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HEALTH ASSESSMENT OF PATIENT

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Introduction

- The professional nurse plays a vital role in the assessment of patient problems.
- Educational preparation and the clinical setting in part determine the extent to which the nurse participates in the assessment process.

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Components of Health Assessment.

- History taking
- Physical examination of various system
- Nutritional assessment
- Related investigations and diagnostic assessment

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History taking or Health history

- Obtaining an accurate history is the critical first step in determining the etiology of a patient's illness .
- A large percentage of the time (70%), you will actually be able make a diagnosis based on the history alone.

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How to take a history?

Introduce yourself

- Never forget patient's name
- Create a therapeutic environment which makes patient friendly and feeling relaxed.
- Maintain confidentiality and respect patient privacy.

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How to take a history?

- Try to see things from patient point of view.
- Understand patient underneath mental status, anxiety, irritation or depression.
- Always exhibit neutral position.

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How to take a history?

Questioning:

- We should always ask questions in simple and clear questions.
- Avoid medical terms
- Ask open questions
- Ask direct questions
- Ask leading questions

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How to take a history?

- Listening : We should always listen to our patient with patience and interest
- If someone does not speak to your language, get an interpreter (neutral not family friend or member also familiar with both languages).
- Ask simple & straight question but do not go for yes or no answer.

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DOs & DON'Ts

DOs

- Observe Silence
- Asking relevant questions
- Clarification
- Offer information
- Focusing
- Give feedback

DON'Ts

- Don't give opinion or suggestions while taking history
- Don't give false reassurance
- Don't dishearten the patient
- Don't show approval and dis aproval to patient's opinion
- Don't make patient boring
- Don't change the subject

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Basic components of the health history

- Identification data of client
- Chief complaint
- History of present illness
- Past health history
  - Past medical history
  - Past surgical history
- Personal history and Social history
- Family history
- Obstetrical history
- Drug history

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Identification data of client or Demographic information

- Name
- Age / Sex
- Address
- D.O.A
- T.O.A
- UHID No
- Ward:
- Bed No
- Education

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Identification data of client

- Occupation
- Religion
- Marital status
- Date of examination
- Monthly Income
- Diagnosis
- Date of surgery
- Name of surgery
- Informant

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Chief Complaint

- It is the main reason, which pushes the patient to seek medical advice
- It is usually a single symptom or occasionally more than one complaints e.g.: chest pain, palpitation, shortness of breath, ankle swelling etc
- Chief complaints have to write or record on patent's own words.

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Chief Complaint

We can ask following questions to patients to get chief complaints

- What brings your here?
- How can I help you?
- What seems to be the problem?

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Chief Complaint

- It has to write as specific and clear
- It should communicate present major problem or issue
- We should also mention the time, duration and frequency of the chief complaint

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History of present illness

- It is the elaborative form of chief complaint
- Here we need to write the patients present illness in detail
- For each problem, we should identify associated symptoms, precipitating factors and alleviating factors
- Avoid medical terminology and make use of a descriptive language that is familiar to them

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History of present illness

- We should record details of present problem with- time of onset and mode of evolution
- We should also add investigations related to present illness (if available); treatment taken & its outcome (if available)
- Describe each symptom in chronological order or sequential order

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History of present illness

- Always relay story in days before admission or begin with the time the patient was last well

E.g. one week before the admission, the patient fell while gardening and cut his foot with a stone.

- Narrate in details
- In details of symptomatic presentation

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"OPQRST"

The following key words have to consider while describing symptoms

E.g. In case of PAIN

- **O**nset of the pain
- **P**osition/site
- **Q**uality, nature, character – burning sharp, stabbing, crushing, also explain depth of pain – superficial or deep.
- **S**everity – How it affects daily work/physical activities of patient?

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"OPQRST"

- **R**elationship to anything or other bodily function/position.
- **R**adiation: where moved to?
- **R**elieving or aggravating factors – any activities or position
- **T**iming – mode of onset (abrupt or gradual), progression (continuous or intermittent – if intermittent ask frequency and nature.)
- **T**reatment received or/and outcome.

