

# Nursing process

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# Learning outcomes

- Discuss the principles and the phases of the nursing process
- Identify major characteristics of the nursing process
- Identify the purpose of assessment
- Discuss how communication is inherent in the nursing process

# Cont'd outcomes

- Discuss the importance of recognizing when to use closed and open-ended questions
- Compare the various frameworks and identify when, why and which one should be used when undertaking a nursing assessment
- Discuss the difference between a nursing diagnosis to that of a medical diagnosis
- Discuss and evaluate the planning process and how it can impact on discharge planning

# Cont'd outcomes

- Compare and contrast the different types of nursing care plans
- Explain the key functions of writing goals/desired outcomes
- List and explore the five activities of the implementing phase and discuss these in relation to patient care
- Identify five components of the evaluation process

# Cont'd outcomes

- List the key skill required to utilize the nursing process effectively
- Discuss the term critical thinking and how this relates to nursing decision making and the nursing process
- Recognize the components of quality assurance in healthcare

# Definition

- Is a systematic method by which nurses plan and provide individualized care to the individual patients, family and community.
- This involves a problem-solving approach that enables the nurse to identify patients' needs and problems.
- NP- Is a method used by nurses in solving patients problems in professional practices.
- Before nursing process was developed, nurses used to provide care based on orders written by physicians and focused on disease rather than the person.

# Characteristic of NP.

- Client centered and focused on holistic care
- Humanistic in character
- The system is open, flexible and dynamic
- Goal directed
- It is flexible to meet the unique needs of clients, family and community
- Planned

# Cont'd characteristics

- It is universally available, i. e. Is used as a framework for nursing care in all types of healthcare settings, with clients of all age groups
- It individualized the approach to each client's particular needs
- It permits creativity for the nurse and client in devising ways to solve the stated health problem



# Cont'd characteristics

- It is interpersonal, hence requires the nurse to communicate directly and consistently with clients to meet their needs
- It is cyclical, since all steps are interrelated and there is no absolute beginning or end
- It emphasizes feedback, which leads either to reassessment of the problem or to revision of the care plan

# Purpose

- The primary purpose of the nursing process is to help manage each client care scientifically holistically and creatively.
- The nurse should work with the client to promote wellness, to prevent disease to restore health and to facilitate coping with altered functioning
- This requires the nurse to have intellectual, technical, interpersonal, willingness, and ethical/legal competencies.

# Organization

- NP is a method for assessing health status, diagnosing health care needs, formulating a plan of care, initiating and implementing plan and evaluating the effectiveness of plan of care
- NP consists of six sequential steps or phases:
  - Assessment
  - Nursing diagnosis
  - Outcome identification
  - Planning
  - Implementation
  - Evaluation

# Properties

- NP has seven properties;
- ✓ Systematic
- ✓ Dynamic
- ✓ Interpersonal
- ✓ Flexible
- ✓ Theoretically based
- ✓ Goal oriented
- ✓ Universally applicable

# Systematic

- NP is a systematic method that directs the nurse and the client as together determines the need for nursing care, plan, and implement the care, and evaluate the results
- The systematic process provides a framework that enables the nurse and client to do the following;
  - ✓ Collect systematically clients data
  - ✓ Clearly indentify clients strengths and problems

# Cont'd systematic

- ✓ Develop holistic plan of individualized care that specified the desired client goals and related outcomes and the nursing intervention most likely to assist the client to meet those expected outcomes
- ✓ Execute the plan of care
- ✓ Evaluate the effectiveness of the plan of care in terms of client goal and achievement
- ✓ Each step of the nursing care is directed in a sequential order/manner

# Dynamic

- This means it keeps on changing or involves continuous change
- It is an ongoing process focused on the changing responses of the client that are identified throughout the nurse-client relationship
- It focuses on changing needs of the client.

# Interpersonal

- It is interpersonal because of its interactive nature between the client and the nurses, the family and the other health professionals.



# Flexible

- This means it can be adapted to nursing practice and in any setting or area of specialization dealing with individual, groups or communities
- It can also be used sequentially and concurrently
- The nurse can more than one step at a time

# Theoretically based

- This is because the process is devised from a broad based knowledge including the science and humanities and can be applied to any other theoretical models at nursing.

# Goal oriented

- This because it offers a means for nurses and clients to work together to identify specific goals related to;
  - ✓ wellness
  - ✓ promotion
  - ✓ disease and illness prevention
  - ✓ Health restoration
  - ✓ Coping with altered functioning
- These are most important to client and to match them with appropriate nursing actions

# Cont' d goal oriented

- The nursing actions are recorded in the plan of care where each nurse can quickly determine the client's priorities and begins nursing with a clear sense of how to proceed
- The client benefits from continuity of care and each nurse can move the client close to good achievement

# Universally applicable

- Once nurses understand nursing process, they find it easy to manage the well and sick clients, young or old.
- Efforts made by nurses to master nursing process results in their possession of a valuable tool that can be used with ease in any nursing situations

# Advantages of Nursing Process

- Provides a framework for meeting the individual needs of the client, family and significant other(s) and the community
- The steps focus the nurses attention on the individual human responses of a client/group to a given health situation, resulting in a holistic plan of care addressing their specific needs

# Cont' d advantages

- Provides an organized, orderly and systematic method of problem solving, which minimizes dangerous errors or omissions in the care giving and avoiding time-consuming repetition in care and documentation
- It promotes active involvement of the client in his/her own health care, enhancing consumer satisfaction. This increases the clients sense of control over what is happening to him/her, stimulates problem-solving and promotes personal responsibility all of which strengthen the clients commitment to achieving identified goals

# Cont'd advantages

- It enables the nurses to have control over their own practice, hence enhances their opportunity to use their knowledge, expertise and intuition constructively and dynamically to increase the likelihood of a successful client outcome which in turn promotes greater job satisfaction and professional growth



# Cont'd advantages

- It provides a common language for practice unifying the nursing profession;
- ✓ The process clearly communicates the plan of care to coworkers and clients which enhances continuity of care, promotes achievement of client goals, provides a vehicle for evaluation and aids in the development of nursing standards.

