PRACTICAL 1 CARRYING OUT NURSING PROCESS

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1.0 OBJECTIVES

After completing this practical, you will be able to:
- carry out the steps of nursing process;
- gain cooperation of parents and children during nursing assessment;
- make the nursing diagnosis of a respective client;
- prepare nursing care plan;
- render/implement nursing care as per nursing care plan; and
- evaluate the effectiveness of nursing interventions.

1.1 INTRODUCTION

You may have learnt about nursing process in your 2nd year course BNS-106 (Medical Surgical Nursing) Block 1 and BNSL-106. Here we shall try to review the same and learn how to apply the nursing process in Paediatric Nursing. How can you participate in the nursing process? One way which you can think of, is in your own home, you can prepare care plan based on nursing process for a child who may be an infant, toddler or a pre-schooler for whom prevention of illness and promotion of health are vital issues. How can you use nursing care plans based on nursing process in the paediatric units of your hospital? In this practical you will find answers to all such questions. Besides, we shall also review nursing process concept. The important components of all nursing care is to record the observation and record any abnormality while taking care of a child.

1.2 REVIEW OF NURSING PROCESS

We assume that you are familiar with the terms like client, nursing care, clinical appraisal, nursing intervention.
You have read that nursing process is a useful series of steps to provide comprehensive care to the client. On this basis, let us try to review nursing process. We shall begin with definition.

1.2.1 Definition

According to WHO (1977) the “nursing process” is a term applied to a system of characteristic nursing interventions in the health of individuals, families and/or communities. It involves the use of scientific methods for identifying the health needs of the patient/client/family or community and for using these to select those which can most effectively be met by nursing care, it also includes planning to meet these needs, provide the care and evaluate the results. The nurse in collaboration with other members of the health care team and the individual or groups being served, defines objectives, sets priorities, identifies care to be given and mobilises resources. He/she then provides the nursing services either directly or indirectly. Subsequently, he/she evaluates the outcome. The information feedback from evaluation of outcome should initiate desirable changes in subsequent interventions in similar nursing care situations. As you know that the nursing process has four components, assessing, planning, implementing and evaluating. This process incorporates the analysis of data and nursing diagnosis as a part of the assessment. We also conceptualise nursing process as a problem-solving process. It consists of five operational phases; Assessment, nursing diagnosis, plan formulation, implementation and evaluation. It involves both cognitive and operational skills.

1.2.2 Comparison of Nursing Process with the Problem-solving Method

Nursing process is a continuous phenomenon, a problem-solving approach to nursing care and serves as the focus for nursing practice and nursing research. The comparison between the two is given in following table. You will get a clear idea of how these two approaches differ. You can adopt either process approach or problem solving approach according to your convenience.

| Table 1.1: Comparison of Nursing Process with Problem-solving Method |
|--------------------------|--------------------------|
| **Nursing Process**      | **Problem-Solving Method** |
| Assessment               | Finding the problem      |
| • Collecting the data    | • Collecting the data    |
|  (Nursing history and assessments) |          |
| • Classifying the data   | • Examining the data     |
|  (comparison with normal)|          |
| • Analysing the data     | • Interpreting the data  |
| • Summarizing and        | • Identifying the problem and stating the problem |
|  interpreting the data   |                          |
| Nursing Diagnosis        | Stating problem          |
| • Stating the problem    | • Developing alternatives and making a decision |
| • Setting priorities     |                          |
| • Establishing goals for care |                      |
1.3 STEPS IN NURSING PROCESS

You must have learnt steps of the nursing process in Medical Surgical Nursing. You review the steps of the nursing process and follow the same steps to plan nursing care for children. We shall revise the same here.

As you know that there are four steps of nursing process as given below:

1.3.1 Assessment

This includes the data collection (nursing history and physical assessment), comparison of data with the normal, and analysis of the data gathered. Systematic and thorough data collection is the first goal of the nurse when initiating the nursing process. It should include the client’s biophysical, psychosocial status and for the older child, spiritual status. Now let us see what actually is assessment.

Nursing Assessment

You will agree with us that nurses should have ability to observe intelligently and systematically. It is a fundamental requisite in nursing assessment and is also essential in all subsequent steps of the nursing process.

