *ask mother whether has history of alcohol use and other teratogenic*

✓ *Ask whether she experienced complications problems during pregnancy*

- Perinatal – explored method delivery

✓ *Spontaneously*

✓ *caesarean section*

- Postnatal

✓ *Enquire about any infection associated with brain function in neonate stage*

- Childhood

✓ *Milestones*

- Adolescence

✓ *Puberty*

✓ *Psychosexual history*

✓ *Peer relationship*

✓ *School performance*

✓ *Drug and alcohol use*

- Early Adulthood

✓ *Marital and other adult relationship*

✓ *Work history*

✓ *Recreational and vocational pursuits*

✓ *Military history*

- Middle and older adulthood

✓ *Changing family constellation*

✓ *Retirement*

✓ *Losses*

✓ *Aging*

Forensic History

- ✓ *Prison history*
- ✓ *Obtain information about criminality*

Premorbid Personality

- ✓ *Interpersonal relationship*
- ✓ *Use of Leisure time*
- ✓ *Predominant mood*
- ✓ *Attitude to self and others*
- ✓ *Attitude to work and responsibility*
- ✓ *Religious and moral attitude*
- ✓ *Fantasy life*

Section 2. Physical Examination

- *A detailed general physical examination (GPE) and systemic examination is a must in every patient.*
- *Physical disease, which is aetiologically important (for causing psychiatric symptomatology), or accidentally co-existent, or secondarily caused by the psychiatric condition or treatment, is often present and can be detected by a good physical examination.*

Vital Signs

Assess vital signs

- Pulse Rate
- Blood Pressure
- Temperature
- Respiratory Rate

Vital signs should be assessed immediately once you discover that your patients unwell.

They provide important basic physiological information.

Head-to-Toe –Assessment

Head to toe Assessment is a comprehensive physical assessment data collection method to gather patient data and determine the patient's health status. It involves examining the entire body from head to toe in a systematic and thorough manner to identify health issues the patient may be experiencing.

At the end of the head-to-toe assessment, the nurse or healthcare provider should have gathered information that can help the patient's treatment plan and have a clear understanding of the patient's overall physical health and any potential issues that may need to be addressed.

Assessment Techniques

To make your head-to-toe assessment systematic, you need to know about the four basic assessment techniques. These techniques are inspection, palpation, percussion, and auscultation.

- Inspection involves using the senses of vision, smell, and hearing to observe and detect any normal or abnormal findings.
- Palpation consists of using parts of the hand to touch and feel for the following characteristics: texture, temperature, moisture, mobility, consistency, the strength of pulses, size, shape, and degree of tenderness.
- Percussion involves tapping body parts to produce sound waves. These sound waves or vibrations enable the examiner to assess underlying structures.
- Auscultation involves the use of a stethoscope to listen for heart sounds, movement of blood through the cardiovascular system, movement of the bowel, and movement of air through the respiratory tract.

In performing physical assessment, use the following physical assessment guide

Assessment of the Head and Face

Inspection

- Inspect the head. Inspect for size, shape, and configuration.
- Inspect for involuntary movement. Head should be positioned still and upright.
- Inspect the face. Inspect for symmetry, features, movement, expression, and skin condition.

Palpation

- Palpate the head. Palpate for consistency; the head is normally hard and smooth without lesions.
- Palpate the temporal artery. This should be located between the top of the ear and the eye.
- Palpate the temporomandibular joint. To assess the temporomandibular joint, place your index finger over the front of each ear as you ask the client to open your mouth.

Assessment of the neck

Inspection

- Inspect the neck. Observe the client's slightly extended neck for position, symmetry, and lumps or masses. Shine a light from the side of the neck across to highlight any swelling.
- Inspect the movement of the neck structures. Ask the client to swallow a small sip of water. Observe the movement of the thyroid cartilage and thyroid gland.
- Inspect the cervical vertebrae. Ask the client to flex the neck (chin to chest, ear to shoulder, twist left to right and right to left, and backward and forward.
- Inspect range of motion. Ask the client to turn the head to the right and to the left (chin to shoulder), touch each ear to the shoulder, touch chin to chest, and lift the chin to the ceiling.

Palpation

- Palpate the trachea. Place your finger in the sternal notch. Feel each side of the notch and palpate the tracheal rings. The first upper ring above the smooth tracheal rings is the cricoid cartilage.
- Palpate the thyroid gland. Locate key landmarks with your index finger and thumb; ask the client to swallow as you palpate

Auscultation

- Auscultate the thyroid gland only if you find an enlarged thyroid gland during inspection or palpation. Place the bell of the stethoscope over the lateral lobes of the thyroid gland; ask the client to hold his breath (to obscure any tracheal breath sounds while you auscultate).

Assessment of Lymph Nodes of The Head and Neck

Palpation

- Palpate the preauricular nodes, postauricular nodes, occipital nodes. There should be no swelling or enlargement and no tenderness.
- Palpate the tonsillar nodes. Palpate the tonsillar nodes at the angle of the mandible on the anterior edge of the sternomastoid muscle
- Palpate the submental nodes, which are a few centimeters behind the tip of the mandible.
- Palpate the superficial cervical nodes in the area superficial to the sternomastoid muscle.
- Palpate the posterior cervical nodes in the area posterior to the sternomastoid and anterior to the trapezius in the posterior triangle.
- Palpate the deep cervical chain nodes deeply within and around the sternomastoid muscle.
- Palpate the supraclavicular nodes by hooking your fingers over the clavicles and feeling deeply between the clavicles and sternomastoid muscles.

Assessment of the Eye and Vision

To perform a thorough assessment of the eye, one needs a good understanding of the external structures of the eye, the internal structures of the eye, the visual fields and pathways, and the visual reflexes

External Eye Structures

Inspection and Palpation

- Inspect the eyelids and eyelashes. Note the width and position of palpebral fissures. Assess the ability of eyelids to close. Note the position of the eyelids in comparison with the eyeballs. Observe for redness, swelling, discharge, or lesions.
- Observe the position and alignment of the eyeball in the eye socket. Eyeballs are symmetrically aligned in sockets without protruding or sinking.
- Inspect the bulbar conjunctiva and sclera. Have the client keep her head straight while looking from side to side and then up toward the ceiling. Observe clarity, color, and texture.
- Inspect the palpebral conjunctiva. Put on gloves for this assessment procedure. First, inspect the palpebral conjunctiva of the lower eyelid by placing your thumbs bilaterally at

the level of the lower bony orbital rim and gently pulling down to expose the palpebral conjunctiva.

- Inspect the lacrimal apparatus. Assess the areas over the lacrimal glands (lateral aspect of upper eyelid) and the puncta (medial aspect of lower eyelid).
- Inspect the cornea and lens. Shine a light from the side of the eye for an oblique view. Look through the pupil to inspect the lens.
- Test pupillary reaction to light. Test for direct response by darkening the room and asking the client to focus on a distant object.
- Test accommodation of pupils. Hold your finger or a pencil about 12 to 15 inches from the client. Ask the client to focus on your finger or pencil and to remain focused on it as you move it closer toward the eyes.

Palpation

- Palpate the lacrimal apparatus; Put on disposable gloves to palpate the nasolacrimal duct to assess for blockage. Use one finger and palpate just inside the lower orbital rim.

2.2 Internal eye structures

Inspection

- Inspect the optic disc. Keep the light beam focused on the pupil and move closer to the client from a 15-degree angle. You should be very close to the client's eye (about 3 to 5 cm), almost touching the eyelashes. Note the shape, color, size, and physiologic cup.
- Inspect the retinal vessels. Remain in the same position as described previously. Inspect the sets of retinal vessels by following them out to the periphery of each section of the eye. Note the number of sets of arterioles and venules.
- Inspect retinal background. Remain in the same position described previously and search the retinal background from the disc to the macula, noting the color and the presence of any lesions.
- Inspect the fovea (sharpest area of vision) and macula. Remain in the same position described previously. Shine the light beam toward the side of the eye or ask the client to look directly into the light. Observe the fovea and the macula that surrounds it.