# Cont'd advantages

- ✓ Its structure provides a format for documenting the clients response to all aspects of the planned care.
- The use of the process provides a means of assessing economic contribution to client care.
- ✓ It supplies a vehicle for the qualitative and quantitative measurements of nursing care than meets the goal of cost effectiveness and still promotes holistic care

# NURSING PROCESS STEPS

1. ASSESSMENT
  2. DIAGNOSIS
  3. OUTCOME IDENTIFICATION
  4. PLANNING
  5. IMPLEMENTATION
  6. EVALUATION
- (A-D-O-P-I-E)

# 1.ASSESSMENT

- Definition

Is the systematic gathering of information related to the;

- ✓ Physical
- ✓ Mental
- ✓ Spiritual
- ✓ Socio-economic
- ✓ Cultural

States of an individual, group or community.

# Cont'd assessment

- It has the following features;
  - ✓ Data collection- form a variety of sources
  - ✓ Data verification and validation- using a systematic and ongoing
  - ✓ Data categorizing- data organization and interpretation
  - ✓ Documentation- recording data

# Cont'd assessment

It involves systematic and continuous collection, validation and communication of patients data

- All the other steps depend on complete, accurate and relevant data
- It begins with the first encounter between the nurse and the patient

# Cont'd assessment

- There is a systematic collection of data on the patients health status
- The data is analyzed to determine the patients health needs

# Cont'd assessment

- The data collected is to be used in formulating the nursing diagnosis
- This phase is described as the organized systematic process of collecting data from a variety of sources to evaluate the health status of a client



# Cont' d assessment

- It is the solid foundation for providing quality care to patients
- The assessment phase may be affected by the nurses beliefs, knowledge and skills
- Accurate and complete assessment is necessary to facilitate diagnosis and treatment of the nursing diagnosis

# Types of assessment

- Comprehensive assessment([**initial**)
  - ✓ This provides baseline client data including a complete health history and current needs assessment
  - ✓ It may not be completed upon admission to a health care agency
  - ✓ Changes in the client's health status can be measured against this data base
  - ✓ Includes assessment of the client's physical and psychological health, perception of health, presence of health risk factors and coping patterns

# Cont'd types

- Focused assessment (**Episodic**)
  - ✓ It is limited to potential health care risks, a particular need, or health care concern
  - ✓ Is used when short stay is anticipated e. g. outpatient surgery, in special areas like mental health settings, labour and delivery or for screening specific problems or risk factors

# Continued types

- Ongoing assessment
- ✓ It is the follow up after comprehensive and focused assessments
- ✓ It involves systematic monitoring of specific problems
- ✓ It broadens the database and allows the nurse to confirm the validity of data obtained during initial assessment
- ✓ This monitoring allows the nurse to determine the client's response to nursing interventions and to identify any other problem

# Cont'd types

- **EMERGENCY**

- ✓ Used in emergencies

- **TIME LAPSED [Ongoing**

- ✓ Used after discharge as follow-up.

# Types of data

- There are 4 types of data collected from a patient:-
  - 1) Subjective data
  - 2) Objective data
  - 3) Historical data
  - 4) Current data

# Subjective data

- Are data collected from the client' s (sometimes family' s) point of view and include perceptions, feelings and concerns.
- It refers to what the patient says
- In pediatrics it refers to what the guardian/caretaker says about the baby

# Objective data

- Something observable and measurable-usually obtained using skills such as:-
  - palpation(pressing)
  - Inspection(looking)
  - Percussion(tapping)
  - And auscultation (listening)
- It helps interpret the patients history more accurately by providing a basis of comparison



# Cont' d objective data

- It incorporates using the senses of touch, smell, hearing and sight
- It also incorporates observable and measurable data that are obtained through both standard assessment techniques performed during the physical examination and the results of laboratory testing

# Historical data

- Information on what happened in the past
- This is obtained from the patient or relatives or guardian of the patient

## Current data

- Information on what is happening at the present
- The guardian or relative or patient him/herself explains the issues that make him/her come to the hospital

# SOURCES OF DATTA

- **Primary source**
- Data from the patient.
- **Secondary source**
- From the relatives, friends
- Health care team e.g nurses, Doctors.
- Medical history of the patient
- Examinations done
- Investigations carried out

# Methods of data collection

1. History taking/interviewing
2. Physical examination
3. Observations
4. Investigations e.g. lab and radiological
5. Review of the clients notes

## History taking(interviewing the patient)

- The nurse uses interviewing skills to help the patient describe the problem
- It is a purposeful conversation
- The primary tool is the nurse/patient relationship
- Good interviewing requires knowledge of what information you need to obtain and skill in eliciting and responding to the patient' s/clients under study.

