Health Assessment

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Health assessment is a systematic, deliberative and interactive process by which nurses use critical thinking to collect, validate, analyze and synthesize the collected information in order to make judgment about the health status and life processes of individuals, families and communities.

Nursing Assessment: Nursing assessment is defined as “the systematic collection of all data and information relevant to the care of patients, their problems, and needs”. Components of the nursing assessment include nursing history, physical examination, review of other sources of assessment data (such as the client's family, other members of the health care team, and the client's record), and analysis and synthesis of data collected.

Purpose of health assessment

1. Health assessments provide benefits for all employees who are interested in understanding their own health and health risks
2. Establish data base assist in order to make nursing judgment
3. Obtain data that will help the nurse in nursing diagnosis and plan patient care
4. To evaluate appropriate nursing intervention
5. Collect data help nurse to know any deviation from normal and discover problems and factors that place pt. for health problems
6. Holistic data collection
7. Assess how health status affect family, daily activity and community

**Principles**

In planning and performing health assessment, the nurse needs to consider the following:

1. An accurate and timely health assessment provides foundation for nursing care and intervention.
2. A comprehensive assessment incorporates information about a client’s physiologic, psychosocial, spiritual health, cultural and environmental factors as well as client’s developmental status.
3. The health assessment process should include data collection, documentation and evaluation of the client’s health status and responses to health problems and intervention.
4. All documentation should be objective, accurate, clear, concise, specific and current.
5. Health assessment is practiced in all healthcare settings whenever there is nurse-client interaction.
6. Information gathered from health assessment should be communicated to other health care professionals in order to
facilitate collaborative management of clients and for continuity of care.

7. Client’s confidentiality should be kept.

**Responsibilities of the nurse**

A-Considerations In Preparing A Patient For A Physical Assessment

a. Establish a Positive Nurse/Patient Rapport. This relationship will decrease the stress the patient may have in anticipation of what is about to be done to him.

- First step in health assessment is building positive communication

- Type of communication are verbal and non verbal communication (body language or gestures)

- Choice suitable time ,environment and clear language are essential principle of communication

- Obtain an Informed, Verbal Consent for the Assessment. The chief source of data is usually the patient unless the patient is too ill, too young, or too confused to communicate clearly. Patients often appreciate detailed concern for their problems and may even enjoy the attention they receive.
b. Explain the Purpose for the Physical Assessment. The purpose of the nursing assessment is to gather information about the patient's health so that you can plan individualized care for that patient. All other steps in the nursing process depend on the collection of relevant, descriptive data. The data must be factual, not interpretive.

c. Ensure Confidentiality of All Data. If possible, choose a private place where others cannot overhear or see the patient. Explain what information is needed and how it will be used. It is also important to convey where the data will be recorded and who will see it. In some situations, you should explain to the patient his rights to privileged communication with health care providers.

d. Provide Privacy From Unnecessary Exposure. Assure as much privacy as possible by using drapes appropriately and closing doors.

e. Communicate Special Instructions to the Patient. As you proceed with the examination, inform the patient of what you intend to do and how he can help, especially when you anticipate possible embarrassment or discomfort.

**B-General nurse responsibility in health assessment**

1. The nurse has the responsibility to carry out health assessment on every person under his/her care.
2. The nurse should regularly perform focused assessments in response to client needs.

3. The nurse needs to obtain client’s consent prior to health assessment.

4. The nurse should demonstrate a caring attitude, respect and concern for each client when doing a health assessment.

5. The nurse has the responsibility in keeping confidentiality about the data being collected from his/her client.

6. The nurse obtains information on a client using various techniques and tools, such as history taking, physical examination, reviewing clients’ records and results of diagnostic tests. He/She has to draw inferences from data collected in order to make appropriate and sound clinical judgment.

7. The nurse has to acquire specialized skills and competence in collecting accurate and relevant information on the patient’s health in performing health assessment in order to make sound clinical decisions.

8. The nurse should document the results of health assessment, analyze the data collected, evaluate the client’s response to health problems and interventions, and provide feedback to the client as appropriate.