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Pat history of illness

- Past medical history
- Past surgical history

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Past medical history

- We should collect details on past illness like DM, HTN, CVA, MI, CAD, IHD; CRF etc.
- Details should include signs and symptoms, course and treatment. E.g. if diabetic- Mention time of Diagnosis/current medication
- We can also add general health of the patient including sleep pattern, appetite, and stability of weight.
- Details of infectious disease history like Diphtheria, polio, tetanus, mumps and measles etc.
- We can also add psychiatric illness history
- Allergic history – food , drug etc

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Past surgical history

- Time/place/ and what type of operation. Note any blood transfusion and blood grouping.
- Date of surgery, Diagnosis, and perioperative course details

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Personal history and Social history

- It includes patient's habits, and hobbies
- Smoking history - Amount, duration and type (Active or Passive)
- Drinking history - amount, duration
- Occupation, social and education background
- ADL, family social support and financial situation

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Family history

- **Family medical history**
- Family medical history is important in identifying your patient's risk for certain disease states.
- Chronic illness or disease can include cancer, diabetes, autoimmune disorders cholesterol, heart disease, hypertension, renal disease, and mental illness.

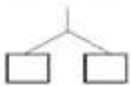
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Family history

- **family tree**
- It is the diagrammatic representations of patient's family. Following symbols are used to draw a family tree

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family tree

Marriage/partnership	
Divorce/separation	
Where the partners are blood relatives (consanguineous relationship)	
Children/siblings	
Identical twins (monozygotic)	
Non-identical twins (dizygotic)	

	Male	Female	Sex Unknown
Individual			
Affected individual (symbol coloured in)			
Multiple individuals			
Deceased			
Pregnancy (the unborn baby of a pregnant mother)			
Miscarriage			
Person providing pedigree information			

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Other Relevant History

- Drug History (DH)
- ✓ Always use generic name or put trade name in brackets with dosage, timing and how long. Example: Ranitidine 150 mg BD PO.
- ✓ Do not forget to mention OCP/Vitamins/Traditional medicine
- ✓ Details of drug allergy
- Gyane/Obstetric history if female

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Other Relevant History

- Immunization if small child
  - Note: Look for the child health card.
  - Small child, obtain the history from the care giver. Make sure that you are talking to right care giver.
- Travel and sexual history if suspected STI or infectious disease

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Physical Examination

- Physical assessment of the client helps the nurse to gather information about the client's health.
- Findings are used to make nursing diagnoses, select appropriate nursing interventions and evaluation of the outcomes of nursing care.
- It is done to all age groups to gather comprehensive data.
- it gives a complete picture of the physiological functioning.
- It helps in the process of decision making with regard to client's treatment.

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Definition

- It is detailed study of the entire body or some part of the body to determine the general, physical and mental condition of the patient.
- A physical assessment is the systematic collection of objective information that is directly observed or is elicited through examination techniques

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Purposes

1. To gather baseline data.
2. To understand physical & mental well being of the patient
3. To detect disease in an early stage
4. To determine extent of the disease
5. To understand any change in the condition of the patient (improvement/deterioration)
6. To determine the nature of care needed for the patient
7. To contribute to medical research
8. To do as a part of routine medical examination
9. To do as a part of pre employment check up

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Principles of physical examination

1) Maintain privacy of patient
2) Maintain confidentiality of the findings
3) Prevent from fall/injury
4) Compare finding of one side with other side
5) Record the findings
6) Anticipate the need of specific diagnostic tools

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Points to remember

- Do painful procedure at the end.
- For seriously ill patient, go for system at risk of being abnormal
- Help the client to take positions without undue exposure
- Always do physical examination of a female client is in the presence of female colleague or female caregiver for avoiding legal complications & psychological comfort
- Label the specimen & dispatch

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Techniques of physical examination

1) **Inspection**
2) **Palpation**
3) **Percussion**
4) **Auscultation**

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Inspection

- Inspect each body system using **vision, smell, and hearing** to assess normal conditions and deviations.
- Assess for ***color, size, location, movement, texture, symmetry, odors, and sounds*** as you assess each body system.

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Palpation

- Palpation requires you to touch the patient with different parts of your hands, using varying degrees of pressure.
- Because your hands are your tools, keep your fingernails short and your hands warm.
- Wear gloves when palpating mucous membranes or areas in contact with body fluids.
- Palpate tender areas last

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There are two types of palpation

Light Palpation

- Use this technique to feel for surface abnormalities.
- Depress the skin ½ to ¾ inches (about 1 to 2 cm) with your finger pads, using the lightest touch possible.
- Assess for texture, tenderness, temperature, moisture, elasticity, pulsations, and masses.

Deep palpation

- Use this technique to feel internal organs and masses for size, shape, tenderness, symmetry, and mobility.
- Depress the skin 1½ to 2 inches (about 4 to 5 cm) with firm, deep pressure.
- Use one hand on top of the other to exert firmer pressure, if needed.