# Cont.....

- It provides the following information:-
  - Biographical data
  - The chief complain
  - History of present illness
  - Past medical history
  - Psychosocial history
  - Family history
  - Activities of daily living
  - Review of body systems

# Cont.....

- Chief complain refers to one or more concerns for which the patient is seeking care or advice
- History of present illness gives the scope of patient' s concerns and amplifies the chief complain
- It gives a chronologic account of how each of the symptoms developed
- Past history explores childhood illnesses, adult illnesses, surgeries accidents, obstetrics, history of any transfusion, gynae events, health maintenance issues e.g. immunizations etc

# Cont.....

- In review of body systems ask the patient about common symptoms in each body system
- Details needed within each area depends on various factors (age, risks, purpose of visit etc)
- Review of body systems is combined with physical examination



# Guidelines to good history taking

- i. The nurse establishes trust by introducing her/himself and asks what name the patient wishes to be called during the interview
- ii. Use good communication or interviewing skills e.g use open ended questions e.g. “Mr. Jumna could you tell me about the headache that has made you come to the hospital today?”

## Cont.....

- iii. Use of interpersonal relationship e.g. develop rapport with the client e.g by greeting the patient, ensure she/he is comfortable, don't sound too "medical" to the patient etc
- iv). Be objective i.e. do not try to interpret information during interview, record the issues as they are told, collect data without drawing conclusions or making judgement
- v). Collect manageable details that are meaningful e.g. whether a cough is dry, productive/expectorating etc

# Cont.....

- vi). Sequence information
- Vii).document clearly and in a timely manner
- Viii). Maintain the right space between you (the Nurse) and the patient.
  - The space maintained provides a cue on the nature of the relationship between two people
  - The space also depends on the socio-cultural roles and customs

# Cont.....

- ❖ Intimate space is up to 2 inches to allow for a maximum interpersonal sensory stimulation
- ❖ Personal space is 4-8 ft and used in close relations. -is a touching distance
- ❖ Social consultative space, 9-12 ft is less personal and less dependant.
- ❖ Speech must be louder .
- ❖ Public space, 12 ft or more is used in giving speech and other public forums

# Preparation to interview a patient

- Review patient charts/records
- Identify the goals of the interview
- Make the environment private and comfortable
- Be aware of your appearance, behaviour, mannerisms and also be aware of those patients who are sensitive that they may even mind notes taking
- Have your stationery ready

# Stages of interviewing

- 1). Greeting the patient and establishing a rapport.
  - ✓ Greet patient by name(sir name)
  - ✓ Introduce self
  - ✓ Clarify your role
  - ✓ Use titles (Mr., Mrs., Sr., Dr. )
  - ✓ If there are other people in the room seek consent from the patient before interview
  - ✓ Maintain a comfortable distance
  - ✓ Maintain good eye contact
  - ✓ Ensure good lighting
  - ✓ Give undivided attention

## 2).Invite the patient' s story

- ✓ Determine the reason for seeking health care using open ended questions e.g. “*what brings you here today?*”
- ✓ Avoid leading questions e.g. “*is the sputum yellow?*”
- ✓ Ask questions that require graded responses rather than yes or no e.g. “*how many stairs do you climb before becoming breathless?*”

# Cont'd history

- ✓ Give alternatives if patient is not able to give a description e.g. “*is the pain throbbing, splitting, dissecting, crushing etc?*”
- ✓ Ask one question at a time
- ✓ Use understandable language
- ✓ Clarify with the patient



# Skills of good interviewing

- Be aware of your and the patients non verbal communication
- Facilitation-use of posture, actions or words to encourage the patient to continue e.g.
  - Leaning forward
    - Also involves use of supplementary statements to encourage the patient to keep verbalizing e.g. “ is that right?”
- Reflection-simple repetition of the patient’ s words encourages them to give more details

# Skills cont.....

- Clarification
- Summarization of what the patient has said
- Empathetic responses but avoid premature reassurances
- Validation –legitimizing patient’ s experiences e.g. “I can understand the diagnosis was scary for you and it may be the reason why you feel anxious
  - It makes the patient feel safe

# Challenges when conducting interview

- ✓ A crying patient
- ✓ Communication barriers
- ✓ Patients who like talking endlessly
  - Focus on the main area of concern for the patient
- ✓ Patient with multiple symptoms
  - Somatoform and somatization disorders
- ✓ Anxious patients

# Challenges cont.....

- ✓ Taking history on sensitive areas e.g. sex, domestic violence, use of illicit drugs, death, bowel actions/functions
  - Maintain non-Judgmental approach, use specific language etc
- ✓ Patients with anger/hostility
  - Apologize if you are the cause of the anger, don't join in the anger, don't get angry too etc

## 2).Physical examination

- For it to be meaningful, the nurse needs to know the normal from the abnormal
- Helps get information to substantiate subjective data
- It further defines client' s response to the disease process
- It uses the techniques of *inspection*, *palpation*, *percussion* and *auscultation*
- Is head to toe examination

## P/E cont.....

- Have a general impression of the patient
  - ✓ E.g. appearance, sleep patterns, recent weight changes etc
- Skin
  - ✓ Rashes, lumps, sores, itching, colour of hair and finger nails etc

