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NURSING FOUNDATIONS II (N11) STUDY GUIDE

BASIC NURSING SKILLS IN THE CARE OF CLIENTS WITH PHYSIOLOGIC NEEDS

MOBILITY AND RESTORATIVE CARE

Introduction

Hello students!

The ability to move, that is, to go from one place to another or in a specified manner, or change one's physical position, is a vital need of sentient beings (humans and animals). In some occasions this can mean their survival. In individuals the lack of ability to move or even a decrease in this ability affects their level of independence in their activities of daily living or can lead to negative consequences such as impairment in skin integrity, muscle atrophy, and even psychosocial problems like depression and social isolation. In clients with existing problems such as those mentioned, a specific rehabilitation and/or restorative nursing program will have to be developed to ensure their attainment of optimal function as independently as possible.

This session looks into the concepts on mobility and restorative care focused on the essential knowledge, skills and attitudes in providing basic nursing care for clients with mild to moderate health problems related to mobility and body movements. You will review basic concepts in mobility, body mechanics, activity and exercise, factors that can influence mobility and body mechanics, as well as common health problems and your role as nurses in addressing these concerns.

Just like the previous sessions, nursing process will be our primary approach in understanding the concepts of mobility and applying restorative care to clients with health problems in these areas. A focus on the basic nursing skills will be expected as we are honing your skills to take care of clients with such alterations. We will look at both independent and dependent nursing interventions in client care.

Learning Outcomes

After studying this topic, you should be able to:

- 1. Review basic concepts on mobility and restorative care.
- 2. Determine the factors affecting mobility and restorative care.
- 3. Identify assessment data pertinent to mobility.
- 4. Identify nursing interventions to safely improve or promote client mobility and rehabilitation.
- 5. Demonstrate procedures and responsibilities promoting client mobility and rehabilitation.
- 6. Utilize nursing process in promoting client mobility.

Content Outline

Concepts on Mobility

Mobility involves the ability to move freely, easily, and purposefully in the environment as this is essential for individuals to meet their basic needs and attain their life goals. In order for the movement of the body to be purposeful and coordinated, it relies on the integrated functioning of the musculoskeletal system, the nervous system, and the vestibular apparatus of the inner ear. Your first discussion on activity and exercise emphasized four basic elements: body alignment, joint mobility, balance, and coordinated movement. People maintain alignment and balance when the line of gravity passes through the center of gravity and the base of support. These are essential concepts and principles not only for teaching your client but also for your own personal application in order to avoid unnecessary mishaps in performing nursing activities.

<u>Exercise</u> is physical activity performed to improve health and maintain fitness. It is usually planned, structured and involves repetitive bodily movement. It can be classified as either <u>isotonic</u>, isometric, <u>or isokinetic</u> and as either <u>aerobic or anaerobic</u>. You should be able to distinguish among these categories of exercise. *We already mentioned the two main benefits of exercise, can you add more?*

<u>Activity tolerance</u> refers to the type and amount of exercise or activities of daily living an individual is *able to perform without experiencing adverse effects*. <u>Functional strength</u>, on the other hand, refers to the *ability to do work*.

Factors affecting mobility

Your discussion in N10 on <u>Activity and</u> Exercise introduced to you the different factors that influence body alignment and activity. These include *growth and development, nutrition, personal values and attitudes, certain external factors, and prescribed limitations to movement.* Immobility affects almost every body organ and system adversely. Some of these problems include disuse osteoporosis and atrophy; contractures; diminished cardiac reserve; orthostatic hypotension; venous stasis, edema, and thrombus formation; decreased respiratory movement and pooling of secretions; decreased metabolic rate and negative nitrogen balance; urinary stasis, retention, infection, and calculi; constipation; and varying emotional reactions (Berman, Snyder and Frandsen, 2016). Since the different body systems are not isolated from each other in terms of functioning, it can be expected that one problem in one system related to immobility may directly or indirectly affect the other systems including psychosocial functioning.

Deepening Your Understanding

Read Chapter 44, pp. 1108-1118 on Activity and Exercise

Berman, A., Snyder, S., & Frandsen, G. (2022). Chapter 44 Activity and Exercise. Kozier & Erb's Fundamentals of Nursing: Concepts, Process, and Practice. 11th ed. Pearson Education, Inc.