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Percussion

- Percussion involves tapping your fingers or hands quickly and sharply against parts of the patient's body to help you locate organ borders, identifies organ shape and position, and determines if an organ is solid or filled with fluid or gas.

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Percussion

Direct percussion

- This technique reveals tenderness; it's commonly used to assess an adult's sinuses.
- Using one or two fingers, tap directly on the body part.
- Ask the patient to tell you which areas are painful, and watch his face for signs of discomfort

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Indirect Percussion

- This technique elicits sounds that give clues to the makeup of the underlying tissue.

How to do it?

- Press the distal part of the middle finger of your non dominant hand firmly on the body part.
- Keep the rest of your hands off the body surface.
- Flex the wrist of your non dominant hand.
- Using the middle finger of your dominant hand, tap quickly and directly over the point where your other middle finger touches the patient's skin.
- Listen to the sounds produced.

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Auscultation

- It involves listening for various lungs, heart, and bowel sounds with a stethoscope.

Preparation for auscultation

- Provide a quiet environment.
- Make sure the area to be auscultate is exposed (a gown or bed linens can interfere with sounds.)
- Warm the stethoscope head in your hand.
- Close your eyes to help focus your attention.

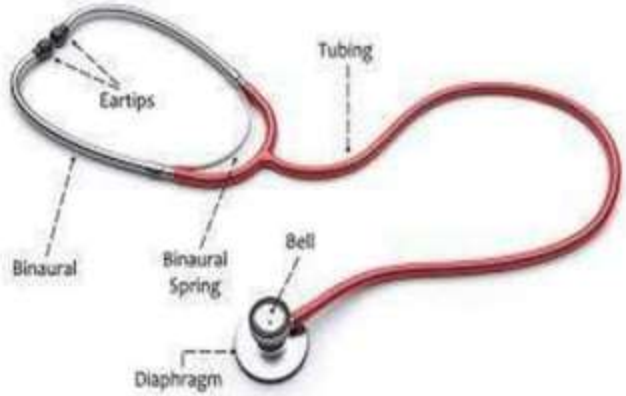
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How to auscultate?

- Use the diaphragm to pick up high-pitched sounds, such as first (S_1) and second (S_2) heart sounds. Hold the diaphragm firmly against the patient's skin, using enough pressure to leave a slight ring on the skin afterward.
- Use the bell to pick up low-pitched sounds, such as third (S_3) and fourth (S_4) heart sounds. Hold the bell lightly against the patient's skin, just hard enough to form a seal. Holding the bell too firmly causes the skin to act as a diaphragm, obliterating low-pitched sounds.
- Listen to and try to identify the characteristics of one sound at a time.

Stethoscope





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Preparation of Unit

- Adequate light
- Noise reduction
- Maintain privacy
- Control of temperature
- Safety of the patient

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Preparation of articles

- Assemble all the articles
- Hand hygiene
- Clean articles
- Warm if needed
- Check the articles are properly functioning
- Change the batteries if needed
- See no part is loose

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List of articles

- Tape measure
- Scale
- Weighing machine
- Sphygmomanometer
- Stethoscope
- TPR tray
- Watch
- Ophthalmoscope
- Laryngoscope
- Otoscope
- Nasal speculum

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List of articles

- Tongue depressor
- Fetoscope
- Proctoscope
- Vaginal speculum
- Tuning fork
- Flash light
- Percussion hammer
- Safety pin
- Cotton
- Wool

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List of articles

- Cold & hot water in test tubes
- Lubricating jelly
- Gloves
- Gown
- Mask
- Specimen bottles
- Hand washing articles
- Pain scale

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Preparation of patient

- Shave the part if needed
- Comfortable position
- Empty bladder/bowel
- Loosen costumes
- Drape the client
- Help client to dress/undress
- Avoid unnecessary exposure
- Allay the fears & anxiety of the patient
- Explain the sequence of the procedure
- Remain with the patient

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Positions for physical examination

- Sitting
- Standing
- Supine
- Dorsal recumbent
- Sim's
- Prone
- Lithotomy
- Knee-chest

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Procedure of Physical Examination

- **A. General survey**
  - **General appearance**
- ✓ Nourishment: well nourished, mal nourished
- ✓ Body build: thin/obese
- ✓ Health: healthy, unhealthy
- ✓ Activity: active/dull
- ✓ Grooming: well-groomed/ill-kempt

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General survey

- **Mental status**

1. Consciousness: conscious, unconscious, delirious, talking incoherently
2. Look: anxious, worried, depressed
3. Orientation: time place & person

- **Anthropometry**

a. Height
b. Weight: take weight without shoes.