# Cont' p/e

## ➤ Head

- ✓ Do ENT examination, R/O any history of a headache, dizziness, use of glasses, blurred vision, hearing problems, vertigo, nosebleeds, frequent colds, use of dentures, bleeding gums, voice hoarseness, tinnitus
- ✓ Assess sinuses via palpation to R/O any tenderness

# Cont.....

## ➤ Neck

- ✓ Lumps, pain, stiffness etc

## ➤ Breast

- ✓ Pain, lumps, discomfort, history of SBE(Teach)

## ➤ Respiratory

- ✓ Cough, wheezing, last chest X-ray



# Cont.....

## ➤ Cardiac

- ✓ Chest pain, palpitations, nocturnal dyspnoea

## ➤ GIT

- ✓ Swallowing problems, heart burns, N&V, constipation, abdominal pain etc

# Cont.....

## ➤ Urinary

- ✓ Frequency, nocturia, pain, any UTI etc

## ➤ Genitalia

- ✓ Pain, sores, STI treatment, contraceptives, menarche, menstrual history, LMP, menopause & andropause symptoms, pregnancy, any abortions etc

## ➤ Musculoskeletal system

- ✓ Muscle pains, joint pains, stiffness of joints, back-ache etc

# Cont.....

- Peripheral vasculature
  - ✓ Leg cramps, varicose veins etc
- CNS
  - ✓ Fainting, seizures, body weakness, numbness, tingling sensation, tremors etc
- Hematological
  - ✓ Anaemia, easy bruising or bleeding, blood transfusion etc

# Cont'd

## ➤ Endocrine

- ✓ Heat and cold intolerance, excessive sweating, excessive thirst or hunger, polyuria, polydypsia etc

## ➤ Psychological

- ✓ Nervousness, tension, mood changes/swings, irritability, suicidal ideas, etc

### 3. Observation

- It is to gather data using the five senses i.e.
- ✓ Noticing the stimuli
- ✓ Selecting, organizing and interpreting the data

# Cont'd observation

- Errors in observing
  - ✓ Unable to notice certain signs as may be unexpected in a certain client or situation or they do not conform to preconceptions about a client's illness
  - ✓ Faulty organization and misinterpretation of data

# Cont'd observation

- The need for observation
- ✓ Establish a nurse-client relationship
- ✓ Gather data about the client's general health status, interpreting physiologic, psychological, cognitive, socio-cultural, developmental and spiritual dimensions
- ✓ Identify client's strengths
- ✓ Identify actual and potential health problems
- ✓ Establish a base for the nursing process

# Cont'd observation

- Involves use of sense to obtain information about a client, significant others and the environment
- Requires broad knowledge base and conscious use of bases
- An observation made could be positive or negative e.g. crying following the death of a loved one is positive
- Observation findings usually require more investigations



## 4).Laboratory findings

- They make part of the objective data
- Some findings are diagnostic and others identify the cause of the disease
- The nurse requires knowledge on diagnostics evaluations, their indications, preparations, and interpretation of the results

# Validating data

- Validation is the act of double checking or verifying data to confirm that it is accurate, complete and factual as nursing diagnosis and interventions are based on this information.
- So the nurse has to;
  - ✓ Ensures that the assessment information is complete
  - ✓ Ensures that objective and related subjective data agree
  - ✓ Obtain additional information that may have been overlooked

# Cont' d validating data

- ✓ Differentiate between cues and inferences
- Cues are subjective or objective data directly observed by the nurse i.e. what pt says or what nurse can see, hear, feel, smell, taste or measures
- Inferences are discrepancies the nurse interprets or conclude makes based on the cues. E.g. a nurse observes the cues, red incision, hot and swollen; the inference is infected incision
- ✓ Avoid jumping to conclusions and focusing in the wrong direction to identify problems

# Cont'd validating data

- Example of validating assessment data
- ❖ Comparing subjective and objective data to verify the pt's statements with observation taken i.e. patient's perception of 'feeling hot' need to be compared with measurement of body temperature
- ❖ To be sure that data consist of cues not inferences i.e. observation- dry skin and reduced tissue elasticity, inference dehydration

# Documenting data

- The nurse records pt data to compare the assessment phase
- All data collected about the pt's health status is recorded accurately
- To increase accuracy the, the nurse records subjective data in the pt's own words as restating in other words what someone says increases the chance of changing the original meaning

## 2.Nursing diagnosis

- It is the 2<sup>nd</sup> step of the nursing process in which nurses determine the meaning of assessment data
- It involves further analysis (breaking down the whole data into parts that can be examined and synthesis (putting data together in a new way) of the collected data (list of nursing assessment)

# Cont' d nursing diagnosis

## Definition

- Refers to actual/potential health problems that focus upon human responses of a client and that nurses are responsible and accountable for identifying and treating independently **or**
- It is the conclusion drawn from data collected about a patient which serves as a means of describing health problem that can be managed or treated by nurses **or**

# Cont'd definition

- It is a statement of patient's problem that is arrived at by making inferences from collected data
- The domain of the nursing diagnosis includes only those health states that the nurse is educated and licensed to treat.
- Is judgment made only after thorough, systematic data collection



# Cont' diagnosis

- It is a clinical judgment about individual, family or community responses to activate or potential health problems/life process
- It provides the basis for selection of nursing intervention to achieve outcome for which the nurse is accountable
- The process of formulating a nursing diagnosis requires theoretical knowledge, analytical thinking and willingness to keep an open mind to explore all possibilities

