CH 23: Assessing Health Status

Page 391

Objectives: Theory

1. Practice assessment skills used in various situation.
2. Differentiate among the techniques used during nursing physical examinations
3. Restate methods for gathering information for a comprehensive database for a patient

Objectives: Clinical practice

1. Examine the patients psychosocial and physical functioning by gathering information in an organized way.
2. Practice basic physical examinations on diverse patient populations
3. Use developmentally appropriate techniques to perform a visual acuity test on a patient
4. Formulate focused assessments for four major systems of cardiovascular, respiratory, gastrointestinal, an neurologic.
5. Design a diverse and developmentally age-appropriate educational program for cancer health promotion
6. Educate patients about the recommendations for periodic diagnostic testing
7. Organize appropriate equipment to assist with a medical examination by positioning and draping the patient

Assessment is a vitally important nursing function. It is a continual process for determining the patients condition and progress

Page 391

Data collection and assessment

page 391

- You are expected to assess lung sounds properly, identify abnormal heart sounds, determine when something might be wrong in the abdomen, monitor circulatory status, detect neurologic changes, note skin problems, and recognize signs and symptoms of problems in any body system.
- Nurses are with patients more than other health care providers are, and they must monitor for **subtle changes in condition.**
- Strong assessment skills can quickly identify new signs and symptoms that indicated complications of an illness or adverse side effects of medical therapy.

Assessment (Data collection) pg 392

- This assessment usually includes gathering a history and demographic data and performing a brief physical examination.
- In addition to the physical examination, you are also expected to obtain historical data concerning the patients past and present state of health
- The health history and psychosocial data provide pertinent information about the patient to assist in administering daily care.

Psychosocial and cultural assessment pg 392

- To care for the whole patient rather than just tend to an area of physical need, you must be aware of how the illness is affecting the patient's life. (Ex. If a mother is worried about the care of her small children at home, her energy will be focused on them rather than on healing)
- Assess for cultural preferences, gender identity, social determinants of health, and health beliefs so that and individualized plan of care can be formulated.
- Cultural assessment include asking the patient and family about preferences for food, bathing, and personal care; what they think about their illness and treatment; and who should be consulted about decisions.
- Lifespan consideration box pg 393- older adult
- Cultural condiseratins box pg 394

Physical assessment

page 392

- ✓ When patients are first encountered, observe their behavior and appearance to begin your assessment of their health status.
- ✓ It is essential to ask the right questions and measure various body functions.
- ✓ The assessment thus provides a complete picture of physiologic functioning.
- ✓ **We combine verbal interview with physical assessment and observation.**
- ✓ **Box 23.1- patient interview guide pg392- 393**
- ✓ Physical examination technique: information is obtained by using the senses: sight, hearing, smell, and touch. The most helpful of these senses is sight, closely followed by touch.

Inspection and observations

pg 396

- When assessing the patients physiologic condition, use inspection to make observations about the patients general appearance, contours of the body, skin tone and color, rashes, scars, and lesions (tissue damage or abnormality), deformities or extremity weakness, characteristic of movements, and respirations.
- Think critically box pg 396

Palpation

pg 396

- Palpation involves using the hands to feel various parts of the body.
- Palpation can be used to detect the size, shape, and position of parts of the body and the texture, temperature, and moisture of the skin.
- Palpation is used to ascertain:
- **Force of pulses**
- **Muscles spasms or rigidity**
- **Pain, swelling, or growth**
- **Any restriction in movement of a body part**
- **Skin temperature, turgor (elasticity) and edema (fluid in the tissues)**
- The pads of the fingers are used to palate the size, position, and consistency of various structures, such as lymph nodes and breast tissue.
- The palm of the hand is used to detect vibrations or tremors (involuntary fine movement of the body or limbs) and the thumb and index finger are used to check skin turgor, joint position, and the firmness of muscle and other tissues.