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General survey

- **Vital signs**
  - Temperature
  - Pulse
  - Respiration
  - Blood pressure
  - Pain

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B.Head to foot examination

- **Skin**
  - Colour: pallor, jaundice, cyanosis, flushing. pigmentation
  - Texture: dryness, wrinkles, moist, turgor
  - Temperature: warm, cold, clammy
  - Lesions: macules, papules, vesicles, wounds. Petechiae

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- **Hair and scalp**
  - Scalp: cleanliness, condition of hair, dandruff, pediculi, ringworm, alopecia
- **Nails**
  - Hygiene
  - Abnormalities: clubbing, splinter hemorrhage, paronychia

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- **Head**
  - Shape of skull: hydrocephalous
  - Fontanels : bulging, depressed
  - Head circumference
- **Face**
  - Pale
  - Puffiness
  - Flushness
  - Enlargement of parotid glands

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- **Eyes**
  - Eye brows: normal, absent
  - Eye lashes: infection
  - Eye lids: edema, lesion, ectropion, entropion,ptosis
  - Eye balls: sunken, protruded
  - Conjunctiva: pale, red

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- Sclera: jaundice
- Cornea & iris: irregularities, abrasions
- Pupils: dilated, constricted, reaction to light and accommodation (PERRLA)
- Lens: opaque, transparent
- Fundus: congestion, hemorrhagic spots
- Eye muscles: strabismus
- Vision: normal, myopia, hypermetropia, visual fields, diplopia

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- **Ears**
  - External ear: discharge, cerumen, fused pinna,
  - Tympanic membrane: perforation, bulge
  - Hearing: hearing acuity
- **Nose**
  - External nares: crusts, discharge, bleeding,
  - Nostrils : septal deviation, polyps, discharge

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- **Mouth & Pharynx**
  - Lip: redness, swelling, crusts, cyanosis, angular stomatitis,
  - Buccal mucosa: leukoplakia, candidacies,
  - Odour: Halitosis
  - Teeth: discoloration, caries
  - Tongue: pale, dry, lesion, tongue tie
  - Gums: bleeding, pus, ulceration, hypertrophy
  - Palate: cleft palate
  - Throat: enlarged tonsils, redness, pus
  - Gag reflex

- **Neck**
  - Lymph nodes: enlarged, palpable
  - ROM: flexion, extension, rotation
  - Thyroid glands: ask patient to swallow saliva
- **Chest**
  - Thorax: shape, symmetry of expansion
  - Breath sounds: normal & abnormal, sigh, wheezing
  - Heart: size, location, murmurs, heart sounds

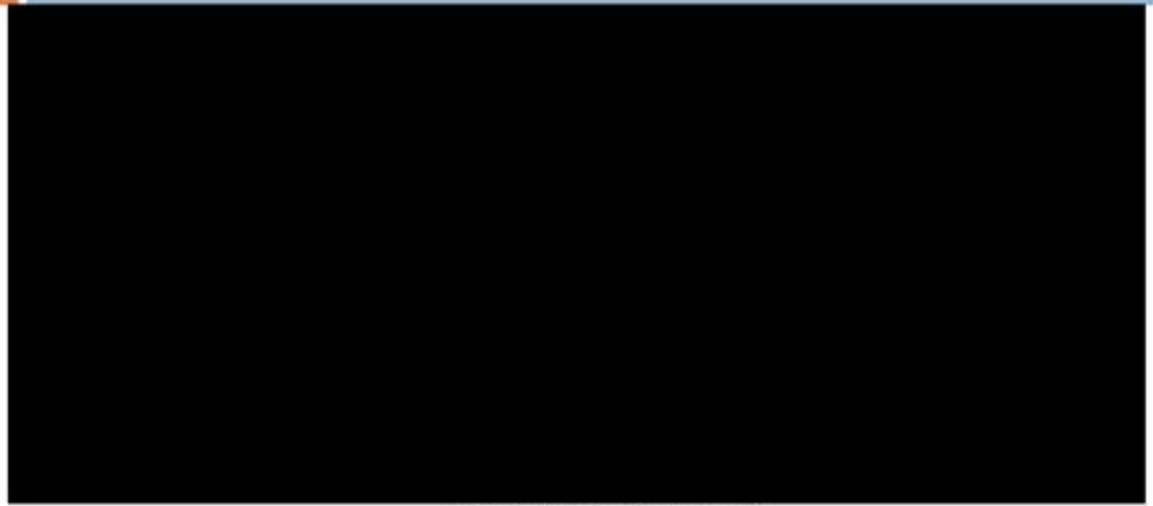
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Respiratory system examination