- Assessment is a two step process that enables the nurse to identify the client’s needs and problems.
- These two steps are as follows:
  
  **Step 1:** Data gathering

  **Step 2:** Problem identification.

Data Gathering

It is the gathering of information about client’s physical health, mental outlook, social circumstances, family and community life, and other factors.

To prepare the data base, it is necessary to gather data. Data base is part of the client oriented record.

There are two types of data:

- Subjective Data
- Objective Data
Subjective Data is basically what patients tell you about what they are experiencing, feeling, seeing, hearing or thinking. They are personal expression of clients about themselves and environment. This data is obtained by the nurse when writing up the nursing history. It is also obtained during daily contact with the client. It is essential to write exactly what client says. In case of young clients, the data may be gathered from parents/guardians.

Objective Data is the information about the client obtained by the health practitioner/nurse by observation via senses (e.g. eye, ear, nose, tongue, skin). This data is usually gathered during the physical examination or functional assessment. Objective data gathering is also a continuous process, requiring daily and sometimes hourly or even minute to minute updating depending on the condition of the client.

Let us now sum up how we can assess and take information from patient/child. Information that is collected from all possible sources is called a data base, which should include the following.

Data Base

- Child’s demographic profile i.e. age, sex, type of family, address, education and occupation of parents.
- Antenatal, intrantal and postnatal history, place of birth.
- Immunization status.
- Developmental milestones.
- Past health history.
- Present health history.
- Signs and symptoms of the present illness.
- Reaction to illness and hospitalization.
- Social and cultural history including parent’s demographic profile.
- Family’s medical history.
- Child’s activities of daily living.
- Physical, physiological and mental status of child.
- Review of laboratory tests.
- Parent-child relationship.

To obtain data, two important skills are required. These are:

Skills

- Observation (the use of all five senses — sight, hearing, touch, taste and smell).
- Communication.

From what possible sources you as a paediatric nurse should collect data for assessment of the child under your care?

- Interview/health history; child, family, significant individuals.
- Observation of social interactions.
• Developmental assessment.
• Laboratory data.
• Consultation with other health professionals, school teachers.

Remember
Setting priorities based on nursing diagnosis is an essential part of nursing management. Decision-making is required immediately after nursing diagnosis is made to alleviate client's suffering.

Now we shall speak about how you can gain cooperation from parents and children during assessment. You need to have a good communication skill.

Points you must remember for gaining cooperation of parents and children during nursing assessment are as follows:

- Welcome parent and child to a neat, clean physical environment where nursing history is to be taken.
- Maintain privacy.
- Provide a space where the young child can play during the parent-nurse interview.
- Introduce child and parent/family members to appropriate persons in the unit.
- Clarify your role as nurse in health setting.
- Throughout the interview and assessment demonstrate empathy for and interest in all family members.
- Assure the child and the parents that information will be kept confidential and will be shared with only nursing staff and physician for planning care for the child.
- Explore any concerns about past events that may influence parents ability to handle stress and help them reduce anxiety levels to obtain cooperation.
- Use effective communication interviewing and teaching skills. The focus of interview and assessment are maintained as the nurse helps the parents and child provide the pertinent information necessary to achieve the mutual goal.
- To alleviate the anxiety of parents and child discuss the general reasons for taking nursing history and for doing an assessment of the child.
- Give detailed explanations regarding specific procedures to be done at appropriate times during the assessment.
- Demonstrate respect for the child and parents during the examination.
- Estimate the coping ability of the child before beginning of assessment.
- Maintain eye-level contact when child speaks to nurse.
- Speak in a quiet tone of voice, using simple sentences to promote understanding and reduce confusion.
- On the basis of the developmental characteristics of each age group, certain techniques can be used to encourage children to cooperate.
- Presence of parents serves to reduce the anxiety of a child during physical assessment.
• If child behaves in a cooperative manner, praise and rewards should be given freely. Material rewards such as stickers and simple toys may be given if available, this in turn will make child gain ability to master and improve self esteem.

You have seen that you collect the subjective data by taking nursing history but while taking history you also make observations based on the history such as identifying some signs or checking pulse B.P. respiration etc. So you need to take careful history. Now we shall focus on history before going to next step of assessment.