Palpation continued page 396

- The pads of the fingers are used in light palpation, and pressure is exerted to indent the skin about 1-2cm.
- Deep palpation depresses the skin about 4-5cm and can be done with both hands.
- When palpating watch the patients face for signs of discomfort adn discontinue if pain occurs.
- Fig 23.1 pg 396

Percussion

page 396

- **Percussion supplies other information about structures of the body.**
- It involves light, quick tapping on the body surface to produce sounds.
- Variations in the sounds reflect the characteristics of the organs or structures below the surface.
- Percussion is used primarily used over the chest and abdomen to determine the size, location, and density of organs that lie within.
- The most common type of percussion consist of striking the middle finger of one hand with the index or middle finger of the other hand. When tapping DO NOT remove the forearm; all the force is generated by a quick snap of the wrist
- Fig 23.2 page 396
- The tapping finger makes a quick contact with the other hand, and after two or three taps in one location, the hands are moved to another area.
- Different sounds are emitted as the examiner moves from one resonant area to a less or more resonant one.
- The sounds vary in their intensity, pitch, and duration, depending on the presence of underlying air, fluid, or a solid organ..

Auscultation

page 396-397

- **Auscultation is the process of listening with the aid of the stethoscope to sounds produced in the body.**
- It is particularly valuable in hearing sounds produced in the heart, lungs, and abdomen.
- When listening to the lungs, use the diaphragm of the stethoscope; heart valve sounds are best assessed through the bell of the stethoscope placed lightly on the chest wall.
- The diaphragm is used to detect high-pitched sounds: breath, bowel, and normal heart sounds
- The diaphragm (Larger, flat surface) is held firmly against the skin, and it may leave a ring on the skin when lifted.
- The bell piece (smaller cupped piece) is used to detect low-pitched sounds such as abnormal heart sounds made by the valves. It is held lightly against the skin; pressing harder obliterates the low-pitched sounds.
- Clinical goldmine box pg 397

Olfaction

page 397

- **Olfaction is the sense of smell.**
- The nose is used to identify a characteristic smells associated with specific problems
- A fruity odor to the breath can indicated diabetic acidosis; alcohol on the breath can provide a clue to the patient's lethargy or irrationality.
- Foul mouth odor may indicate periodontal disease or poor oral hygiene.
- A foul or sweet odor coming from under a cast or a wound indicates infection.
- A foul odor in the female genital area may indicate a vaginal infection.

Basic Physical Examination

page 397

- **Height and weight:**
- A basic nursing function is to weigh and measure the patient.
- Weight is measured consistently with or without shoes, depending on the practice setting.
- Fig 23.3 pg 397
- An infant is weight on an infant scale. **Never leave an infant unattended on the scale.**
- Height is measured from the sole of the foot to the crown on the head. A vertical measuring rod is generally used with the patients standing erect and looking straight ahead.
- Shoes should NOT be worn by the patient when height is measured.
- The most common device used to measure adults and older children is the height rod attached to the standing scale.
- Infants and children younger than 3 years of age are measured in the supine position with the legs fully extended.

Basic Physical Examination

page 398

- **Vital Sign measurement:**

- Vital signs should be measured at the time of the physical examination.
- Blood pressure should be measured on both arms after the patient has been quietly sitting or lying down for at least 5 minutes.
- Clinical goldmine box page 398
- If blood pressure is abnormal, it should be measured on both arms and with the patient in a standing position as well.
- NEVER take the blood pressure on the arm containing a dialysis shunt, IV site, or on the side where a mastectomy and lymph node dissection have occurred.
- Think critically box page 399
- Clinical goldmine box pg 399

Review of body systems

page 399

- **Head and neck:**
- Assess the patient's general appearance, the color and tone of the skin and its condition, the appearance of the eyes, and the condition of the hair.
- Does the nose seem congested? Is there drainage? Do teeth appear clean? Does the patient seem to have difficulty hearing? Are the pupils equal in size? Do the eyes move in unison? Are there any extra movements of the eyes or eyelids? Are the corneas and lens clear, or is there opacity? (hazy or cloudy) is the patient alert and oriented? Does thinking seem logical? Does the neck appear without lumps? Is the neck positioned midline to the head? Does neck movement appear complete and without pain or stiffness?