- Inspect the anterior chamber. Remain in the same position and rotate the lens wheel slowly to +10, +12, or higher to inspect the anterior chamber of the eye.

Assessment of The Ear

Beginning when the nurse first meets the client, the assessment of hearing provides important information about the client's ability to interact with the environment.

External ear structures

Inspection and Palpation

- Inspect the auricle, tragus, and lobule. Note size, shape, and position. Observe for lesions. discolorations, and discharge.
- Palpate the auricle and mastoid process. Normally the auricle, tragus, and mastoid process are not tender.

Internal ear structures

Inspection

- Inspect the external auditory canal. Use the otoscope. A small amount of odorless cerumen is the only discharge normally present.
- Inspect the tympanic membrane (eardrum). Note color, shape, consistency, and landmarks.
- Perform Weber's test if the client reports diminished or lost hearing in one ear. Strike a tuning fork softly with the back of your hand and place it in the center of the client's head or forehead. Ask whether the client hears the sound better in one ear or the same in both ears.
- Perform the Rinne test. The Rinne test compares air and bone conduction. Strike a tuning fork and place the base of the fork on the client's mastoid process. Ask the client to tell you when the sound is no longer heard. Move the prongs of the tuning fork to the front of the external auditory canal. Ask the client to tell you if the sound is audible after the fork is moved.
- Perform the Romberg test. Ask the client to stand with feet together and arms at the sides and eyes open and then with eyes closed.

Assessment of the Mouth, Throat, Nose, Sinus

Subjective data related to the mouth, throat, nose, and sinus can aid in detecting diseases and abnormalities that may affect the client's activities of daily living**.**

History of present health concern

Tongue and Mouth

- Do you experience tongue or mouth sores or lesions? Are they painful? How long have you had them? Do they recur? Is it single, or do you have many?
- Do you experience redness, swelling, bleeding, or pain in the gums or mouth? How long has this been happening? Do you have any toothache? Have you lost any permanent teeth?

Nose and Sinuses

- Do you have pain in your sinuses?
- Do you experience any nosebleeds? How much bleeding? What color is the blood?
- Do you experience frequent clear or mucous drainage from your nose?
- Can you breathe through both of your nostrils? Do you have a stuffy nose at times during the day or night?
- Do you have seasonal allergies? Describe the timing of the allergies and symptoms.
- Have you experienced a change in your ability to smell or taste?

Throat

- Do you have difficulty chewing or swallowing food? How long have you had this? Do you have any pain?
- Do you have a sore throat? How long have you had it? Describe. How often do you get sore throats?
- Do you experience hoarseness? How long?

Past health history

- Have you ever had any oral, nasal, or sinus surgery? Do you have a history of sinus infections? Describe your symptoms. Do you use nasal sprays?

Family history

- Is there a history of mouth, throat, nose, or sinus cancer in your family?

Lifestyle and health practices

This is a very important section of the health history because it deals with the client's human responses.

- Do you smoke or use smokeless tobacco? If so, how much? Are you interested in quitting this habit?
- Do you drink alcohol? How much and how often?
- Do you grind your teeth?
- Describe how you care for your teeth or dentures. How often do you brush and use dental floss? When was your last dental examination?
- If the client wears braces: How do you care for your braces? Do you avoid any specific types of foods? Describe your usual dietary intake for a day.
- If the client wears dentures: How do your dentures fit?
- Do you brush your tongue?
- How often are you in the sun? Do you use lip sunscreen products?

Mouth

Inspection and Palpation

- Inspect the lips. Observe lip consistency and color.
- Inspect the teeth and gums. Ask the client to open their mouth. Note the number, color, condition, and alignment of the teeth.
- Inspect the buccal mucosa. Use a penlight and tongue depressor to retract the lips and cheeks to check color and consistency. Also, note Stenson's ducts (parotid ducts) located on the buccal mucosa across from the second upper molars.
- Inspect and palpate the tongue. Ask the client to stick out the tongue. Inspect for color, moisture, size, and texture. Observe for fasciculations (fine tremors), and check for midline protrusions. Palpate any lesions present for induration.
- Assess the ventral surface of the tongue. Ask the client to touch the tongue to the roof of the mouth, and use a penlight to inspect the ventral surface of the tongue.
- Inspect for Wharton's ducts. These are openings from the submandibular salivary glands located on either side of the frenulum on the floor of the mouth.

- Observe the sides of the tongue. Use a square gauze pad to hold the client's tongue to each side. Palpate for any lesions, ulcers, or nodules for induration.
- Check the strength of the tongue. Place your fingers on the external surface of the client's cheek. Ask the client to press the tongue's tip against the inside of the cheek to resist pressure from your fingers.
- Check the anterior tongue's ability to taste by placing drops of sugar and salty water on the tip and sides of the tongue with a tongue depressor.
- Inspect the hard (anterior) and soft (posterior) palates and uvula. Ask the client to open the mouth wide while you use a penlight to look at the roof. Observe color and integrity.
- Note odor. While the mouth is wide open, note any unusual or foul odor.
- Assess the uvula. Apply a tongue depressor to the tongue and shine a penlight into the client's wide-open mouth. Note the characteristics and positioning of the uvula. Ask the client to say "Aaah" and watch for the uvula and soft palate to move.
- Inspect the tonsils; Using the tongue depressor to keep the mouth open wide, Inspect the tonsils for color, size, and presence of exudate or lesions. Tonsils should be graded.
- Inspect the posterior pharyngeal wall. Keeping the tongue depressor in place, shine the penlight on the back of the throat. Observe the color of the throat, and note any exudate or lesions.

Assessment of the Nose

Inspection and **Palpation**

- Inspect and palpate the external nose. Note nasal color, shape, consistency, and tenderness.
- Check the patency of airflow through the nostrils by occluding one nostril at a time and asking the client to sniff.
- Inspect the internal nose. To inspect the internal nose, use an otoscope with a short wide-tip attachment. Use your non-dominant hand to stabilize and gently tilt the client's head back. Insert the short wide tip of the otoscope into the client's nostril without touching the sensitive nasal septum.

Assessment of the Sinuses

Palpation

- Palpate the sinuses. Palpate the frontal sinuses by using your thumbs to press up on the brow on each side of the nose. Palpate the maxillary sinuses by pressing with thumbs up on the maxillary sinuses.

Percussion

- Percuss the sinuses. Lightly tap over the frontal sinuses and over the maxillary sinuses for tenderness.

Transillumination

- **Transilluminate the sinuses**. Transilluminate the frontal sinuses by holding a strong, narrow light source snugly under the eyebrows. Use your other hand to shield the light. Transilluminate the maxillary sinuses by holding a strong, narrow light source over the maxillary sinus and asking the client to open his or her mouth.

Assessment of the Thoracic and Lung

Subjective data related to the thoracic and lung assessment provide many clues about underlying respiratory problems and associated nursing diagnoses, as well as clues about the risk for the development of lung disorders.

Posterior thorax

Inspection

- Inspect for nasal flaring and pursed lip breathing. Nasal flaring is not observed in normal findings.
- Observe the color of the face, lips, and chest. The client has an evenly colored skin tone without unusual or prominent discoloration.
- Inspect the color and shape of the nails. Pink tones should be seen in the nailbeds. There is normally a 160-degree angle between the nail base and the skin.
- Inspect configuration. While the client sits with her arms at her sides, stand behind her and observe the position of the scapulae and the shape and configuration of the chest wall.