Activity 1: Problems of Immobility

Immobility can bring about a host of problems that affect not only one or two body systems but several, which can eventually lead to further illness or debilitation. For each of the following body systems, identify the problems or effects of immobility, and the assessment techniques or tests you will use to validate these problems. Be concise with your answers. Submit your answer in the VLE with the name format: [Surname, Firstname Initial]_Problems of Immobility

Body System	Problems/Effects of Immobility	Assessment Technique/Tests
Cardiovascular System		
Respiratory System		
Musculoskeletal System		
Nervous System		
Gastrointestinal System		
Integumentary System		
Urinary System		
Metabolism		
Psychosocial Functioning		

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Concepts and Principles of Restorative Care and Rehabilitation Nursing

Disease, injury, and surgery, including birth injuries and birth defects can affect body function. These can result in **disability** which refers to any lost, absent, or impaired physical or mental function. It can also be <u>acute or chronic</u>. Depending on the extent of impairment, disability affects the individual's level of independence in performing his/her ADLs, which can either be total or partial, reversible or irreversible. The concept of **rehabilitation nursing** refers to the process of restoring an individual with disability to his or her highest possible level of physical, psychological, social, and economic function. **Restorative nursing**, on the other hand, refers to the care that helps persons regain health, strength, and independence, such as those older persons in nursing care homes. Restorative nursing may involve measures that promote: Self-care Elimination Positioning Mobility Communication Cognitive function (Nurse Key, 2016).

Nursing Process Application in The Care of Clients with Mild to Moderate Health Problems Affecting Mobility

In caring for your clients, your knowledge of the basics in nursing health history and physical assessment will come in handy with particular focus on activity and exercise pattern and assessment of the musculoskeletal system. Relative to your client's activity and exercise pattern **Assessment** includes a nursing history and physical examination of *body alignment, gait, joint appearance and movement, capabilities and limitations for movement, muscle mass and strength, activity tolerance, and problems related to immobility.* You need to ask questions related to *daily activity level* (refer to KATZ Level of Independence in ADL), *activity tolerance and level of endurance, type and frequency of exercise, and factors affecting mobility.* In addition, you need to check results of *laboratory tests, take measurements of body weight, fluid intake, and fluid output.* Refer to your references for special techniques in assessing immobility problems and determine what abnormal assessment findings are related to these.

The approved NANDA-I **Nursing Diagnoses** related to activity and mobility problems include Activity *Intolerance, Risk for Activity Intolerance, Impaired Physical Mobility (including its more specific versions), Sedentary Lifestyle, and Risk for Disuse Syndrome.* Other relevant diagnoses are *Fear (of falling), Ineffective Coping, Situational Low Self-Esteem, Powerlessness, Risk for Falls, and, if the client is immobilized, many other potential problems such as <i>Ineffective Airway Clearance and Risk for Infection.* Given this list and your knowledge of the previous concepts, you can imagine the other possible nursing health problems that the client may experience as a consequence of his mobility problems.

<u>**Goals and Outcomes of Care**</u> follow the NOC labels pertaining to activity and exercise, some of which include: activity tolerance; ambulation; balance; body positioning; coordinated movement; endurance; fall prevention behavior; fatigue level; immobility consequences, both physiological and psycho-cognitive; joint movement; mobility; physical fitness; play participation; and self-care. Examples of overall statements of goals for clients with actual or potential problems for mobility may include:

The client will demonstrate:

- Increased tolerance for physical activity
- Restored or improved capability to ambulate and/or participate in ADLs
- Absence of injury from falling or improper use of body mechanics
- Enhanced physical fitness
- · Absence of any complications associated with immobility

You can add further to this list based on what you and your client agree to achieve to improve his optimal functioning. In addition to previous nursing interventions related to promoting activity and exercise such as passive and active range of motion (ROM) exercises, there are other **Nursing**

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interventions the nurse performs with the client such as *moving, turning and positioning clients in bed or assisting clients to make transfers.* In performing these interventions, the nurse must remember to use good body mechanics. Although it does not ensure protection from injury, it allows for efficient, coordinated and safe use of the body to move objects and carry out ADLs. It is something both the nurse and client are encouraged to practice. Included in the nurse's interventions would be a *systematic 24- hours schedule of position changes, use of appropriate supportive or assistive devices for the client.* Preambulatory exercises and ambulating techniques to encourage client independence should also form part of the plan of care, including specific instructions about appropriate *use of wheelchairs, canes, walkers, and crutches.* Following the *NIC labels* nurses can initiate and apply a variety of independent nursing interventions to address client concerns. Some of these interventions require *skills performance* and will be reviewed in the basic nursing skills procedure in this module.