Review of the body system

page 399

- **Chest, heart, and lungs:**
- **The chest should rise and fall with respiration symmetrically on both sides of the body.**
- Inspect the spine form the rear and the side. It should be midline with gentle concave and convex curves when viewed laterally.
- The shoulders should appear to be at equal height. Note whether lordosis (exaggerated lumbar curve- mainly seen in the elderly), kyphosis (increased curve in the thoracic area) or scoliosis (pronounced lateral curvature of the spine) is present.
- Inspect the anterior chest to see if there is a noticeable point of maximal impulse (PMI) of the heart. It will be located at or close to the fifth intercostal space and the midclavicular line. Place the diaphragm of the stethoscope over this area and listen for the heart sounds S1 and S2. **S1 is the "lub" sound and S2 is the "dub" sound.**
- **S1 is the LOUDEST at the apex of the heart in the mitral area.**
- **S2 is softer at this location and can be heard more intensely over the aortic area.**
- **Fig 23.8 page 400**

Review of the body systems page page 401

- Lung sounds are auscultated using the diaphragm of the stethoscope. The sounds are created by air movement through passageways of varying diameter and length.
- When auscultation is done over the upper area of the chest over the bronchi, the sounds are harsh and loud and are shorter on inspiration than expiration. There is a pause between the two sounds
- Bronchovesicular sounds are those heard over the central chest or back. Normally they are equal in length during inspiration and expiration and have no pause between them. They are medium in tonality and loudness.
- Vesicular sounds are the soft, rustling sounds heard in the periphery of the lung fields. They are longer on inspiration than expiration, and there in no pause between them.
- **Adventitious sounds are abnormal lung sounds**
- Fig 23.9 page 401.
- Table 23.1 abnormal lung sounds pg 401
- Fig 23.10 page 401
- **Perform auscultation on initial assessment and once per shift for all patients who are on bed rest, who a respiratory problem or who are at risk for a respiratory problem.**

Review of the body systems page

- **Skin and extremities:**
- The skin is inspected for any rash or lesion, and the assessment frequently includes the Braden scale for predicting pressure score risk.
- Table 23.2 page 403
- Check turgor by gently pinching up a bit of skin on the arm or over the sternum. If the skin is slow to return to a flat position the patient is most likely dehydrated. If the skin returns to the original position in less than 3 seconds, the turgor can be described as "brisk" or "elastic".
- Check the nails for discoloration or abnormal appearance (cubbing). Abnormally shaped fingertips may indicate a cardiopulmonary problem. (chronic hypoxia)
- Check capillary refill time by observing the color of the nail bed and then compressing the nail bed with the thumbnail or the distal end of a capped pen. Release the pressure and note how quickly the color return to the nail bed. If the color returns slowly, check again and count the seconds to estimate the number or seconds it takes for the color to return. **Expected refill time is less than 3 seconds.**
- Lifespan consideration box 403

Review of the body systems

page 402-403

- Compare peripheral pulses bilaterally. It is most important to check the dorsalis pedis pulse because it is an indication of the quality of circulation in the lower extremities.
- Assess for generalized edema by checking for weight gain over a short period of time. Ask about shoe and ring tightness and sock patterns left on the ankles when socks are removed. Look for eye (periorbital edema) and hand puffiness and abdominal fullness. To check for dependent edema, press the fingers into the tissue over the tibia just above the ankle. If an indentation remains**, pitting edema** is present.
- To describe edema, you can use the terms taut, tight, puffy, indented, or pitting. If pitting is present, it is classified according to depth and "rebound time" (time it takes to return to baseline appearance) from 1+ to 4+, in 2-mm increments as follows: 1+ equals 2 mm-indentation with immediate rebound; 2+ equals 4mm indentation with rebound of 15 seconds or less; 3+ equals 6-mm indentation with rebound 30 seconds or less; 4+ equals 8-mm indentation with rebound time greater than 30 seconds.
- Fig 23.11 page403

Review of the body systems page 404

- **The abdomen:**
- Assess the bowel sounds on admission and once per shift for all patients.
- Bowel sounds are produced by the contractions of the small and large intestine. They are wavelike clicks and gurgles that occur from 5 to 30 times a minute. They are particularly active after eating; between meals, it is normal to hear only a few sounds.
- **Bowel sounds are described as hyperactive if they are very frequent or hypoactive if there are long periods of silence, and absent if no sound is heard for 2-5 minut3ed in any of the four quadrants.**
- Clinical goldmine box page 404
- Inspect, auscultate, percussion, palpate.
- Fig 23.12
- After auscultating and percussing, gently palpate each quadrant of the abdomen looking for areas of tenderness, pain and abnormal masses.
- If no sounds are heard on quadrants place patient on NPO (nothing to eat/drink by mouth) and notify MD.