9. The nurse should continuously advance their competence in health assessment throughout one’s nursing career.
10. The nurse who takes up an advanced practice role has the responsibility to prepare himself/herself in order to perform advanced and focused health assessment.

**Type of data**
(1) Subjective data are apparent only to the person affected and can be described or verified only by that person. Pain, itching, and worrying are examples of subjective data.

(2) Objective data are detectable by an observer or can be tested by using an accepted standard. A blood pressure reading, discoloration of the skin, and seeing the patient in the act of crying are examples of objective data.

(3) Objective data are sometimes called signs, and subjective data are sometimes called symptoms.

**Types of Health Assessments**
In general, there are four fundamental types of assessments that nurses perform:

- A comprehensive or complete health assessment: A comprehensive or complete health assessment usually begins with obtaining a thorough health history and physical exam. This type of assessment is usually performed in acute care settings upon admission, once your patient is stable, or when a new patient presents to an outpatient clinic
• An interval or abbreviated assessment: Nurses perform an interval or abbreviated assessment at this time. This type of assessment is not as detailed as the complete assessment that occurs at admission. The advantage of an abbreviated assessment is that it allows you to thoroughly assess your patient in a shorter period of time.

• A problem-focused assessment: The problem-focused assessment is usually indicated after a comprehensive assessment has identified a potential health problem. The problem-focused assessment is also indicated when an interval or abbreviated assessment shows a change in status from the most current previous assessment or report you received, when a new symptom emerges, or the patient develops any distress. An advantage of the focused assessment is that it directs you to ask about symptoms and move quickly to conducting a focused physical exam.

• An assessment for special populations e.g. children, women pregnant and elderly assessment.

Health assessment includes:

• Complete health history
• ROS or general survey
• Physical Exam

A- Health History:
The purpose of obtaining a health history is to provide you with a description of your patient’s symptoms and how they developed. A complete history will serve as a guide to help identify potential or underlying illnesses or disease states.

A complete health history (other than biographical information) include:

- Chief complaint
- Present health status
- Past health history
- Current lifestyle
- Psychosocial status
- Family history

1. Chief complaint. Record the chief complaint as a brief statement of whatever is troubling the patient and the duration of time the problem has existed. The chief complaint is the signs and symptoms causing the patient to seek medical attention. Record his reason for the visit and the date of his last contact with a medical treatment facility.

2. Past medical history. This provides background for understanding the patient as a whole and his present illness. It includes childhood illnesses, immunizations,
allergies, hospitalizations and serious illnesses, accidents and injuries, medications, and habits.

(3) Family health history. This enhances your understanding of the environment in which the patient lives. Obtaining this information identifies genetic problems, communicable diseases, environmental problems, and interpersonal relationships. Specific inquiry should be made regarding the general state of health of parents, grandparents, siblings, spouse, and children. Record if the patient is adopted and has no access to his biological family's history.

**B-ROS or general survey**

Composed of 4 parts: physical appearance, body structure, mobility & behavior

- **Physical Appearance**
  - Age
  - Sex
  - LOC
  - Skin color
  - Facial features

- **Body Structure**
  - Stature
  - Nutrition
  - Symmetry
- Posture
- Position
- Body contour
- **Mobility**
- Gait
- Range of Motion (PROM or AROM)
- **Behavior**
- Facial expression
- Mood
- Speech
- Dress/Hygiene

**Another general survey**

- Includes Height & Weight

  a. Vital signs: The patient's vital signs are part of the objective data that helps to better define the patient's condition and helps you in planning care. The following vital signs may be taken at the time the patient's height and weight are obtained.

  (1) **Blood pressure.** Blood pressure may be taken in both arms. Record whether the patient was lying, sitting, or standing at the time the reading was obtained.

  (2) **Temperature.** Record the temperature and whether it is an oral, axillary, or rectal temperature.

