Tikrit University

College of Nursing

Basic Nursing Sciences

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Health assessment and physical examination

(General Survey)

by:

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General Survey- Objective Data

- Is a study of the whole person, covering the general health state & any obvious physical characteristics.
- Is an introduction for the PE
- Gives an overall impression of the person
- **Consists of Four main components :**
    1. Physical Appearance
    2. Body Structure
    3. Mobility
    4. Behavior

General Survey

1. Physical Appearance:

- **Age:** person appears his or her stated age.
- **Sex:** sexual development is appropriate for gender and age.
- **Level of Consciousness:** alert, oriented, attends to questions & responds appropriately.

-Abnormal Findings: confused, drowsy, lethargic

- **Skin Color:** color tone is even, skin intact

-Abnormal Findings: pallor, cyanosis, jaundice

- **Facial Features:** are symmetric with movement

2. Body Structure

- **Stature:** the height appears within normal range for age

-Abnormalities: Gigantism, Dwarfism

- **Nutrition:** weight appears within normal range for height & body build

-Abnormalities: simple obesity, truncal obesity, or gynoid

- **Symmetry:** body parts look equal bilaterally

-Abnormalities: Unilateral atrophy or hypertrophy

- **Posture:** stand comfortably erect

-Abnormalities: rigid spine & neck, moves as one unit

- **Position:** sit comfortably in a chair or bed

-Abnormalities: tripod- leaning forward

3. Mobility

- **Gait:** foot placement is accurate, Walk is smooth, even, balanced, symmetric arm swing are present.
- **Range of Motion:** full mobility for each joint, movement is smooth, coordinated, deliberate, no involuntary movement.

- Abnormalities: limited joint range of motion, paralysis, jerky movement, uncoordinated, tremors.

4. Behavior

- **Facial Expression:** maintains eye contact, expression are appropriate to the situation.

-Abnormalities: Smiling when anxious, depressed, sad, distressed, angry.

- **Mood and Affect:** comfortable & cooperative

  -Abnormalities: hostile, crying, suspicious

- **Speech:** Articulation (ability to form words)
- **Dress:** appropriate to the climate, clean & fit
- **Personal Hygiene:** clean, hair is groomed & brushed.

II- Assessment Techniques & safety in the Clinical Setting

Assessment Techniques

- Health History: **Subjective** Data (symptoms)
- Physical Examination: **Objective** Data (signs)

- The physical examination requires that the examiner develop technical skills (tools to gather the data) and a knowledge base.
- You will use your senses: sight, smell, touch and hearing to gather data.
- The skills requisite for the physical examination are: **Inspection, Palpation, Percussion, and Auscultation**.

A) Inspection

- Is defined as a concentrated watching.
- It is close, careful scrutiny, first of the individual as a whole and then of each body system.
- Begins the moment you first meet the person and develop a general survey.
- Is the first technique used in physical examination (PE)
- Requires good lightening, adequate exposure, and occasional use of instruments (e.g. otoscope, penlight)
- Requires comparison between the right & left sides of the body. The two sides are nearly symmetric.

B) Palpation

- Palpation applies sense of touch to assess:
- Texture, temperature, moisture, organ location and size, swelling, vibration or pulsation, rigidity or spasticity, presence of lumps or masses, and presence of tenderness or pain.

❖ **Different parts of the hand are used to assess different factors:**

- **Fingertips:** skin texture, swelling, pulsation, lumps.
- **Dorsal (back) of hand:** temp
- **Grasping action of fingers and thumb:** position, shape, and consistency of an organ
- **Base of fingers** (metacarpophalngeal joints) or **ulnar surface of the hand:** Vibration
- Use slow motion and check for symmetry

- Use calm gentle approach
- Keep fingernails short
- Wash & warm your hands
- Identify any tender area and palpate it last
- Stop palpating if the patient complain from pain
- Start with light palpation to gain trust and to detect surface characteristics, then perform deeper palpation.

– With **deep** palpation use an intermittent palpation rather than a long one.

- Use relaxation techniques (e.g., deep breathing, imagery).
- Avoid any situation in which deep palpation could cause internal injury or pain.
- **Bimanual** palpation requires the use of both hand to capture an organ such as the uterus and kidney.

C) Percussion

- Is tapping the persons skin with short, sharp strokes to assess underlying structures.
- The strokes producing palpable vibrations & sound waves.
- Determines location, size, shape of organs, & density of the underlying organ.

➢ May elicit pain & tenderness when the assessed area is inflamed (e.g., Sinusitis)

- Detects density of underlying structure , i.e., fluid-filled, air-filled, or solid tissue.
- May detect an abnormal masses when they are not deeper than 5 cm.
- **Two types:**
    - **Direct Percussion:** the striking hand contacts the skin. (e.g., assessing sinuses)
    - **Indirect Percussion:** involves both hands.
    - The striking hand contacts the stationary hand which is fixed in the person's skin
    - In the indirect method, one finger (middle) acts as **'hammer**' while the finger (middle) of other hand acts as **striking surface**.

- **Percussion Sounds:**

- **Resonance**- Over normal lungs
- **Hyper-resonance**- Abnormal in adult, over lungs with increased amount of air: COPD lung, & emphysema.
- **Tympany**- over air-filled bowel; stomach, intestine- (musical or drum-like)
- **Dullness**- over liver or spleen (dense area)
- **Flatness**- muscle & bone (no air is present, very dense, over thigh muscle, bone or tumor).

Percussion sound depends on:

- The nature of underlying structure
- Thickness of body wall
- Correctness of the technique

D) Auscultation

- Is listening to sounds produced by the body, such as heart, lung, abdomen.
- **Sounds:**
  - **Audible**: Heard with unassisted ears
  - **Auscultatory**: Heard with stethoscope

e.g., 'audible' wheezes can be heard just by standing next to person; 'auscultatory' wheezes can only be heard with a stethoscope.

➢ **When using the stethoscope:**

- Place it on bare skin, not over clothing
- Have a quiet environment
- Use the diaphragm and the bell of the stethoscope correctly.
- **Diaphragm:** <u>for high pitched sounds</u> such as breath, bowel, & normal heart sounds.
- **Bell:** <u>is for soft low pitched sounds</u> such as abnormal heart sounds or murmurs.

The Clinical Setting

The examination room should be:

- Warm & comfortable
- Quiet & Private
- Good lighting
- Bedside stand or table for equipment
- Position the examination table so that both sides of the person are easily accessible.

The Equipment

- Platform scale with height attachment
- Skinfold calaipers
- Sphygmomanometer, Stethoscope, thermometer
- Penlight
- Otoscope / Ophthalmoscope
- Tuning fork
- Tongue depressor
- Vision screener
- Flexible tape measure
- Reflex hummer
- Sharp object
- Cotton balls
- Clean cloves
- Pulse oximeter
- Nasal speculum

A safer Environment

- Monitor the cleanliness of your equipments
- Wash your hands to decrease risk of microorganism transition
  - Before and after every physical patient encounter
  - After contact with blood, body fluids, secretions, and excretions
  - After contact with any contaminated with body fluids
  - After removing gloves
- Wear gloves when the potential exists for contact with any body fluids (e.g., blood, open skin lesion, mucous membrane, body fluids)