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Cardio vascular examination



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Clinical breast examination



Abdominal examination



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Rectum, Anus

- Check for Hemorrhoids , fissure, fistula and anal opening
- Digital rectal examination
- Pelvic masses, prostrate

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- **Spine**
  - Body curves: lordosis, kyphosis, scoliosis
- **Assessing male and female genitalia**
- Inspect and palpate female genitalia: - inspection of external genitalia for any type of abnormal growth, inflammation, infection, discharge, laceration.
- Inspect and palpate male genitalia:-scrotum, penis, testis, are examined for any type of inflammation, tumor, pigmentation, herniation, infection.

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- **Extremities (Upper & Lower)**
  - Range of motion in all joints
  - Posture: decorticate, decelerate, erect
  - Movements: unsteady gait, limp, tremors
  - clubbing, edema, varicose veins

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System vise examination

- **Respiratory system**
- **Cardiovascular system**
- **Gastrointestinal system**
- **Reproductive system**
- **Neurological examination (Nervous System)**

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Cranial nerve assessment



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GCS

Glasgow Coma Scale	
Best Eye Opening Response	1 = No response
	2 = To pain
	3 = To speech
	4 = Spontaneously
Best Motor Response	1 = No response
	2 = Extension – abnormal
	3 = Flexion - abnormal
	4 = Flexion – withdrawal
	5 = Localizes pain
	6 = Obeys verbal commands
Best Verbal Response	1 = No response
	2 = Sounds - incomprehensible
	3 = Speech - inappropriate
	4 = Conversation - confused
	5 = Oriented X 3

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After care of patient after physical examination

- Recording
- Dressing
- Comfortable positioning
- Explain findings and need of further evaluation
- Dispose the used/soiled items in an appropriate manner
- Clean and replace articles

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Nutritional Assessment

Definition

- It is a comprehensive analysis of a person's nutrition status that uses historical information, food intake data, anthropometric measurements, and physical examination & biochemical data.

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Purposes:

- 1. Identify individuals who are malnourished or are at risk for developing malnutrition.
- 2. Provide data for designing a nutrition plan of care to prevent or minimize development malnutrition.
- 3. Establish baseline data for evaluating the efficacy of nutritional care.

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Methods for collecting current dietary intake information:

- **24-hour recall:** It is a guided interview in which an individual recounts all of the food & beverages consumed in the past 24 hours or during the previous day.
- **Food frequency questionnaire:** A survey of food routinely consumed
- **Food diaries:** A detailed log (record of events) of food eaten during a specified time period, usually several days.
- **Direct observation:** Just by observing food intake of the individual directly in a facility.

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Most common anthropometric measures

- Height or length.
- Weight.
- Arm and head circumference.
- Waist circumference.
- Body mass index.
- Triceps skin-fold thickness

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Investigations and Diagnostic Assessment

- Diagnostic tests are used to detect, confirm, or rule out the presence of a disease or medical condition. They can be used to screen for certain conditions in people who are at increased risk; to evaluate the effects of treatment; or to monitor disease progression

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Common tests and procedures

- Allergy testing (Skin test, Patch test)
- Blood tests(CBC,Biochemistry,Hormonal analysis)
- Bone, joint and muscle tests
- Brain and nerve tests
- Body fluid analysis (Asctic,pleural,pericardial)
- Biopsy (surgical removal of a tissue sample for microscopic evaluation; e.g., breast biopsy, prostate biopsy)

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Common tests and procedures

- Cancer tests (Tumor markers)
- CSF test
- Digestive system tests (e.g., endoscopic procedures such as colonoscopy and barium enema)
- DNA analysis
- Cardiac tests (e.g., electrocardiogram, stress tests)
- Ear, nose and throat tests
- Endoscopies and laparoscopies (UGIE,Colonoscopy,broncho scopy,procto scopy etc)
- Genetic tests
- Gynecological tests

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Common tests and procedures

- Lung and breathing tests (PFT)
- Microbiology Tests (Cultures)
- Nuclear medicine (e.g., bone scan, positron emission tomography [PET scan])
- Skin tests
- Semen Analysis
- Sputum test
- Thyroid tests
- Urinary system tests (e,g., cystoscopy)
- Urine tests
- Vision tests
- Imaging Test and Scan (including x-rays, CT Scan,MRI,USG)

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