NANDA	NOC	NIC
Impaired Physical Mobility	 Suggested NOC Labels Ambulation: Walking Ambulation: Wheelchair Joint Movement: Active Mobility Level Self-Care: Activities of Daily Living (ADLs) Transfer Performance Client Outcomes Increases physical activity Meets mutually defined goals of increased mobility Verbalizes feeling of increased strength and ability to move Demonstrates use of adaptive equipment (e.g., wheelchairs, walkers) to increase mobility 	 Suggested NIC Labels Exercise Therapy: Ambulation Exercise Therapy: Joint Mobility Positioning

NANDA-NOC-NIC Connections

Evaluating established goals and outcomes of care based on the goat statements and NOC labels used. If outcomes are not achieved, the nurse, client, and support person need to explore the reasons before modifying the care plan. Sometimes it could be a lack of understanding or some missed instructions. Additional questions may be asked if an immobilized client fails to maintain muscle mass and tone and joint mobility, so that appropriate measures and necessary referrals to the primary physician may be made (Berman, Snyder, and Frandsen, 201

Deepening Your Understanding

Read Chapter 44, pp. 1025 - 1060 on Nursing Management

Berman, A., Snyder, S., & Frandsen, G. (2016). Chapter 44 Activity and Exercise. Kozier & Erb's Fundamentals of Nursing: Concepts, Process, and Practice. 10th ed. Upper Saddle River, New Jersey: Pearson Education, Inc.

Study the Sample Nursing Care Plan for <u>*Risk for Disuse Syndrome*</u> on <u>page 1061</u>. This gives a concrete application of the NANDA-NOC-NIC Relationship/Connection. You can also refer to the *concept map* found on <u>page 1062</u>.

Activity 2: Case Application – Mobility and Restorative Care

Read and work on the case sample below.

Mr. Nadu Lascia, a 43-year-old client, is recovering from a back injury and a left knee operation, following a motorcycle accident. He is to be discharged the following day on crutches and will return after 3 days to continue his rehabilitation program. A major aspect of discharge planning involves instructional needs of the client and the client's family.

Provide Mr. Nadu Lascia and his family education about any of the following topics:

- Maintaining musculoskeletal function
- Preventing injury
- Managing energy to prevent fatigue
- Preventing back/knee injuries

Choose <u>one topic</u> and develop a <u>health teaching plan.</u> Submit your work in VLE in PDF format using file name format: [Surname,Initial of Firstname]_Mobility-Health Teaching

One of the focus of planning and intervention of the nurse is to prepare the client and the family for home care since it is likely that the family or the client will need assistance to care for himself/ herself after hospital discharge or to continue his/her treatment/therapy in the community on an out-patient basis. An important nursing responsibility across all health conditions and context is to provide Health Education or Health Teaching to clients and their families.



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PRE-LABORATORY ACTIVITIES

Common/Basic Nursing Procedures in Mobility Management and Restorative Care

- Positioning clients on the bed (moving a client up in bed)
- Turning a client to the lateral or prone position in bed
- Logrolling a client
- Assisting a client to sit on the side of the bed (dangling)
- Transferring between bed and chair
- Transferring between bed and stretcher
- Ambulating clients using assistive devices (e.g., crutches, wheelchairs, etc.)

Nursing Skills Video: "Move Clients, but Mind Your Back"

Watch the following lists of videos for assisting and teaching clients in positioning, moving and transferring.

- 1. Assisting with Moving a Patient in Bed
- 2. Transferring from bed to stretcher
- 3. Assisting Client from Supine to Sitting Position
- 4. Assisting Client from Bed to Chair Transfer
- 5. Assisting with Ambulation Using a Gait Belt
- 6. Transferring Patient from Bed to Wheelchair
- 7. How to Use Crutches: Different types of Gaits

References

- Berman, A., Snyder, S., & Frandsen, G. (2022). *Kozier& Erb's Fundamentals of Nursing: Concepts, Process, and Practice.* (11th ed.). Pearson Education, Inc.
- Brookside Associates. (2015). *5.02 The effects of immobility*. Retrieved from Nursing Fundamentals I: <u>https://brooksidepress.org/nursing_fundamentals_1/?page_id=430&cn-reloaded=1</u>
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