  (3) **Pulse and respiration**.
Recognize transcultural considerations
Note S/S (signs/symptoms) of distress/pain

Assessment pain includes:
• S- Severity
• L- Location
• I- Influencing factors
• D- Duration
• A- Associated Symptoms

C-Physical examination
It is the process of examining the patient’s body to determine the presence or absence of physical problems
The goal of the physical examination is to obtain valid information concerning the health of the patient. The examiner must be able to identify, analyze, and synthesize the accumulated information

Assessment Techniques:
1-Inspection: is the most frequently used assessment technique. When you are using inspection, you are looking for conditions you can observe with your eyes, ears, or nose. Examples of things you may inspect are skin color, location of lesions, bruises or rash, symmetry, size of body parts and abnormal findings, sounds, and odors. Inspection can be an important technique as it leads to further investigation of findings
Method of observation used during physical examination

- First step in examining a patient or body part
- It includes a general survey of the patient’s
  mental status  posture
  body movement  gait
  breath  skin
  speech  stature
  state of nutrition

How to inspect

- Make sure the room is in a comfortable temperature
- Use good lighting, preferably sunlight
- Look and observe before touching
- Completely expose the body part you are inspecting while draping the rest
- Compare symmetrical body parts

2-Auscultation is usually performed following inspection, especially with abdominal assessment. The abdomen should be auscultated before percussion or palpation to prevent production of false bowel sounds

3-Palpation is another commonly used physical exam technique, requires you to touch your patient with different parts of your hand using different strength pressures. During light palpation, you press the skin about ½ inch to 3/4 inch with the pads of your fingers. When using deep palpation,
use your finger pads and compress the skin approximately 1½ inches to 2 inches. Light palpation allows you to assess for texture, tenderness, temperature, moisture, pulsations, and masses. Deep palpation is performed to assess for masses and internal organs

- Methods of “feeling the hands used during physical examinations
- The examiner touches and feels the patient’s body part with his hands to examine
  - size
  - consistency
  - texture
  - location
  - tenderness of an organ or body part
- The palpation of abdomen is particularly important
4-**Percussion** is used to elicit tenderness or sounds that may provide clues to underlying problems. When percussion directly over suspected areas of tenderness, monitor the patient for signs of discomfort. Percussion requires skill and practice. It is used to detect diaphragmatic movement (e.g., the size of heart, edge of liver and spleen and ascitis)

- **Tympany** sounds like a drum and is heard over air pockets.
- **Resonance** is a hollow sound heard over areas where there is a solid structure and some air (like the lungs).
- **Hyperresonance** is a booming sound heard over air such as in emphysema.
- **Dullness** is heard over solid organs or masses.
- **Flatness** is heard over dense tissues including muscle and bone

**teach the eye to see, the finger to feel, and the ear to hear”**

**Note:** What is the fifth?

**Smelling**

Smelling

- A method used to evaluate the relationship between abnormal odor from the patient and disease
- The odor is elicited from the exudates of skin, mucosa, respiratory tract, GI, blood etc
Abnormal odor may also provide important clues for the diagnosis of the disease

**Equipment for physical examination**

- Stethoscope
- Gloves
- Tongue blades
- Gauze pads
- Penlight
- Lubricant gel
- Tape measure
- Nasal speculum
- Sphygmomanometer
- Turning fork: 128 Hz, 512 Hz
- Reflex hammer
- Safety pins
- Pocket visual acuity card
- Oto-ophthalmoscope

**Review of Systems and Physical Exam**

The physical examination can be performed in a “head-to-toe” fashion, starting with the head and ending with the toes. Although some healthcare professionals have varied tactics to performing this skill, the key to assessment is to ensure a consistent, methodical approach to avoid missing any vital assessment areas.

**Skin Assessment:**

Skin assessment can be performed throughout the physical examination. As each body system is examined, assessment of the skin can be incorporated into findings.

