Knowledge on body mechanics among II year B.sc nursing students in Narayana nursing institutions at Nellore

V Rupa Saritha Reddy and Dr. Indira S

Abstract

Background: Transfer and positioning are basic skills learned early in the education of professional nurse, knowledge of their skills and the nurse’s ability to implement them properly help maintain the client’s mobility and protect the nurses from injuries. The knowledge and application of body mechanics enable the nurse to care safely for clients with varying levels of independent mobility throughout the lifespan.

Objectives: 1. To assess the knowledge regarding body mechanics among II Year B.sc Nursing Students.
2. To find out the association between the body mechanics among II Year B.sc Nursing Students with their selected socio demographic variables.

Materials and Methods: The descriptive research design was used to conduct research study. The 40 II Year B.sc Nursing Students were selected by using simple random sampling technique among II Year B.sc Nursing Students in Narayana nursing institutions at Nellore.

Result: the result reveals that with regards to level of knowledge regarding body mechanics 16 (40%) nursing students are having inadequate knowledge, 23 (58%) nursing students are having moderate knowledge and 1 (2%) nursing students are having adequate knowledge.

Keywords: Knowledge, body mechanics, nursing students

Introduction

Body Mechanics is the coordinated effect of the musculoskeletal and nervous system to maintain balance, Posture, and body alignment. During Lifting, Bending, Moving and performing various activities of daily living use of proper body mobility of daily living use of proper body mobility without muscle stain and extensive use of energy. Body alignments and postures are without balance of the center of gravity. Body mechanics is the term used to describe the efficient coordinated and safe use of the body to move the objects and carry out the activities of daily living. The major purpose of the body mechanics is to facilitate the safe and efficient use of appropriate muscle. Groups to maintain a balance when the person moves the center of gravity direction moves towards the body. Types of body mechanics lifting, Pulling and Pushing and Pivoting Preventing a back of injury.

According to TNAI association of INWIA, Body Mechanics describe the center of gravity of an object and various plaints of the body. The center of gravity of an object and may be defined as the point at which man is centered. In the standing position. The center of gravity is located in the center of pelvis approximately midway between the umbilicus and symphysis pubis. The line of gravity is a vertical line that passes through the center of gravity. The constant pull exerted by earth every object towards center of maintain good posture and balance.

The principles of body mechanics and alignment are important in transferring and positioning the physically dependent client. Practical application of these principles reduce the risk of injury to client and health care personnel, risk of injury to client and health care personnel, back injury to client and a significant problem for nursing personnel, many of these and injury are sustained each year as a result of improper lifting and bending technique. The knowledge and application of body mechanics enable the nurse to care safely pro mechanic for client with varying order of independent mobility throughout the lifespan.
The knowledge and application of body mechanics enable the nursing student to care safely for client with varying cords of the independent mobility and throughout the life span. Knowledge and practice of body mechanics protect the client application of body mechanics enables the nurse to use correct muscle groups when position complaining care. The nursing students are able to position transfer and help client ambulate safely and effectively.

**Problem statement**
A study to assess the knowledge on body mechanics among II Year B.sc Nursing Students in Narayana nursing institutions at Nellore.

**Objectives**
- To assess the knowledge regarding body mechanics among II Year B.sc Nursing Students
- To find out the association between the body mechanics among II Year B.sc Nursing Students with their selected socio demographic variables.

**Materials and Methods**
A quantitative research approach and descriptive research design was used to assess the knowledge regarding body mechanics among II Year B.sc Nursing Students in Narayana nursing institutions at Nellore. The sample includes all the II year B.Sc nursing students who are studying in Narayana Nursing Institutions at Nellore. 40 II year B.Sc nursing students were selected by using simple random sampling technique. With the help of extensive reviews from various text books, net sources and journals, Structured questionnaire was developed to assess knowledge regarding body mechanics. Each correct answer was given by score ‘1’ and wrong score ‘0’. The score interpretation was <50% (Inadequate knowledge), Between 50-75% (Moderate knowledge), >75% (Adequate knowledge). The tool was sent to nursing experts for content validity. The reliability of the tool ‘r’ value was 0.89. The tool was tested for the feasibility by conducting pilot study among 4 nursing students. Prior formal permission was obtained from ethical committee of Narayana Medical College Hospital at Nellore. The samples were informed by the investigator about the purpose of the study and the written consent was obtained. The data collection was carried out 2 weeks. Data was collected by using socio demographic variables and structured questionnaires to assess the knowledge regarding body mechanics. It took 10-15 minutes to collect the data from each participant. The data was analyzed and tabulated by using descriptive and inferential statistics based on objectives of the study.

**Result and Discussion**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Frequency (f)</th>
<th>Percentage (%)</th>
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<tbody>
<tr>
<td>In adequate knowledge</td>
<td>16</td>
<td>40</td>
</tr>
<tr>
<td>Moderate knowledge</td>
<td>23</td>
<td>58</td>
</tr>
<tr>
<td>Adequate knowledge</td>
<td>1</td>
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Table no-I: Shows that with regards to level of knowledge regarding body mechanics 16 (40%) nursing students are having inadequate knowledge, 23 (58%) nursing students are having moderate knowledge and 1 (2%) nursing students are having adequate knowledge.

**Association between the body mechanics among II Year B.sc Nursing Students with their selected socio demographic variables.**
There is a significant association between the level of knowledge regarding body mechanics among II Year B.sc Nursing Students with their selected socio demographic variables like religion and year of education. There is no significant association like age and educational qualification at the level of P<0.05.

**Nursing implications:**
The study has implication to wising practice, nursing education, nursing research and nursing administration.

**Nursing practice:**
Students should have moderate knowledge regarding body mechanics. Education should be provided to the students regarding body mechanics.

**Nursing education:**
Continuing nursing education (CNE) program on body mechanics and its importance in education. So that they can gain adequate knowledge regarding body mechanics.

**Nursing research:**
There is need for extended and intensive nursing research, the study will motivate other investigator to conduct for their studies regarding importance of body mechanics.

**Nursing administration:**
The nursing administrator has the responsibility to increase the knowledge regarding body mechanics in nursing students, through conducting conferences and seminars.

**Recommendations**
- The study can be replicates on a large sample from nursing students.
- Similar study can be conducted and standardized protocols can be developed.

**Conclusion**
The study concluded that majority of the nursing students having moderate knowledge about body mechanics. As a
research investigator need to improve adequate knowledge regarding body mechanics.

References
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