- Observe the use of accessory muscles. Watch as the client breathes and does not use it.
- Inspect the client's positioning. Note the client's posture and ability to support weight while breathing comfortably.

Palpation

- Palpate for tenderness and sensation. Palpation may be performed with one or both hands; however, the sequence of palpation is established. Start toward the midline at the level of the left scapula and move your hand from left to right, comparing findings bilaterally. Move systematically downward and out to cover the lateral portions of the lungs at the bases.
- Palpate for crepitus. Crepitus, also called subcutaneous emphysema, is a crackling sensation that occurs when air passes through fluid or exudate. Use your fingers and follow the above sequence when palpating.
- Palpate surface characteristics. Use gloves and your fingers to palpate any lesions you noticed during the inspection.
- Palpate for fremitus. Following the above sequence, use the ball or ulnar edge of one hand to assess for fremitus (vibrations of air in the bronchial tubes transmitted to the chest wall.
- Assess chest expansion. Place your hands on the posterior chest wall with your thumbs at the level of T9 or T10 and press together a small skin fold.

Percussion

- Percuss for tone. Start at the apices of the scapulae and percuss across the tops of both shoulders. Then percuss the intercostal spaces across and down, comparing sides. Percuss the lateral aspects at the bases of the lungs, comparing sides.
- Percuss for diaphragmatic excursion. Ask the client to exhale forcefully and hold their breath. Beginning at the scapular line, percuss the intercostal spaces of the right posterior chest wall. Percuss downward until the tone changes from resonance to dullness. Next, ask the client to inhale deeply and hold it. Percuss the intercostal spaces from the mark downward until resonance changes to dullness.

Auscultation

- Auscultate for breath sounds. To begin, place the diaphragm of the stethoscope firmly and directly on the posterior chest wall at the apex of the lung at C7. Ask the client to breathe deeply through his or her mouth for each area of auscultation in the auscultation sequence so you can best hear inspiratory and expiratory sounds.

- Auscultate for adventitious sounds. Adventitious sounds are sounds added or superimposed over normal breath sounds and heard during auscultation.
- Auscultate voice sounds. Bronchophony: Ask the client to repeat the phrase “ninety-nine” while you auscultate the chest wall.

Anterior thorax

Inspection

- Inspect for shape and configuration. Have the client sit with her arms at her sides. Stand in front of the client and assess shape and configuration.
- Inspect the position of the sternum. Observe the sternum from an anterior and lateral viewpoint. Watch for sternal retraction.
- Inspect the slope of the ribs. Assess the ribs from an anterior and lateral viewpoint.
- Observe the quality and pattern of respiration. Note breathing characteristics as well as rate, rhythm, and depth.
- Inspect intercostal spaces. Ask the client to breathe normally and observe the intercostal spaces.
- Observe for use of accessory muscles. Ask the client to breathe normally and observe for use of accessory muscles.

Palpation

- Palpate for tenderness, sensation, and surface masses. Use your fingers to palpate for tenderness and sensation. Start with your hand positioned over the left clavicle and move your hand left to right, comparing findings bilaterally. Move your hand systematically downward toward the midline at the level of the breasts and outward at the base to include the lateral aspect of the lung.
- Palpate for fremitus. Using the sequence for the anterior chest above, palpate for fremitus using the same technique as for the posterior thorax.
- Palpate anterior chest expansion. Place your hands on the client’s anterolateral wall with your thumbs along the costal margins and pointing toward the xiphoid process.

Percussion

- Percuss for tone. Percuss the apices above the clavicles. Then percuss the intercostal spaces across and down, comparing sides.

Auscultation

- Auscultate for anterior breath sounds, adventitious breath sounds, and voice sounds. Place the diaphragm of the stethoscope firmly and directly on the anterior chest wall. Auscultate from the apices of the lungs slightly above the clavicles to the bases of the lungs at the sixth rib. Listen at each site for at least one respiratory cycle. Follow the sequence for anterior auscultation

Assessment of the Breast and Lymphatic System

Female breasts

Inspection

- Inspect size and symmetry. Have the client disrobe and sit with arms hanging freely. Explain what you are observing to help ease client anxiety.
- Inspect color and texture. Be sure to note the client's overall skin tone when inspecting the breast skin. Note any lesions.
- Inspect superficial venous pattern. Observe the visibility and pattern of breast veins.
- Inspect the areolas. Note the color, size, shape, and texture of the areolas of both breasts.
- Inspect the nipples. Note the size and direction of the nipples of both breasts. Also note any dryness, lesions, bleeding, or discharge.
- Inspect for retraction and dimpling. To inspect the breasts accurately for retraction and dimpling, ask the client to remain seated while performing several different maneuvers. Ask the client to raise her arms overhead, then press her hands against her hips. Next, ask her to press her hands together.

Palpation

- Palpate texture and elasticity. Smooth, firm, elastic tissue is a normal finding.
- Palpate tenderness and temperature. A generalized increase in nodularity and tenderness may be a normal finding associated with the menstrual cycle or hormonal medications.
- Palpate for masses. Note location, size in centimeters, shape, mobility, consistency, and tenderness. Also, note the condition of the skin over the mass.
- Palpate the nipples. Wear gloves to compress the nipple gently with your thumb and index finger. Note any discharge.

- Palpate mastectomy or lumpectomy site. If the client has had a mastectomy or lumpectomy, it is still important to perform a thorough examination. Palpate the scar and any remaining breast and axillary tissue for redness, lesions, lumps, swelling, or tenderness.

Assessment of Axillae

Inspection and Palpation

- Inspect and palpate the axillae. Ask the client to sit up. Inspect the axillary skin for rashes or infections. Hold the client's elbow with one hand, and use the three finger pads of your other hand to palpate firmly the axillary lymph nodes. First, palpate high into the axillae, moving downward against the ribs to feel for the central nodes. Continue to move down the posterior axillae to feel for the posterior nodes.

Male breasts

Inspection and Palpation

- Inspect and palpate the breasts, areolas, nipples, and axillae. Note any swelling, nodules, or ulceration. Palpate the flat disc of underdeveloped breast tissue under the nipple.

Assessment of the Heart and Neck Vessels

Neck Vessels

Inspection

- Observe the jugular venous pulse. Inspect the jugular venous pulse by standing on the right side of the client. The client should be in a supine position with the torso elevated 30 to 45 degrees. Ask the client to turn the head slightly to the left. Shine a tangential light source onto the neck to increase visualizations of pulsations as well as shadows.
- Evaluate jugular venous pressure. Evaluate jugular venous pressure by watching for the distention of the jugular vein.

Auscultation and Palpation

- **Auscultate the carotid arteries.** Auscultate the carotid arteries if the client is middle-aged or older or if you suspect cardiovascular disease. Place the bell of the stethoscope over the carotid artery and ask the client to hold his or her breath for a moment so breath sounds do not conceal any vascular sounds.

- **Palpate the carotid arteries.** Palpate each carotid artery alternately by placing the pads of the index and middle fingers medial to the sternocleidomastoid muscle on the neck.

Assessment of Heart

Inspection

- Pulsations . with the client in a supine position with the head of the bed elevated Inspect between 30 and 45 degrees, stand on the client's right side and look for the apical impulse and abnormal pulsations.

Palpation

- Palpate the apical pulse. Remain on the client's right side and ask the client to remain supine. Use the palmar surfaces of your hand to palpate the apical impulse in the mitral area.
- Palpate for abnormal pulsations. Use your palmar surfaces to palpate the apex, left sternal border, and base.