**When assessing the skin, EXAMINE the following:**

- General pigmentation (evenness, appropriate for heritage)
- Systemic color changes (pallor, erythema, cyanosis, jaundice)
- Freckles and moles (symmetry, size, border, pigmentation)
- Temperature (hypothermia, hyperthermia)
- Moisture and texture (diaphoresis, dehydration, firm smooth texture)
- Edema (location and degree)
- Bruising (location, pattern, consistent with history – especially in at risk populations)
- Lesions (color, elevation, pattern or shape, size, location, exudates)
- Hair (normal color, texture, distribution)
- Nails (shape, contour, color)

Remember that skin breakdown is a common problem with ill and hospitalized patients. Skin assessment is vital to identify areas of vulnerability in the prevention of pressure ulcer

**Neurological Assessment**

It may not be necessary to perform the entire neurological exam on a patient with no suspicion of neurological disorders. You should perform a complete baseline neurological examination on any patient that has verbalized neurological concerns in their history, or if a noted neurological deficit is discovered. When examining the nervous system, ask the following:
• Any past history of head injury? (location, loss of consciousness)
• Do you have frequent or severe headaches? (when, where, how often)
• Any dizziness or vertigo? (frequency, precipitating factors, gradual or sudden)
• Ever had/or do you have seizures? (when did they start, frequency, course and duration, motor activity associated with, associated signs, medications, coping strategies)
• Any difficulty swallowing? (solids or liquids, excessive saliva)
• Any difficulty speaking? (forming words or actually saying what you intended)
• Do you have any coordination problems
• Do you have any numbness or tingling?
• Any significant past neurologic history? (cerebral vascular accident, spinal cord injuries, neurologic infections, congenital disorders)
• Environmental or occupational hazards? (insecticides, lead, organic solvents, illicit drugs

Cranial Nerves:
1. Cranial Nerve I: Olfactory
2. Cranial Nerve II: Optic
3. Cranial Nerves III, IV, & VI: Oculomotor, Trochlear, and Abducens
4. Cranial Nerve V: Trigeminal
5. Cranial Nerve VII: Facial Nerve
6. Cranial Nerve VIII: Acoustic (Vestibulocochlear)
7. Cranial Nerve IX & X: Glossopharyngeal and Vagus
8. Cranial Nerve XI: Spinal Accessory
9. Cranial Nerve XII: Hypoglossal

Inspect and palpate the motor system (Tests muscle groups and for motor neuron disease)

- Muscles appropriate size for body (atrophy, hypertrophy)
- Muscle strength (asymmetric, weak for patient)
- Muscle tone (range of motion, pain, flaccidity, spasticity, rigidity)
- Involuntary movements (tic, tremor, fasciculation)

Assess the sensory system (Tests intactness of peripheral nerves, sensory tracts, and higher cortical discrimination)

- Superficial pain
- Light touch
- Vibration

Level of Consciousness (Monitors for signs of increasing intracranial pressure)

Is your patient oriented to person, place, and time? Are they oriented to the situation?

Is your patient alert? If not, what does it take to get them alert - calling their name, light touch, vigorous touch, pain
**Pupillary Response**

Size, shape, and symmetry of both pupils should be the same.

Each pupil should constrict briskly when a light is shined into the eyes.

Each pupil should have consensual light reflex.

**Assessment of the Eyes**

Any vision changes or difficulty?

Any eye pain?

Do you have double vision?

Any redness, swelling or discharge?

Do you have a history of glaucoma?

Do you wear glasses or contacts

**Look for:**

Visual acuity

Visual fields (confrontation test)

Extraocular muscle function (nystagmus, abnormal corneal light reflex)

Conjunctiva and sclera (redness, irritation)

Pupil (shape, symmetry, light reflexes, accommodation)

Ocular fundus (red reflex, optic disc, retinal vessels, macula)

**Assessment of the Ears**

Have you had many ear infections?

Do you have any discharge from your ears?

Do you have any hearing difficulty?
Do you have any environmental or occupational exposure to loud noises?

Any ringing in your ears (tinnitus)?

Any dizziness (vertigo) (Jarvis, 2008)?

**Look for:**

Size, shape, skin condition, and tenderness

External canal (redness, swelling, discharge)

Tympanic membrane [color & characteristics (amber, redness), air/fluid levels]

Hearing acuity (also examined as you collect the patient’s history)