# Characteristics of nursing diagnosis

- Formulation of a diagnostic statement lies within the realm of the professional nurse
- A health problem is any condition or situation in which a client requires help to promote, maintain, or regain a state of health or to achieve a peaceful death

# Cont'd characteristics

- Nursing diagnosis describes;
- ✓ Actual health problems (deviation from health)
- ✓ Potential health problems (risk factors that pre dispose persons and families to health problems)
- ✓ Areas of enriched personal growth

# Cont'd characteristics

## ❖ Examples

- Actual health problem
  - ✓ Ineffective air way clearance
  - ✓ Fluid volume deficit
  - ✓ Knowledge deficit
- Potential health problems
  - ✓ High risk for infection
  - ✓ High risk for injury

# Cont'd characteristics

- Areas of enriched personal growth
  - ✓ Self-development
  - ✓ Health maintenance management
  - ✓ Parenting
- The domain of nursing diagnosis includes only those health states that the nurses are able and licensed to treat
- Is a judgment made only after a thorough systematic process of data collection

# Advantages of nursing diagnosis

- Facilitate communication among nurses and other health team members, identifies a client's health status, strengths, and health problems
- Strengthen the nursing process and provide direction for planning independent nursing interventions
- Help the nurse to focus on independent nursing actions

# Cont'd advantages

- Help identify the focus of a nursing activity and thus facilitate peer review and quality assurance programs.
- ✓ Peer review is the appraisal of nurse's practice, education, or research by coworkers of equal status.
- ✓ Quality assurance is the evaluation of nursing services provided and the results achieved against an established standard

# Cont'd advantages

- Facilitate nursing intervention when a client moves from one hospital unit to another or from hospital to home.
- ✓ This guides the planning of the nursing interventions that the client requires after discharge
- Facilitate comprehensive health care by identifying, validating, and responding to specific health problems



# Cont' d Nursing Diagnosis

- This stage entails identification of patient' s problems
- There are two types of problems
  - 1) Nursing diagnosis-actual or potential health problem that can be managed by independent nursing interventions
  - 2) Collaborative problems-These are health problems that require both physician prescribed and nursing prescribed interventions

# Cont' d.....

- A problem is any health care condition that require a diagnosis, therapeutic and educational action.
- According to NANDA I [North American Nursing Diagnosis Association International ] Nursing diagnosis is a clinical judgment about individual family or community on actual or potential health problems.

# Types of nursing diagnosis

- There are five (5) types of nursing diagnosis but the most common are two (2):-actual and potential
  1. Actual nursing diagnosis
    - Represents a problem that has been validated i.e. it is present
  2. Potential/risk nursing diagnosis
    - Represents a problem that an individual/family/community is more vulnerable to develop than the others in the same situation

# Other diagnoses include:-

1. Wellness nursing diagnosis
2. Syndrome nursing diagnosis
3. Possible nursing diagnosis

# The steps of nursing diagnosis

- ❖ Data processing i.e. interpreting collected data
- ❖ Determining the client's health problems, health risks, and strengths
- ❖ Formulating nursing diagnosis

# OR

- 1) Identifies the patients nursing problems
- 2) Identifies the defining characteristics
- 3) Identifies the aetiology of the problems
- 4) State the nursing diagnosis concisely and precisely

# Steps in the diagnostic process

- a) Data processing .data collected during assessment compare against standards e.g BP whether normal.
- b) Formulation of nursing diagnosis- cluster of cues and make inferences from the data-cues are objective or subjective data-inference are nurses conclusions.
- c) Verification using the data.
- d) Documentation

# Steps in the diagnostic process

- ❖ Verification using the data.
- ❖ Documentation



## a. Data processing

- Is the first aspect of analyzing, the act of interpreting collected data or data collected during assessment compared against standards e.g BP whether normal. It involves classifying the items, interpreting and validating data
- When interpreting data, the nurse uses the theoretical knowledge and experience to make correct meanings

# Cont'd data processing

- E.g. linking a headache with reddening eyes, fever with a sore throat, elevated WBCs count with elevated temperature etc
- It involves the following steps;
  - ✓ Organize data
  - ✓ Compare against standards (identify significant cues)
  - ✓ Cluster data (generate tentative hypotheses)
  - ✓ Identify gaps and inconsistencies

# Organizing the data

- The data collected is organized into a usable framework for the nurse and others who may need access to them.
- Theoretical framework and conceptual models often guide the format of the assessment tool, facilitating the organization of the data
- The nurse chooses one or more nursing models and develop skill by using them consistently

# comparing data against standards

- The nurse compares the client's data to a wide range of standards or measures. E.g.
  - ✓ Normal health patterns
  - ✓ Normal vital signs
  - ✓ Laboratory values
  - ✓ Basic food groups
  - ✓ Growth
  - ✓ development

# Cont'd standard comparison

- The nurse compares the client data against standards and norms in order to identify significant and relevant cues. A cue is a piece of information or data that influences decisions and are required through the use of the five senses (taste, touch, smell, hearing, and sight)
- Types of cues;
  - ✓ Cues that point to change in a client's health status or pattern which may be positive or negative e.g.
- Client states; “ I have recently experienced shortness of breath while climbing stairs” or “I have not smoked for three months

# Cont'd cues

- Cues that vary from norms of the client population where by client's pattern may fit within cultural norms but vary from norms of general society.

e.g.