Auscultation

- Auscultate heart rate and rhythm. Place the diaphragm of the stethoscope at the apex and listen closely to the rate and rhythm of the apical impulse.
- If you detect an irregular rhythm, auscultate for a pulse rate deficit. This is done by palpating the radial pulse while you auscultate the apical pulse. Count for a full minute.
- Auscultate to identify S1 and S2. Auscultate the first heart sound (S1 or "lub") and the second heart sound (S2 or "dub"). Use the diaphragm of the stethoscope to best hear S1. Use the diaphragm of the stethoscope to hear S2 and ask the client to breathe regularly.
- Auscultate for extra heart sounds. Use the diaphragm first, then the bell, to auscultate over the entire heart area. Note the characteristics of any extra sound heard. auscultate during the systolic pause.
- Auscultate for murmurs. Use the diaphragm and the bell of the stethoscope in all areas of auscultation because murmurs have a variety of pitches. Also, auscultate with the client in different positions because some murmurs occur or subside according to the client's position.
- Auscultate with the client assuming other positions. Ask the client to assume a left lateral position. Use the bell of the stethoscope and listen at the apex of the heart. Ask the client

to sit up, lean forward, and exhale. Use the diaphragm of the stethoscope and listen over the apex and along the left sternal border.

Assessment of the Peripheral Vascular System

Arms

Inspection

- **Observe arm size and venous pattern; also look for edema.** Arms are bilaterally symmetric with minimal variation in size and shape. No edema or prominent venous patterning.
- **Observe the coloration of the hands and arms.** Color varies depending on the client's skin tone, although color should be the same bilaterally.

Palpation

- Palpate the client's fingers, hands, and arms, and note the temperature. Skin is warm to the touch bilaterally from fingertips to upper arms.
- Palpate to assess capillary refill time. Compress the nailbed until it blanches. release the pressure and calculate the time it takes for the color to return.
- Palpate the radial pulse. Gently press the radial artery against the radius. Note elasticity and strength.
- Palpate the ulnar pulses. Apply pressure with your first three fingertips to the medial aspects of the inner wrists.
- Palpate the brachial pulses if you suspect arterial insufficiency. Do this by placing the first three fingertips of each hand at the client's right and left medial antecubital creases.
- Palpate the epitrochlear lymph nodes. Take the client's left hand in your right hand as if you were shaking hands. Flex the client's elbow about 90 degrees. Use your left hand to palpate behind the elbow in the groove between the biceps and triceps muscles.
- Perform the Allen test. The Allen test evaluates the patency of the radial or ulnar arteries. The test begins by assessing ulnar patency. Have the client rest the hand palm side-up on the examination table and make a fist. Then use your thumbs to occlude the radial and ulnar arteries. Note that the palm remains pale. Release the pressure on the ulnar artery and watch for color to return to the hand.

Assessment of Legs

Inspection, **Palpation**, and **Auscultation**

- Observe skin color while inspecting both legs from the toes to the groin. Ask the client to lie supine. Then drape the groin area and place a pillow under the client's head for comfort.
- Inspect the distribution of hair. Hair covers the skin on the legs and appears on the dorsal surface of the toes.
- Inspect for lesions or ulcers. Legs are free of lesions or ulcerations.
- Inspect for edema. Inspect the legs for unilateral and bilateral edema. Note veins, tendons, and bony prominences.
- Palpate edema. If edema is noted during inspection, palpate the area to determine if it is pitting or nonpitting. Press the edematous area with the tips of your fingers, hold for a few seconds, then release.
- Palpate bilaterally for the temperature of the feet and legs. Use the backs of your fingers. Compare your findings in the same areas bilaterally.
- Palpate the superficial inguinal lymph nodes. First, expose the client's inguinal area, keeping the genitals draped. Feel over the upper medial thigh for the vertical and horizontal groups of superficial inguinal lymph nodes.
- Palpate the femoral pulses. Ask the client to bend the knee and move it out to the side. Press deeply and slowly below and medial to the inguinal ligament. Release pressure until you feel the pulse.
- Auscultate the femoral pulses. If arterial occlusion is suspected in the femoral pulse, position the stethoscope over the femoral artery and listen for bruits.
- Palpate the popliteal pulses. Ask the client to raise the knee partially. Place your thumbs on the knee while positioning your fingers deep in the bend of the knee. Apply pressure to locate the pulse.
- Palpate the dorsalis pedis pulses. Dorsiflex the client's foot and apply light pressure lateral to and along the side of the extensor tendon of the big toe.
- Palpate the posterior tibial pulses. Palpate behind and just below the medial malleolus. Palpating both posterior tibial pulses at the same time aids in making comparisons.
- Inspect for varicosities and thrombophlebitis. Ask the client to stand because varicose veins may not be visible when the client is supine and not as pronounced when the client is sitting. As the client is standing, inspect for superficial vein thrombophlebitis.

- Check for Homan's sign. First, flex the client's knee about 5 degrees, place your hand under the client's calf muscle, and quickly squeeze the muscle against the tibia. Ask the client to report any pain or tenderness.

Assessment of the Abdomen

Abdomen

Always follow this sequence when assessing the abdomen: inspection, auscultation, percussion, and palpation. Changing the order can alter the frequency of bowel sounds and make your findings less accurate.

Inspection

- Observe the coloration of the skin. Abdominal skin may be paler than the general skin tone because this skin is so seldom exposed to the elements.
- Note the vascularity of the abdominal skin. Scattered fine veins may be visible.
- Note any striae. Old, silvery, white striae or stretch marks from past pregnancies or weight gain are normal.
- Inspect for scars. Ask about the source of a scar, and use a centimeter ruler to measure the scar's length. Document the location by quadrant and reference lines, shape, length, and specific characteristics.
- Assess for lesions and rashes. The abdomen is free of lesions or rashes. Flat or raised brown moles, however, are normal and may be apparent.
- Inspect the umbilicus. Note the color of the umbilical area. Observe the umbilical location. Assess the contour of the umbilicus.
- Inspect abdominal contour. Look across the abdomen at eye level from the client's side from behind the client's head, and from the foot of the bed. Measure abdominal girth as indicated.
- Assess abdominal symmetry. Look at the client's abdomen as she lies in a relaxed supine position.
- Inspect abdominal movement when the client breathes. Abdominal respiratory movement may be seen, especially in male clients.
- Observe aortic pulsations. A slight pulsation of the abdominal aorta, which is visible in the epigastrium, extends full length in thin people.

- Observe for peristaltic waves. Normally peristaltic waves are not seen, although they may be visible in very thin people as slight ripples on the abdominal wall.

Auscultation

- Auscultate for bowel sounds. Use the diaphragm of the stethoscope and make sure that it is warm before you place it on the client's abdomen.
- Auscultate for vascular sounds. Use the bell of the stethoscope to listen for bruits over the abdominal aorta and renal, iliac, and femoral arteries.
- Auscultate for a friction rub over the liver and spleen. Listen over the right and left lower rib cage with the diaphragm of the stethoscope.

Percussion

- Percuss for tone. Lightly and systematically percuss all quadrants.
- Percuss the span or height of the liver by determining its lower and upper borders. To assess the lower border, begin in the RLQ at the mid-clavicular line and press upward. Note the change from tympany to dullness. To assess the upper border, percuss over the upper right chest at the MCL and percuss downward, noting the change from lung resonance to liver dullness.
- Percuss the spleen. Begin posterior to the left mid-axillary line (MAL), and percuss downward, noting the change from lung resonance to splenic dullness.
- Perform blunt percussion on the liver. Percuss the liver by placing your left hand flat against the lower right ribcage. Use the ulnar side of your right fist to strike your left hand.