The Nursing History

The nursing history provides a guide for obtaining systematic information which can help you to:

• Plan and modify your care to suit the individual clients preferences and usual living pattern.

• Establish a baseline from which to evaluate the results of nursing action.

You have already learnt that the history is collected soon after admission of the client in the unit. However, we will review briefly.

• The technique for obtaining the history is a structured interview.

• The items frequently included are:
  — events leading to client’s admission to the hospital.
  — basic social data.
  — physician data.
  — client’s usual pattern of daily living.
  — environmental factors that may affect client’s health.
  — client’s or family’s understanding of health and illness status.
  — concern and expectations of client/family care he/she will receive in hospital.

• Some of these data may be obtained from the health records.

• The format of the nursing history form varies from hospital to hospital.

The data as we have mentioned above can be obtained from various sources as given below:

Sources of Data

There are two major sources of data:

Primary source is the client.

Secondary sources include

— The client’s significant others such as family members, friends.

— Hospital and clinic records e.g. out patient department care paper.

— Laboratory and diagnostic reports such as CBC report, urine routine and microscopic report, ECG report, X-ray and its report.
— Note of other members of the health team such as physiotherapist, dietitian notes of etc.
— Medical and nursing literature.
— Notes from lectures, educational films and tapes.

**Remember**
- You need to use all five senses in observing a client.
- Head to foot examination will be helpful and no part of the body will be left out if sequence is followed.

The information you obtain from talking with the client/family members and from your observations should always be validated by checking with the client so that whether the impression you have gained are in line with client’s perceptions.

The following items need validation:
- Vital signs
- Elimination status
- Nutritional status
- Sensory perception
- Motor status
- State of rest and comfort
- Mental status
- Growth and development status
- Emotional status
- Social status

Refer the following nursing assessment form in relation to vital signs.

**King George Hospital Nursing Assessment Form**

Name: Raju  
Age: 5 years  
Ward: Isolation Ward  
Date: 6th Nov. 1992  
Day of admission: 3rd day.

**Vital signs:**
- Blood Pressure: 100/70 mm/Hg
- Temperature oral Rectal Axilla - 103° F (Axilla)
- Pulse/minute - Radial: 120
  - Irregular
  -Bounding
- Respiration/minute: 24
  -Non-rhythmic
  -Labored
After you have completed the assessment of child you have to arrive at a concrete conclusion in order to plan for his care. For that you go through the Nursing diagnosis as given below.

**Nursing Diagnosis**

- Nursing diagnosis are judgements or conclusions reached by you after analyzing the data base that indicate a potential or actual human need that you as a nurse can address.
- It is a description of current and potential problems of client that can be alleviated by nursing interventions.
- Actual problem or potential problem and factors that produced the problem. It is a statement of a client’s actual potentials and factors that produced the problems.

So you have to identify the factors which actually produce the problems in individual client/child. While making diagnosis you may come across following problems.

**List of Nursing Diagnosis**

- Activity intolerance
- Airway clearance — ineffective
- Adjustment — impaired
- Anxiety
- Body temperature — altered (Hypothermia, Hyperthermia)
- Bowel elimination — alteration-constipation/diarrhoea/incontinence
- Breathing pattern — ineffective
- Cardiac output — alteration (decreased)
- Comfort, alteration (in pain)
- Communication — impaired (verbal)
- Diversional activity — deficit
- Coping — ineffective individual or family, disabling
- Fear
- Fluid volume — alteration (excess, deficit)
- Gas exchange — impaired
- Growth and development — deviations
- Hopelessness
- Infection
- Injury — poisoning, suffocation, trauma
• Knowledge — deficit (specific areas — weaning food)
• Mobility impaired
• Neglect
• Non — compliance
• Nutrition — alteration in less than required, more than body requires
• Post trauma responses
• Powerlessness
• Rape, trauma syndrome
• Self-concept, disturbance
• Sensory — perceptual alteration, (visual alteration kinesthetic, tactile, olfactory)
• Sexual dysfunction

With the above discussion we can say that a well worded nursing diagnosis has two parts:
• The problem
• The etiology of problem

For example a statement of a problem and its cause may be given as follows:

i) • Problem — An alteration in child’s mucus membrane
   • Etiology — Due to poor oral hygiene

ii) Problem — Dehydration
    Etiology — Diarrhoea

Activity 1
Select one child of any age group and list problems and its etiology in the box provided.