- ✓ eating very small meals
- ✓ Having a poor appetite

- Cues that indicate a development delay i. e. changes in health patterns occur as the person grows and develops

e.g. at 9 months an infant is usually able to sit without support

# Clustering data

- It is determining the relatedness of facts and finding patterns in the facts
- Data are examined to determine whether any patterns are present even if represent isolated incidents or are significant
- It is influenced by the nurse's background of scientific knowledge, past experiences, and concept of nursing

# Cont'd clustering

- The nurse combines data from different assessment areas to form patterns or subjective and objective data into appropriate categories
- The nurse makes inferences (i.e. the nurse's judgment or interpretation of cues) throughout the diagnostic process
- The nurse interprets the possible meaning of the cues and labels the cue cluster with tentative diagnostic hypotheses



# Identifying gaps

- Are the missing information needed to determine a data pattern. E.g. during the assessment phase, the nurse needs data about a client's definition of health to interpret his statement "I am sick all the time". Data may be completely missing or incomplete

## b).Formulating of nursing diagnosis

- ❖ Formulation of nursing diagnosis. Cluster of cues and make inferences from the data. Cues are objective or subjective data. Inference are nurses conclusions.
- ❖ It is clear statement about a clients actual or potential health problem. Diagnosis may be written in either two parts or three parts.

# diagnosis

❖ Two parts:

- ✓ Problem(P)- statement of the clients response
- ✓ Etiology(E)- Factors contributing to probable causes of the response.
- ❖ The 2 parts are joined by the word related to or associated with rather than “due to” . E.g
- ✓ In effective breathing pattern (problem) related to pain (etiology).

## Cont.....

- Self esteem disturbance (problem) related to altered body image (loss of arm) (etiology).
- Anticipatory grieving (problem) related to anticipated loss( etiology) secondary to husbands illness (etiology).

# Cont.....

Three parts:

- Statement includes the problem the etiology and observed sign and symptoms (PES). ( Related to and manifested by). Or evidence by. E.g
- Self-esteem disturbance (problem) related to altered body image (loss of arm) (etiology) manifested by crying and hostility( signs and symptoms).
- Anticipatory grieving(problem) related to husbands terminal illness(etiology) manifested by Anorexia and withdrawn behaviour(signs and symptoms).

# “The problem”

- The problem is the first part of the statement which identifies the patient problem noted in the assessment phase
- The problem can be determined by considering the list of accepted diagnosis

# Examples

- ❖ Alteration –a change from usual functioning level  
e.g. altered nutrition means there a change from  
the usual optimum eating or nutritional capacity
- ❖ “Risk for” is another modifier
- ❖ “potential for”
- ❖ “Impairment”
- ❖ “Deficit”
- ❖ “Dysfunctional”
- ❖ “Ineffective” etc

# Etiology

- The second part of the diagnostic statement which points out the source of the problem or the contributing factor to the problem
- It helps identify the specific nursing intervention to correct/rectify the problem



# Evidence/manifestations/signs and symptoms

- They do substantiate the nursing diagnosis and they come as the last part of a 3 order/part nursing diagnosis
- NB:-
  - Actual nursing diagnosis should come before potential one
  - Nursing unlike medicine doesn't yet have a complete taxonomy of diagnosis labels

## Cont.....

- The official organization that has assumed the responsibility for developing the taxonomy for nursing diagnosis and formulating nursing diagnosis is North America Nursing Diagnosis Association (NANDA)
- The compiled and categorized nursing diagnosis by NANDA are updated at least every 2 years

# Example 1

- Pain related to inflammation of the lung tissue as evidenced by patient reporting pain
  - ❖ Pain –problem
  - ❖ Inflammation of the lung tissue-etiology
  - ❖ Patient reporting pain-defining characteristics
- Potential nursing diagnosis has only two components:-*problem* and *etiology*

## EXAMPLE 2

- Mrs. Tom is involved in a road traffic accident where she sustained fractured ribs
- ✓ On assessment she complains of fatigue, general body weakness, shortness of breath (breathlessness), intense pain while coughing and abdominal pain
- ✓ She also sustained soft tissue injuries making her with unstable gait
- ✓ She is anorexic too. Her vital signs are:-BP-80/60mmHg, pulse-96 B/min, temp.,-36°C and SPO<sub>2</sub> of 65%
- ✓ At the moment she is on complete bed rest

# Cont' d

- **SpO<sub>2</sub>** stands for Peripheral capillary oxygen saturation.
- It is an estimation of the oxygen saturation level.
- **Normal blood oxygen levels** are considered 95-100 percent.
- Between 90 and 95 percent, ones blood oxygen level is considered low but it is not necessarily indicative of a health issue.