Palpation

- Perform light palpation. Using the fingertips, begin palpation in a non-tender quadrant, and compress to a depth of 1cm in a dipping motion. Then gently lift your fingers and move to the next area.
- Deeply palpate all quadrants to delineate abdominal organs and detect subtle masses. Using the palmar surface of the fingers, compress to a maximum depth (5 to 6 cm). Perform bimanual palpation if you encounter resistance or assess deeper structures.
- Palpate for masses. Note their location, size, shape, consistency, demarcation, pulsatility, tenderness, and mobility. Do not confuse a mass with a normally palpated organ or structure.

- Palpate the umbilicus and surrounding area for swellings, bulges, or masses. Umbilicus and the surrounding area are free of swellings, bulges, or masses.
- Palpate the aorta. Use your thumb and first finger or two hands and palpate deeply in the epigastrium, slightly to the left of the midline. Assess the pulsation of the abdominal aorta.
- Palpate the liver. Note consistency and tenderness. To palpate bimanually, stand at the client's right side and place your left hand under the client's back at the level of the eleventh to twelfth ribs. Lay your right hand parallel to the right costal margin. Ask the client to inhale, then compress upward and inward with your fingers.
- Palpate the spleen. Stand at the client's right side, reach over the abdomen with your left arm, and place your hand under the posterior lower ribs. Pull up gently. Place your right hand below the left costal margin with the fingers pointing toward the client's head. Ask the client to inhale and press inward and upward as you provide support with your other hand.
- Palpate the kidneys. To palpate the right kidney, support the right posterior flank with your left hand and place your right hand in the RUQ just below the costal margin at the MCL.
- Palpate the urinary bladder. Palpate for a distended bladder when the client's history or other findings warrant. Begin at the symphysis pubis and move upward and outward to estimate bladder borders.

Assessment of the Female Genitalia

External female genitalia

Inspection

- Inspect the Mons Pubis. Wash your hands and put on gloves. As you begin the examination, note the distribution of pubic hair. Also, be alert for signs of infestation.

- Observe and palpate inguinal lymph nodes. There should be no enlargement or swelling of the lymph nodes.

- Inspect the labia majora. Observe the labia majora and perineum for lesions, swelling, and excoriation.

- Inspect the labia minora, clitoris, urethral meatus, and vaginal opening. Use your gloved hand to separate the labia majora and inspect for lesions, excoriation, swelling, and/or discharge.

Palpation

- Palpate Bartholin's glands. If the client has labial swelling or a history of it, palpate Bartholin's glands for swelling, tenderness, and discharge. Place your index finger in the vaginal opening and your thumb on the labia majora. With a gentle pinching motion, palpate from the inferior portion of the posterior labia majora to the anterior portion.

- Palpate the urethra. If the client reports urethral symptoms or urethritis, or if you suspect inflammation of Skene's glands, insert your gloved index finger into the superior portion of the vagina and milk the urethra from the inside, pushing up and out.

Internal Female Genitalia

Inspection

- Inspect the size of the vaginal opening and the angle of the vagina. Insert your gloved index finger into the vagina, noting the size of the opening. Then attempt to touch the cervix. Next, while maintaining tension, gently pull the labia majora outward. Note hymenal configuration and transections.

- Inspect the vaginal musculature. Keep your index finger inserted in the client's vaginal opening. Ask the client to squeeze around your finger. Use your middle and index fingers to separate the labia minora. Ask the client to bear down.

- Inspect the cervix. With the speculum inserted in position to visualize the cervix, observe the cervical color, size, and position. Also, observe the surface and the appearance of the os. Look for discharge and lesions as well.

- Inspect the vagina. Unlock the speculum and slowly rotate and remove it. Inspect the vagina as you remove the speculum. Note the vaginal color, surface, consistency, and any discharge.

Assessment of the Male Genitalia

Penis

Inspection and Palpation

- Inspect the base of the penis and pubic hair. Sit on a stool with the client facing you and standing. Ask the client to raise his gown or drape. Note pubic hair growth pattern and any excoriation, erythema, or infestation at the base of the penis and within the pubic hair.

- Inspect the skin of the shaft. Observe for rashes, lesions, or lumps.

- Palpate the shaft. Palpate any abnormalities noted during the inspection. Also, note any hardened or tender areas.

- Inspect the foreskin. Observe the color, location, and integrity of the foreskin in uncircumcised men.

- Inspect the glans. Observe for size, shape, lesions, or redness.

- Palpate the urethral discharge. Gently squeeze the glans between your index finger and thumb.

Scrotum

Inspection

- Inspect the size, shape, and position. Ask the client to hold his penis out of the way. Observe for swelling, lumps, or bulges.

- Inspect the scrotal skin. Observe color, integrity, and lesions or rashes. To perform an accurate inspection, you must spread out the scrotal folds of the skin. Lift the scrotal sac to inspect the posterior skin.

Palpation

- Palpate the scrotal contents. Palpate each testis and epididymis between your thumb and first two fingers. Note size, shape, consistency, nodules, and tenderness.

Auscultation

- Continue examination of a scrotal mass by auscultating with a stethoscope. Normal findings are not expected. Bowel sounds may be auscultated over a hernia but will not be heard over a hydrocele.

Transillumination

- Transilluminate the scrotal contents. If an abnormal mass or swelling was noted in the scrotum, transillumination should be performed. Darken the room and shine a light from the back of the scrotum through the mass. Look for a red glow.

Inguinal area

Inspection

- Inspect for inguinal or femoral hernia. Inspect the inguinal and femoral areas for bulges. Ask the client to turn their head and cough or to bear down as if having a bowel movement, and continue to inspect the areas.

Palpation

- Palpate for inguinal hernia and inguinal nodes. Ask the client to shift his weight to the left for palpation of the right inguinal canal and vice versa. Place your right index finger into the client's right scrotum and press upward, invaginating the loose folds of skin. Palpate up the spermatic cord until you reach the triangular-shaped, slitlike opening of the external inguinal ring. Try to push your finger through the opening and, if possible, continue palpating up the inguinal canal.

- Palpate inguinal lymph nodes. If nodes are palpable, note size, consistency, mobility, or tenderness.

- Palpate for femoral hernia. Palpate on the front of the thigh in the femoral canal area. Ask the client to bear down or cough. Feel for bulges. Repeat on the opposite thigh.

- Inspect and palpate for scrotal hernia. Ask the client to lie down; note whether the bulge disappears. If the bulge remains, auscultate it for bowel sounds. Finally, gently palpate the mass and try to push it upward into the abdomen.

Assessment of the Anus, Rectum, Prostate

Anus and rectum

Inspection

- Inspect the perianal area. Spread the client's buttocks and inspect the anal opening and surrounding area.

- Inspect the sacrococcygeal area. Inspect this area for any signs of swelling, redness, dimpling, or hair.

Palpation

- Palpate the anus. Inform the client that you are going to perform the internal examination at this point. Lubricate your gloved index finger; ask the client to bear down. As the client bears down, place the pad of your index finger on the anal opening. When you feel the sphincter relax, insert your finger gently with the pad facing down.

- Palpate the rectum. Insert your finger further into the rectum as far as possible. Next, turn your hand clockwise. This allows palpation of as much rectal surface as possible. Note tenderness, irregularities, nodules, and hardness.

- Palpate the peritoneal cavity. This area may be palpated in men above the prostate gland in the area of the seminal vesicles on the anterior surface of the rectum. In women, this area

may be palpated on the anterior rectal surface in the area of the rectouterine pouch Note tenderness or nodules.

Prostate gland

Palpation

- In male clients, palpate the prostate. The prostate can be palpated on the anterior surface of the rectum by turning the hand fully counterclockwise so the pad of your index finger faces toward the client's umbilicus. Note the size, shape, and consistency of the prostate, and identify any nodules or tenderness.