<table>
<thead>
<tr>
<th>Name of the Client</th>
<th>Age</th>
<th>Date of Admission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosis</td>
<td>Weight on Admission</td>
<td></td>
</tr>
<tr>
<td>Problem</td>
<td>Etiology</td>
<td></td>
</tr>
</tbody>
</table>

Let us now understand how to use the list of nursing diagnosis to identify nursing diagnosis. You can do so by doing the following activity:

Activity 2
Raju, 5 year old child is admitted in an isolation ward and he is diagnosed as a case of poliomyelitis (Rt. Leg). He has following signs and symptoms:

Signs and Symptoms
• High fever — 104° F.
• Loss of appetite — anorexia
• Inability to move right leg
• Dehydration
• Anuria
• Sore throat
• Headache
• Restlessness

i) List the nursing diagnosis of Raju in the box.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Nursing Diagnosis</th>
<th>System Affected</th>
</tr>
</thead>
</table>

ii) Name the systems of the body affected in poliomyelitis against each nursing diagnosis in the box.

Now we shall move on to another important step of nursing diagnosis i.e. planning.
1.3.2 Planning

Once you have listed the nursing diagnosis you have to plan the care. This step consists of goal setting and nursing strategies. The major activity in planning is the development of the nursing care plan that provide basis for intervention. The paediatric client, the family and the nurse must be involved. The nurse’s plan of action must be structured to include all the identified nursing diagnosis, actual or potential and should be based on principles and sound rationale. With this concept of planning we shall now define nursing care plan.

Nursing care plan is a written document that states specific nursing interventions planned for a particular client.

Practical Points in Preparation of Nursing Care Plan

- You first review the nursing diagnosis, then assign this priority or the order in which these are to be met.
- Along with client and family, develop goals specific to the client’s individual needs.
- These goals may be designated (by the client/family) as high, medium or low priority.
- Your nursing strategies should be client centred.
- Each strategy that you consider should be based on a specific reason.
- Document or write down nursing diagnosis, goals with time periods and nursing strategies. This information is to be written in a systematic and concise manner so that other nursing personnel can understand and use it.
- Remember that nursing care plan focuses on nursing problems and have a nursing approach.
- Write nursing care plan in clear and specific terms.
- Take time to sit down and write out a plan of care that will help you to organize your mental thoughts to think through what you hope to accomplish by nursing care.
- Take into account potential problems as well as those which are actually present. Review the possibilities of alternative nursing interventions and develop a plan of care that can be followed through by all nursing personnel concerned with the client.

Advantage of Written Plan of Care

- Continuity.
- Completeness of care.
- That everyone is using the same approach with the client.
- That nothing is left out in care.

Format of Nursing Care Plan

It varies from hospital to hospital, nursing school to nursing school and textbooks to textbooks.

The following two nursing care plan describes one nursing diagnosis of Raju.
Name of Client: Raju
Age: 5 years
Date of admission: 6th Nov., 1992
Date of Care Plan: 9th Nov., 1992

### Nursing Care Plan 1

<table>
<thead>
<tr>
<th>Client's Problem</th>
<th>Expected Outcome</th>
<th>Nursing Strategies/intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain in Right leg</td>
<td>1) Quiet and comfortable at all times</td>
<td>1) Medication for pain</td>
</tr>
<tr>
<td></td>
<td>2) Calm facial expression</td>
<td>2) Hot fomentation</td>
</tr>
<tr>
<td></td>
<td>3) Decreased restlessness</td>
<td>3) Maintain anatomical position of right leg with extra pillows</td>
</tr>
<tr>
<td></td>
<td>4) Verbal expression stating that pain is lessened</td>
<td>4) Complete bed rest</td>
</tr>
</tbody>
</table>