# Problems for Mrs. Tom

- ✓ Ineffective breathing pattern
- ✓ Acute pain
- ✓ Unstable gait
- ✓ Anorexia
- ✓ Ineffective airway clearance

# Cont'd

- ✓ Altered tissue perfusion
- ✓ Risk for infection
- ✓ Knowledge deficit
- ✓ Pain
- ✓ Potential for internal injuries
- ✓ Potential for aspiration

# Examples of nursing diagnosis for Mrs. Tom

- 1) Acute pain related to tissue trauma or acute pain related to tissue inflammation as evidenced by spitting secretions with difficulty
- 2) High risk for altered nutrition less than body requirement related to anorexia
- 3) Impaired gaseous exchange related to chest pain as evidenced by a low SPo<sub>2</sub> of 60%



# Cont.....

- 4). Fluid volume deficit related to internal bleeding evidenced by the low BP
- 5). Potential for circulatory volume deficit related to internal injuries
- 6). Potential for infection related to impaired skin integrity
- 7). Potential for respiratory tract infection related to reduced cough reflex
- 8). Potential for injury related to unstable movement

# Guidelines for writing a nursing diagnosis

- The medical diagnosis should not be included in the diagnostic statement e.g. it is wrong to say “Altered nutrition less than body requirement related to gastro-enteritis
- The two parts of the diagnosis SHOULD NOT mean the same thing e.g. “Altered comfort related to pain OR inability to feed self related to feeding problem
  - ✓ **Correct** –” self care deficit or feeding deficit related to weakness in the hands

## Cont.....

- Etiological factors SHOULD NOT Be expressed in terms that cannot be changed e.g. “dysfunctional grieving related to death of spouse” OR “Alteration in comfort, pain related to surgical incision”
- Avoid value judgment: avoid use of words such as poor, good, unhealthy, inadequate etc implies value judgment

# Cont.....

- A patient's behaviour should not be judged by the nurse's personal behaviour and standards e.g. it will be wrong to say  
“Disturbance in self image related to poor relationship with parents” **instead say**  
“Disturbance in self image related to prolonged separation from parents”
- Avoid reversing the clauses: it may result in unclear communication about the problem and etiology leading to difficulties in writing appropriate outcome and nursing orders

# Cont.....

- ✓ E.g it will be wrong to say “Decreased calorie intake related to alteration in nutrition
- ✓ **Correct-** “alteration in nutrition less than body requirement related to decreased calorie intake
- Write in legally acceptable terms. E.g it will be wrong to say “risk for injury related to lack of side rails” OR “ineffective airway related to frequent suctioning
- ✓ **Correct-** risk for injury related to dizziness or motor weakness

# Cont.....

- Use “related to” rather than “due to” or “caused by”
  - ✓ This suggests that it is a contributing factor
  - ✓ “Related to” identifies a relationship between the problem and the etiology
  - ✓ Related to does not imply cause-effect relationship
  - ✓ “Due to” implies cause –effect relationship

# Cont.....

- Write the diagnosis in terms of response rather than need
- ✓ The problem should reflect response to illness
- ✓ Therapeutic or functional needs e.g “needs frequent turning” , “needs mouth care” , “needs nutritious diet” , they describe nursing interventions and not responses
- The actual nursing diagnosis should come before the potential nursing diagnosis in the nursing care plan



# Differences between nursing & medical diagnosis

- Nursing diagnosis is a nursing judgment and refers to a condition that nurses are permitted to treat and/or manage. It describes a patient's physical, sociocultural, psychological and spiritual responses to an illness or a health problem.
- A medical diagnosis is made by a physician and refers to a condition that he/her can treat. It is a disease processes with specific pathophysiological responses that are fairly uniform from one patient to another



# Continued differences

- A patient's medical diagnosis remains the same for as long as the disease process is present
- Nursing diagnoses change as the patient's responses change.
- They (N.D.) relate to the nurse's independent functions in the areas of healthcare that are unique to nursing and separate distinct from medical management
- Nurses have responsibilities related to both medical and nursing diagnosis

# Example comparisons

## Nursing diagnosis

- Activity intolerance related to decreased cardiac output (has restricted mobility for hours following infarction)

## Medical diagnosis

- Myocardial infarction

# PLANNING

- It is the 3<sup>rd</sup> step in nursing process. It is the process of designing the nursing interventions required to prevent, reduce or eliminate the clients health problems identified during diagnostic phase.
- The following people can be involved in planning:
  - One or more nurses
  - The client, family member
  - Other health professions(Client must participate actively)

# Cont.....

- Planning is a systematic process in which decision making and problem solving are carried out.
- Planning processes uses
  1. Data obtained during assessing
  2. The diagnosis statement that present the clients health problem( potential and actual).

# Cont.....

Types:[Phases of planning]

1. Initial planning- Carried out by the nurse who is admitting, gathers the comprehensive admission assessments.
2. Ongoing planning updates the clients plan of care.

New information about client is collected, evaluation done is included to plan of care.

3. Discharge planning involves plan for discharge.

# PLANNING PHASE INVOLVES

- Prioritizing the nursing diagnosis, once the list of nursing diagnosis has been made ,the problems can be ranked in order of importance using the Maslow hierarchy of human needs.
- Identify and set goals.
- ✓ Goals are intended change in clients condition.
- ✓ Goals should be time bound.

# Cont'd planning

- ✓ Goals may be long term expected in weeks or months.
- ✓ short term expected in hours
- Identify specific nursing interventions also referred to as nursing action performed to achieve outcome.

## Cont.....

- Direct care intervention performed through interaction with the client.
- Indirect care intervention activity performed on behalf of the client.e,g making referrals.
- Independent ones that nurses are authorized to prescribe based on their knowledge.
- Dependent intervention prescribed by physician.



# Cont'd planning

## **Planning Process:**

- 1- Setting priorities.
- 2- Establishing client goals/desired out comes.
- 3- Selecting nursing strategies.
- 4- Writing nursing orders.