- Inspect the stool. Withdraw your gloved finger. Inspect any fecal matter on your glove. Assess the color, and test the feces for occult blood. Provide the client with a towel to wipe the anorectal area.

Assessment of the Musculoskeletal System

Gait

Inspection

- **Observe gait.** Observe the client's gait as the client enters and walks around the room.

- Assess for the risk of falling backward in the older or handicapped client by performing the "nudge test". Stand behind the client and put your arms around the client while you gently nudge the sternum.

Temporomandibular joint

Inspection and Palpation

- Inspect and palpate the TMJ. Have the client sit, and put your index and middle fingers just anterior to the external ear opening. Ask the client to open the mouth as widely as possible; move the jaw from side to side; and protrude and retract the jaw.

- Test range of motion. Ask the client to open the mouth and move the jaw laterally against resistance. Next, as the client clenches the teeth, feel for the contraction of the temporal and masseter muscles to test the integrity of cranial nerve V.

Sternoclavicular joint

Inspection and Palpation

- With the client sitting, inspect the sternoclavicular joint for location in midline, color, swelling, and masses. Then palpate for tenderness or pain.

Assessment of Cervical, thoracic, lumbar spine

Inspection and **Palpation**

- Observe the cervical, thoracic, and lumbar curves from the side and then from behind. Have the client standing erect with the gown positioned to allow an adequate view of the spine. Observe for symmetry, noting differences in height of the shoulders, the iliac crests, and the buttock areas.

- Palpate the spinous processes and the paravertebral muscles on both sides of the spine for tenderness or pain.

- Test ROM of the cervical spine. Test ROM of the cervical spine by asking the client to touch the chin to the chest and to look up at the ceiling.

- Test ROM of the thoracic and lumbar spine. Ask the client to bend forward and touch the toes. Observe for symmetry of shoulders, scapula, and hips.

- Test for back and leg pain. If the client has low back pain that radiates down the back, perform Lasegue's test (straight leg raising) to check a herniated nucleus pulpous. Ask the client to lie flat and raise each relaxed leg independently to the point of pain. At the point of pain, dorsiflex the client's foot.

- Measure leg length. If you suspect the client has one leg longer than the other, measure them. Ask the client to lie down with their legs extended. With a tape, measure the distance between the anterior superior iliac spine and the medial malleolus, crossing the tape on the medial side.

Shoulders, arms, elbows

Inspection and **Palpation**

- Inspect and palpate shoulders and arms. With the client standing or sitting, inspect anteriorly and posteriorly symmetry, color, swelling, and masses. Palpate for tenderness, swelling, or heat.

- Test ROM. Ask the client to stand with both arms straight down at the sides. Nest, ask him to move the arms forward and then backward with elbows straight. Then have the client bring both hands together overhead, elbows straight, followed by moving both hands in front of the body past the midline with elbows straight.

- Inspect for size, shape, deformity, redness, or swelling. Inspect elbows in both flexed and extended positions.

- Test ROM. Ask the client to flex the elbow and bring the hand to the forehead, straighten the elbow, hold the arm out, turn the palm down, then turn the palm up.

Hands, wrists, fingers

Inspection and Palpation

- Inspect wrist size, shape, symmetry, color, and swelling. Then palpate for tenderness and nodules. Palpate the anatomic snuffbox (the hollow area on the back of the wrist at the base of the fully extended thumb.

- Test ROM. Ask the client to bend their wrist down and back. Next, have the client hold the wrist straight and move the hand outward and inward.

- Test for carpal tunnel syndrome. Perform Phalen's test. Ask the client to place the backs of both hands against each other while flexing the wrists 90 degrees downward. Have the client hold this position for 60 seconds

- Inspect size, shape, symmetry swelling, and color. Palpate the fingers from the distal end proximally, noting tenderness, swelling, bony prominences, nodules, or crepitus of each interphalangeal joint.

- Test ROM. Ask the client to spread the fingers apart, make a fist, bend the fingers down and then up, move the thumb away from other fingers, and touch the thumb to the base of the small finger.

Hips

Inspection and **Palpation**

- With the client standing, inspect the symmetry and shape of the hips. Palpate for stability, tenderness, and crepitus.

- Test ROM. With the client supine, ask the client to: Raise the extended leg; flex the knee up to the chest while keeping the other leg extended; move an extended leg away from the midline of the body as far as possible and then toward the midline of the body as far as possible. Bend the knee and turn the leg inward and then outward.

Knees

Inspection and Palpation

- With the client supine and then sitting with knees dangling, inspect for size, shape, symmetry, swelling, deformities, and alignment. Observe for quadricep muscle atrophy.

- Test for swelling. The bulge test helps detect a small amount of fluid in the knee. With the client in the supine position, use the ball of your hand firmly to stroke the medial side of the knee upward. three to four times, to displace any accumulated fluid. Then press on the lateral side of the knee and look for a bulge on the medial side of the knee.

- Perform the ballottement test. With the client in a supine position, firmly press your non-dominant thumb and index finger on each side of the patella. Then with your dominant fingers, push the patella down on the femur.

- Test ROM. Ask the client to bend each knee up toward the buttocks or back, straighten the knee, and walk normally.

- Test for pain and injury. With the client in the supine position, ask the client to flex one knee and hip. Then place your thumb and index finger of one hand on either side of the knee. Use your other hand to hold the heel of the foot up. Rotate the lower leg and foot laterally. Slowly extend the knee, noting pain or clicking.

Ankles and feet

Inspection and **Palpation**

- With the client sitting, standing, and walking, inspect position, alignment, shape, and skin.

- Palpate ankles and feet for tenderness, heat, swelling, and nodules. Palpate the toes from the distal end proximally, noting tenderness, swelling, boney prominences, nodules, or crepitus of each interphalangeal joint.

- Test ROM. Ask the client to point toes upward then downward, turn soles outward then inward, rotate foot outward then inward, turn toes under foot and then upward.

1. Assessment of the Neurologic System

Cranial nerves

Inspection

- Test CN I (olfactory). For all assessments of the cranial nerves, have the client sit in a comfortable position at your eye level. Ask the client to clear the nose to remove any mucus, then to close their eyes, occlude one nostril, and identify a scented object that you are holding.

- Test CN II (optic). Use the Snellen chart to assess vision in each eye. Ask the client to read a newspaper or magazine paragraph to assess near vision. Assess the visual fields of each eye by confrontation. Use an ophthalmoscope to view the retina and optic disc of each eye.

- Assess CN III (oculomotor), IV (trochlear), and VI (abducens). Inspect the margins of the eyelids of each eye. Assess extraocular movements. If nystagmus is noted, determine the direction of the fast and slow phases of movement. Assess pupillary response to light and accommodation in both eyes.

- Assess CN V (trigeminal). Test motor function. Ask the client to clench the teeth while you palpate the temporal and masseter muscles for contraction. Test sensory function. Tell the client: "I am going to touch your forehead, cheeks, and chin with the sharp or dull side of this safety pin or paper clip. Please close your eyes and tell me if you feel a sharp or dull sensation. also, tell me where you feel it."

- Test CN VII (facial). Test motor function. Ask the client to smile, frown and wrinkle the forehead, show teeth, puff out cheeks, purse lips, raise eyebrows, and close eyes tightly against resistance.

- Test CN VIII (acoustic/vestibulocochlear). Test the client's hearing ability in each ear and perform the Weber and Rinne tests to assess the cochlear (auditory) component of cranial nerve VIII.

- Test CN IX (glossopharyngeal) and X (vagus). Test motor function. Ask the client to open their mouth wide and say "ah" while you use a tongue depressor on the client's tongue. Test the gag reflex by touching the posterior pharynx with the tongue depressor.