### Nursing Care Plan 2

<table>
<thead>
<tr>
<th>Assessment Data</th>
<th>Expected client/family outcomes</th>
<th>Nursing Intervention</th>
<th>Reason</th>
<th>Criteria for Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain in right leg</td>
<td>Quiet and comfortable at all times</td>
<td>As mentioned in care plan No. 1</td>
<td>Effect of virus on nerves results in pain. Due to pain and uneasiness right leg is not in anatomical position. This may lead to contracture and deformity of right leg.</td>
<td>Statement that pain has lessened.</td>
</tr>
<tr>
<td>Uneasiness verbal statement</td>
<td>Calm facial expression</td>
<td></td>
<td></td>
<td>Right leg is maintained in anatomical position.</td>
</tr>
<tr>
<td>Severe pain in anatomical position right leg altered crying</td>
<td>Decreased uneasiness</td>
<td></td>
<td></td>
<td>Calm and quiet expression</td>
</tr>
<tr>
<td></td>
<td>Statement of pain lessened</td>
<td></td>
<td></td>
<td>Decreased uneasiness.</td>
</tr>
</tbody>
</table>

### 1.3.3 Implementation

The planned goals and strategies are translated into nursing intervention by means of the nursing care plan. It is essential that the client and family participate in nursing care to alleviate or correct the problems and to prevent potential problem. This phase of nursing process ends when the nursing strategies have been completed and the client’s responses have been recorded.
These recordings must be related to:

- Nursing diagnosis
- Nursing actions
- Clients responses
- Additional important information

Recording is done in an objective and concise manner as it is the basis for evaluation of the nursing care plan.

1.3.4 Evaluation

This is the last step in nursing process. Throughout care, you constantly evaluate the progress the client has made towards reaching the pre-established goals/objectives. This step is the process of determining the extent to which predetermined goals/objectives have been attained.

The effectiveness of nursing care will be evaluated by you through observations of the client. It is important to have definite criteria in mind. These criteria should be observable and they should be measurable.

If you find that a prescribed strategy does not appear effective, try alternative course of action. You can also examine critically the soundness of the plan developed.

Evaluation means a reassessment and a gathering of additional new information. On the basis of your reassessment and a gathering of additional new information, you may identify new problems, modify your plan of care or decide to try alternative interventions.

We hope by now you have learnt the nursing process and identified nursing diagnosis of Raju.

All you have to do now is; visit a paediatric ward and select one client in the age group of 3 to 5 years suffering with any communicable disease.

Let us now understand how to use nursing process for the selected client.

**Activity 3**

- Identify the nursing diagnosis of the selected client in a paediatric ward of your work place.
- List needs according to the priority.
- Prepare a nursing care plan.
- Give comprehensive care to the selected client for five days and send your care plan, each day wise for the assessment.

**Activity 4**

As you have the experience of admission procedure, admit one client to the paediatric ward and prepare nursing care plan. Discuss with your nursing colleagues and modify if required. Send a copy of the care plan along with nursing history and assessment to your center for evaluation.
Guideline for Nursing Process (Paediatrics)

1) **Identification:**
   - Name: Age: Sex: Religion:
   - Address:
   - Education Status of Parents: Mother Father
   - Occupation of Parents:
   - Bed No./Unit:
   - MRD No.:
   - Diagnosis:
   - Date of Admission:
   - Date of Planning:

2) **Medical Therapy:**
   - i) Procedures (Diagnostic/Therapeutic/Purpose/Nursing Responsibility)
   - ii) Medications/Action/Side effects/Nursing Responsibility.

3) **Assessment of the Child:**
   - Subjective Assessment — Short History/Complaints
   - Objective Assessment (Specific to diagnosis)
     - Vital Signs
     - Growth parameters
     - Investigations

4) **Nursing Care Plan:**

<table>
<thead>
<tr>
<th>Nursing Diagnosis</th>
<th>Expected Outcome</th>
<th>Nursing Interventions</th>
<th>Evaluation of Nursing Care</th>
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5) **Possible Prognosis**

1.4 **LET US SUM UP**

This practical provides you with the details of nursing process. You have learnt about the definition and steps of nursing process. You have identified different nursing diagnosis and learnt how to prepare a nursing care plan based on the steps of the nursing process, nursing history and nursing assessment.

After reading this practical you would have realized that each client is unique, having different needs based on his illness and environmental factors. Nursing is primarily concerned with assisting an individual client to cope with the daily activities of living in such a way as to promote his/her optimum level of health or to cope with the exigencies of terminal illness. The nursing process involves a continuing dynamic set of activities on your part.