# SETTING PRIORITIES

- Is the process of establishing a preferential order for nursing diagnosis and interventions.
- ✓ The nurse and client begin planning by deciding which nursing diagnosis requires attention first, which second, and so on.
- ✓ High priority life threatening condition e.g. bleeding.
- ✓ Medium priority less life threatening conditions .
- ✓ Low priority require minimal intervention.

# Cont'd planning

- Consider ABC
  - ✓ A Airway
  - ✓ B Breathing
  - ✓ C Cardiac activity

## FACTORS TO BE CONSIDERED WHEN SETTING NURSING INTERVENTIONS

- Clients values and beliefs
- Clients priorities
- Resources available e.g. medical equipments
- Safe and appropriate
- Based on nursing knowledge and experience.

# Establishing client goals/desired out comes.

Establishing client goal/desired out comes:

The nurse/client set goals for each nursing diagnosis.

Purpose of Goals:

a- provide direction for planning nursing interventions

b- Serve as criteria for evaluating client progress.

c- Enable the client and the nurse to determine when the problem has been resolved.

# Cont'd

## **Types of Goals:**

### **a- Short Term Goals:**

For a client who require health care for a short time.

For those who are frustrated by long-term goals that seem difficult to attain and who need satisfaction of achieving a short-term goal.

### **b- Long Term Goals:**

Are often used for clients who live at home and have a chronic health problem.

# Cont'd

- Selecting nursing intervention and activities are actions that nurse performs to achieve client goals.
- The specific strategies chosen should focus on eliminating or reducing the etiology.

## **Nursing Intervention:**

**1- Independent intervention:** are those activities that nurses are licensed to initiate on the basis of their knowledge and skills.

# Cont'd

**2- Dependent intervention:** are activities carried out under the physician orders.

**3- Collaborative intervention:** are actions the nurse carries out in collaboration with other health team member.



### 3- choosing nursing strategies

#### **criteria for choosing nursing strategies:**

- 1- Safe and appropriate for patient.
- 2- An achievable with the resources available.
- 3- Congruent with other strategies.
- 4- Determined by state law.

## 4-writing nursing orders

### **The component of nursing order:**

- 1- Date.
- 2- Action verb.
- 3- Content area.
- 4- Time element.
- 5- Signature.

# NURSING CARE PLAN

- Is a written guide to be implemented to help client achieve optimal health.
- CONSISTS OF
  - Assessment data collected during assessment period.
  - Nursing diagnosis, according to priority.
  - Goal/outcome criteria.
  - Interventions/plan of action.
  - rational reason for each goal implemented.
  - Implementation
  - Evaluation see results

## Cont....

- Nursing care plan organizes information about a client health into meaningful whole, it focuses on action nurses must take.

# PURPOSE OF NURSING CARE PLAN

- To provide direction for individualized care of the client.
- To provide continuity of care.
- To provide direction about what needs to be documented on the clients notes.
- To serve as a guide for assigning staff to care for the patient.
- To serve as a guide for reimbursmbent from medical insurance companies.

# INTERVENTIONS

- Can be implemented on the following basis
  - Specific order can be written by physician in patients record or by nurse in the nursing care plan.
  - Standing order written by physician and kept in the file nurses implement them after assessing the condition of the client.
  - Protocol order followed under certain specific conditions.

In emergency situations, the nurse can proceed directly from assessment to intervention.

# IMPLEMENTATION

- Is the phase in which the nurse puts the nursing care plan into action to attain desired out come.
- ✓ Implementation involves carrying out nursing orders.
- ✓ Implementation phase includes data collection, priotization, performance and documentation.

# Cont'd implementation

## **Process of implementing:**

- 1- Reassessing the client.
- 2- Determining the nurse need for assistance.
- 3- Implementing the nursing orders( strategies).
- 4- Delegating and Supervising.
- 5- Communicating the nursing actions.



# Cont'd implementation

- Guidelines on implementation;
- ✓ Base nursing intervention on scientific knowledge, nursing and professional standards
- ✓ Clearly understand the intervention to be implemented and question any that are not understood
- ✓ Adapt activities to the individual patient
- ✓ Implement safe care

# Cont' d

- ✓ Provide teaching, support and comfort to enhance the effectiveness of nursing care plan
- ✓ Be holistic i.e. view the pt as a whole
- ✓ Respect and dignity of the pt to enhance the pt's self-esteem by providing privacy and encouraging him/her to make their own decisions
- ✓ Encourage pts to participate actively in implementing the nursing interventions

# EVALUATION

- It is to judge or to appraise
- ❖ Evaluating is a planned, ongoing, purposeful activity in which clients and health care professionals determine:
  - ✓ The clients progress toward goals and achievement.
  - ✓ The effectiveness of the nursing care plan

# Cont'd evaluation

- In nursing process to evaluate is to identify whether the set goals have been met.
- Evaluation is important in nursing process because the results will tell either nursing interventions will be terminated, reviewed or changed.

# Components of evaluation

## **Process of evaluating client responses:**

- 1- Identify the desired out comes.
- 2- Collecting data related to desired out comes.
- 3- Compare the data with desired out comes
- 4- Relate nursing actions/activities to client goals/desired outcomes.
- 5- Draw conclusions about problem status.
- 6- Continue to modify or terminate the clients care plan.

# Cont'd evaluation

- DOCUMENTATION

Putting down what has been done.