- Test CN XI (spinal accessory). Ask the client to shrug the shoulders against resistance to assess the trapezius muscle. Ask the client to turn the head against resistance, first to the right and then to the left, to assess the sternocleidomastoid muscle.

- Test CN XII (hypoglossal). To assess the strength and mobility of the tongue, ask the client to protrude the tongue, move it to each side against the resistance of a tongue depressor, then put it back in the mouth.

Assessment of Motor and cerebellar systems

Inspection

- Assess the condition and movement of muscles. Assess the size and symmetry of all muscle groups. Assess the strength and tone of all muscle groups. Note any unusual involuntary movements such as fasciculations, tics, or tremors.

- Evaluate balance. To assess gait, ask the client to walk naturally across the room. Note posture, freedom of movement, symmetry, rhythm, and balance. Ask the client to walk in heel-to-toe fashion, next on the heels, then on the toes. Perform Romberg test. Ask the client to stand erect with arms at the side and feet together. Note any unsteadiness or swaying.

- Assess coordination. Demonstrate the finger-to-nose test to assess the accuracy of movements, then ask the client to extend and hold arms out to the side with eyes open. Next, say, "Touch the tip of your nose first with your right index finger, then with your left index finger.

Sensory systems

Inspection

- Assess light touch, pain, and temperature sensations. For each test, ask clients to close both eyes and tell you what they feel and where they feel it. Scatter stimuli over the distal and proximal parts of all extremities and the trunk to cover most of the dermatomes. To test the light touch sensation, use a wisp of cotton to touch the client. To test pain sensation, use

the blunt and sharp ends of a safety pin or paper clip. to test temperature sensation, use test tubes filled with hot and cold water.

- Test vibratory sensation. Strike a low-pitched tuning fork on the heel of your hand and hold the base on a bony surface of the fingers or big toe. Ask the client to indicate what he feels.

- Test sensitivity to position. Ask the client to close both eyes. Then move the client's toes or a finger up or down. Ask the client to tell you the direction it is moved.

- Assess tactile discrimination (fine touch). Remember that the client should have her eyes closed. To test stereognosis, place a familiar object such as a quarter, paper clip, or key in the client's hand and ask the client to identify it. To test point localization, briefly touch the client and ask the client to identify the points touched. to test graphesthesia, use a blunt instrument to write a number on the palm of the client's hand. Ask the client to identify the number.

Section 4: Investigations

In this section any investigation that has been conducted example laboratory, radiological studies and other investigations , must be included in the case study. This also help to find the aetiological factors of mental illness.

Section 5: Mental Status Examination

General Appearance and Behaviour

Patient's appearance, behaviour and manner relating to the examiner are assessed with particular attention paid to abnormalities.

In General Appearance and Behaviour the patient will be assessed for:

- ✓ General Appearance

- Grooming which includes body cleanliness and neatness; is the patient clean, neat/tidy or kempt? General self- care.
- Physical appearance assess approximate height, weight, and he looks like does he looks comfortable/uncomfortable, obese, emaciated
- Dressing; does he dress adequately, appropriately, report any peculiarities observed such as overdressing and underdressing.

- Facial expression;

✓ Attitude towards Examiner

- *Cooperation/guardedness/evasiveness/hostility/combativeness/haughtiness,*
- *Attentiveness,*
- *Appears interested/disinterested/apathetic,*
- *Any ingratiating behaviour,*

✓ Comprehension

- *Intact/impaired (partially/fully) assess whether he /she is confused*

✓ Gait and Posture

- *Normal or abnormal (way of sitting, standing, walking, lying)*

✓ Motor Activity

- *Increased/decreased,*
- *Excitement/stupor,*
- *Abnormal involuntary movements (AIMs) such as tics, tremors, akathisia,*
- *Restlessness/ill at ease,*
- *Catatonic signs example mannerisms, stereotypies, posturing, waxy flexibility, negativism, ambitendency, automatic obedience, stupor, echopraxia*

✓ Social Manner and non- verbal behaviour

- *Increased, decreased, or inappropriate behaviour, Eye contact (gaze aversion,staring vacantly, staring at the examiner, hesitant eye contact, or normal eye contact).*

✓ Rapport

- *Whether a working and empathic relationship can be established with the patient, should be mentioned.*

Speech

✓ Rate and Quantity

- *Whether speech is present or absent (mutism), If present, whether it is spontaneous, whether productivity is increased or decreased, Rate is rapid or slow (its appropriateness), Pressure of speech or poverty of speech.*

✓ Volume and Tone

- *Increased/decreased (its appropriateness),*

Low/high/normal pitch

✓ Flow and rhythm of speech

- *Smooth/hesitant, Blocking (sudden), Dysprosody, Stuttering/Stammering/Cluttering, Any accent, Circumstantiality, Tangentiality, Verbigeration, Stereotypies (verbal), Flight of ideas, Clang associations.*

Mood and Affect

- *The assessment of mood includes testing the quality of mood, which is assessed subjectively ('how do you feel') and objectively (by examination).*
- *The other components are stability of mood (over a period of time), reactivity of mood (variation in mood with stimuli), and persistence of mood (length of time the moodlasts).*
- *The affect is similarly described under quality of affect, range of affect (of emotional changes displayed*

Thought

✓ Stream and Form

- *Assess the continuity of thought ; Whether the thought processes are relevant to the questions asked; Any loosening of associations, tangentiality, circumstantiality, illogical thinking, perseveration, or verbigeration is noted.*

✓ Content

- *Assess any preoccupations; obsessions, Explore for delusions/ideas of persecution, reference, grandeur, love, jealousy (infidelity), guilt, nihilism, poverty, somatic (hypochondriacal) symptoms, hopelessness, helplessness, worthlessness, and suicidal ideation*.

Perception

- *Assess for hallucinations* ***eg you can test auditory hallucination by*** *asking the client/patient whether he/she hear sounds that commands him to harm other/or self* **,** *ask whether he/she sees/feel/test/smell something not normal*
- *It should be further enquired what was heard, in which part of the day was it morning/afternoon/evening or night?. Were they male or female voices, how interpreted and whether these are second person or third person hallucinations (i.e. whether the voices were addressing the patient or were discussing him in third person); also enquire about command (imperative) hallucinations (which give commands to the person).*
- *Enquire whether the hallucinations occurred during wakefulness, or were they occurring while going to sleep and/or occurring while getting up from sleep*

Cognition

✓ Consciousness

- *The intensity of stimulation needed to arouse the patient should be indicated to demonstrate the level of alertness, for example, by calling patient's name in a normal voice, calling in a loud voice, light touch on the arm, vigorous shaking of the arm, or painful stimulus.*
- *Grade the level of consciousness: conscious/ confusion/somnolence/clouding/delirium/stupor/coma.*
- *Any disturbance in the level of consciousness should ideally be rated on Glasgow Coma Scale, where a numeric value is given to the best response in each of the three categories (eye opening, verbal, motor).*

✓ Orientation

- *Whether the patient is well oriented to time (test by asking the time, date, day, month, year, season, and the time spent in hospital), place (test by asking the present location, building, city, and country) and person (test by asking his own name, and whether he can identify people around him and their role in that setting). Disorientation in time usually precedes disorientation in place and person*

✓ Attention

- *Is the attention easily aroused and sustained; Ask the patient to repeat digits forwards and backwards (digit span test; digit forward and backward test), one at a time (for example, patient may be able to repeat 5 digits forward and 3 digits backwards).*
- *Start with two digit numbers increasing gradually up to eight digit numbers or till failure occurs on three consecutive occasions.*

✓ Concentration

- *Can the patient concentrate; Is he easily distractible; Ask to subtract serial sevens from hundred (100-7 test), or serial threes from fi fty (50-3 test), or to count backwards from 20, or enumerate the names of the months (or days of the week) in the reverse order.*
- *Note down the answers and the time taken to perform the tests.*

✓ Memory

✓ *Immediate Retention and Recall (IR and R)*

- *Use the digit span test to assess the immediate memory; digit forwards and digit backwards subtests*

a) *Recent Memory*

Ask how did the patient come to the room/hospital; what he ate for dinner the day before or for breakfast the same morning. Give an address to be memorised and ask it to be recalled 15 minutes later or at the end of the interview.

b) Remote Memory

- *Ask for the date and place of marriage, name and birthdays of children, any other relevant questions from the person's past. Note any amnesia (anterograde/retro grade), or confabulation, if present.*

✓ Intelligence

- *Ask questions about general information, keeping in mind the patient's educational and social background, his experiences and interests, for example, ask about the current and the past prime ministers and presidents of India, the capital of India, and the name of the various states.*
- *Test for reading and writing; Use simple tests of calculation.*

✓ Abstract thinking

- Abstract thinking testing assesses patient's concept formation.