Review of the body systems

page 404

- **Genitalia, anus, and rectum:**
- Unless the patient has a specific complaint in these areas, the nurse does not visually assess them. However, they may be assessed when bathing the patient, performing perineal care, or assisting with toileting. Ask the patient about any problems or concerns with these areas.
- Box 23.7 page 407

Data analysis/problem identification (nursing diagnosis)

page 404

- Problem statements are formulated or chosen depending on the problems discovered during the assessment. The data are analyzed, sorted, and clustered and the problems are identified.

Planning

page 404

- Generate solutions:
- Appropriate goals or expected outcomes are written for each problem statement identified. Priorities of care are set based on the most urgent needs of each assigned patient. Then, a work organization plan that incorporated all the task and assessments that need to be completed during the shift is created.

Implementation

page 404

- Take action:
- Assessment of patients involves interviewing and gathering a history, performing the physical examination, or assisting the primary care provider while the physical examination is being performed.
- In many instances, a nursing assessment of the areas of basic need is more appropriate than a total assessment. A systematic way to perform such an assessment is to use the acronym RNS HOPE. **R**est and activity. **N**utrition, fluids, and electrolytes. **S**afety and security. **H**ygiene and grooming. **O**xygenation and circulation needs. **P**sychosocial and learning. **E**limination.
- Box 23.6 page 405.
- Information gathered from this assessment is then analyzed, and a nursing care plan is prepared using the nursing process.
- Each patient should also be assessed at the beginning of each shift or shortly thereafter. This is a quick head to toe assessment to enable the nurse to establish priorities of care and organize the work for the shift.

Positioning and draping

page 408

- Most examinations begin with the patient in a gown, seated on the end of the examination table with a drape over the lap and legs.
- The primary purpose of draping the patient is to prevent unnecessary exposure of the body during examination.
- A patient who feels exposed and embarrassed will be tense, restless, and less able to cooperate. Proper draping contributes to the patients' feelings of being cared for, and it promotes relaxation.
- Lifespan consideration box page 408

Special focused assessment

page 411

- The neurologic check is performed at regular intervals on patients who have experienced a head injury or who have had brain surgery.
- It is done for any patient at risk of increasing intracranial pressure.
- A decrease in LOC (level of consciousness) is an indicator or neurologic deterioration.
- The pupil size is measured under normal light conditions. Pupils are normally round and equal in size. A flashlight is used to make the pupils constrict. They should constrict briskly when stimulated by the light. Both pupils should get smaller when either eye is stimulated by the light; this is called **consensual reflex.**
- Pupils also constrict when looking at a near object and then dilate when viewing a far object; this is called **accommodation.**
- Normal findings are often documented using the acronym **PERRLA**. **P**upils **E**qual, **R**ound, and **R**eactive to **L**ight and **A**ccommodation.
- Eye muscles are tested by checking extraocular movements. Ask the patient to track your finger or an object as it is moved to six different positions. They eyes normally move in a coordinated manner. Absence of movement or irregular movement may indicate cranial nerve damage or neurologic problem

Special focused assessment

page 412

- The Glasgow Coma Scale is used in most hospitals to score the neurologic examination for patients with level of consciousness. It provides a baseline against which changes can be evaluated.
- Take vital signs at the time of the neurologic check because diseases that increase intracranial pressure can affect the vitals signs, although such changes often do not occur until late, when circulation to the brain has been impaired.
- Table 23.3 page 412

Key points

page 413

- Nurses are expected to perform a basic physical assessment.
- Time and practice will improve assessment skills.
- One of the most important nursing roles is assessing ill patients for signs of complications.
- Data collection is a vital part of a physical assessment, and it requires a comprehensive interview.
- A holistic assessment require psychosocial, spiritual, and cultural data
- Auscultation percussion, palpation, and olfaction are used as methods of assessment.
- Auscultation of the lungs and heart must be done carefully and thoroughly
- They physical assessment provides an excellent patient education opportunity about preventative health care.
- A neurologic check is often performed by nurses every few hours on patients at risk of increasing intracranial pressure.
- The Glasgow Coma Scale is used to score the neurologic examination and to quantify the patient's neurologic condition.