- The methods used are:

a*) Proverb Testing: The meaning of simple proverbs (usually three) should be asked.*

b) Similarities (and also the differences) bet ween familiar objects should be asked, such as: table/ chair; banana/orange; dog/lion; eye/ear.

Insight

- *Ask the patient's attitude towards his present state; whether there is an illness or not; if yes, which kind of illness (physical, psychiatric or both); is any treatment needed; is there hope for recovery; what is the cause of illness. Depending on the patient's responses insight can be graded on a six-point scale*

Judgement

- *Test judgement is assessed by asking the patient what he would do in certain test situations, such as 'a house on fi re', or 'a man lying on the road', or 'a sealed, stamped, addressed envelope lying on a street'.*
- *Judgement is rated as Good/Intact/Normal or Poor/Impaired/Abnormal*

Formulation

*After a comprehensive psychiatric assessment, a diagnostic formulation summarises the detailed positive (and important negative) information regarding the patient under the focus of care, before listing diagnosis, prognostic factors, and a management plan***.**

a) **Diagnostic formulation**

Section 6; Nursing Management

- Disease profile
- Nursing care plan (management plan) refer appendix 4

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APPENDICES

Appendix 1; Cover Page

ELCT –SD ILEMBULA INSTITUTEOF HEALTH AND ALLIED SCIENCES.

CASE STUDY OF A PATIET WITH

……..

STUDENT NAME:…… SUPERVISER: ……

STUDENT REGISTRATION NUMBER: ……

P.O.BOX 1, ILEMBULA
NJOMBE

Appendix 2 ; Checklist of Head To Toe Assessment

Patient's full name_____

Clinician's full name:_____

Date and time conducted:_____

II. Head/Face

- ☐ Distribution/condition of hair
- ☐ Scalp: no bumps, nits, lesions
- ☐ Palpate skill for tenderness
- ☐ Symmetrical facial movements
- ☐ Sharp and dull sensation on face intact

Notes:

III. Eyes

- ☐ Symmetrical
- ☐ Eyebrow & eyelash distribution
- ☐ Check conjunctiva, sclera, cornea
- ☐ PERRLA
- ☐ Six cardinal positions
- ☐ Snellen Chart: _____

Notes:

IV. Ears

- ☐ Inspect/palpate auricle
- ☐ Inside ear/tympanic membrane
- ☐ Weber's test
- ☐ Rinne test
- ☐ Whisper test

Notes:

V. Nose

- ☐ Palpate nose/symmetry check
- ☐ Check septum and inside nostrils
- ☐ Patency of nares (breathe through each nostril)
- ☐ Intact smell
- ☐ Palpate sinuses

Notes:

VI. Mouth/Throat

- ☐ Lips (moistness & color)
- ☐ Teeth & gums
- ☐ Buccal mucosa & palate
- ☐ Examine tongue * Inspect uvula & tonsils
- ☐ Palpate jaw joint

Notes:

VII. Neck/Shoulders

- ☐ Neck range of motion
- ☐ Shoulder shrug w/resistance
- ☐ Lymph nodes
- ☐ Palpate neck and trachea
- ☐ Check for JVD

Notes:

IX. Lungs/Thorax

- ☐ Lung auscultation
- ☐ Resp. exclusion: _____
- ☐ Palpate thorax
- ☐ Spinal curvature
- ☐ Coughing? _____

Notes:

X. Circulatory System

- ☐ Carotid & temporal artery palpation
- ☐ Heart auscultation

Notes:

XI. Gastrointestinal

- ☐ Abdominal inspection
- ☐ Auscultation for bowel sounds
- ☐ Abdomen palpation
- ☐ Problems with bowel/bladder?

Notes:

XII. Arms/Hands

- ☐ ROM and strength
- ☐ Arm pulses (brachial and radial)
- ☐ Cap refill
- ☐ Skin turgor
- ☐ Sharp and dull sensation

Notes:

XIII. Legs/Feet

- ☐ ROM and strength
- ☐ Cap refill
- ☐ Leg pulses
- ☐ Sharp and dull sensation
- ☐ Assess gait

Notes:

XIV. Genitourinary

- ☐ Pubic hair check
- ☐ Tenderness, lumps, lesions

Notes:

XV. Breast

- ☐ Palpate breasts

Notes:

Additional Notes:

Appendix 03 Mental Status Exam Checklist

Mental Status Exam Template

Patient Information			
First Name	Last Name	Date of Birth	Patient ID

Mental Status Examination

Observations

Appearance	☐ Neat	☐ Disheveled	☐ Inappropriate	☐ Bizarre	☐ Other:
Speech	☐ Normal	☐ Tangential	☐ Pressured	☐ Impoverished	☐ Other:
Eye Contact	☐ Normal	☐ Intense	☐ Avoidant	☐ Other:	
Motor Activity	☐ Normal	☐ Restless	☐ Tics	☐ Slowed	☐ Other:
Affect	☐ Full	☐ Constricted	☐ Flat	☐ Labile	☐ Other:

Comments:

Mood

☐ Euthymic ☐ Anxious ☐ Angry ☐ Depressed ☐ Euphoric ☐ Irritable ☐ Other:

Comments:

Cognition

Orientation Impairment	☐ None	☐ Place	☐ Object	☐ Person	☐ Time
Memory Impairment	☐ None	☐ Short-term	☐ Long-term	☐ Other:	
Attention	☐ Normal	☐ Distracted	☐ Other:		

Comments:

Perception

Hallucinations	☐ None	☐ Auditory	☐ Visual	☐ Other:
Other	☐ None	☐ Derealization	☐ Depersonalization	

Comments:

Thoughts

Suicidality	☐ None	☐ Ideation	☐ Plan	☐ Intent	☐ Self-harm
Homicidality	☐ None	☐ Aggressive	☐ Intent	☐ Plan	
Delusions	☐ None	☐ Grandiose	☐ Paranoid	☐ Religious	☐ Other:

Comments:

Behavior

☐ Cooperative ☐ Guarded ☐ Hyperactive ☐ Agitated ☐ Paranoid ☐ Stereotyped ☐ Aggressive
☐ Bizarre ☐ Withdrawn ☐ Other:

Comments:

Insight	Comments:	Judgment	Comments:
☐ Good ☐ Fair ☐ Poor		☐ Good ☐ Fair ☐ Poor	

Clinician Name	Clinician Designation	Clinician Signature	Date

Appendix 04 Nursing Care Plane Template

ASSESSMENT	NURSING DIAGNOSIS	EXPECTED OUTCOME	NURSING INTERVETIONS	RATIONALE	EVALUATION