



EVALUATE THE EFFECTIVENESS OF BODY MECHANICS DEMONSTRATION AMONG NURSING OFFICERS AT SELECTED HOSPITALS, PUDUCHERRY.

Ms. A. Pavithra*	M.Sc (N), Medical Surgical Nursing, College of Nursing, East Coast Institute of Medical Sciences, Puducherry. *Corresponding Author
Dr. Baby Rathinasabapathy	Professor, Department of Mental Health Nursing, College of Nursing, East Coast Institute of Medical Sciences, Puducherry.
Dr. D. Kavitha	Professor cum Vice principal, Dept. of Medical and Surgical Nursing, College of Nursing, East Coast Institute of Medical Sciences, Puducherry.
Dr. M. Jeyagowri	Principal, Department of Child Health Nursing, College of Nursing, East Coast Institute of Medical Sciences, Puducherry.

ABSTRACT The study was conducted to evaluate the effectiveness of Body Mechanics Demonstration on levels of knowledge, attitude and practice using quantitative approach, quasi-experimental (one group pre-test post-test) research design. Hundred subjects were selected from IGGGH & PGI, Puducherry using probability sampling technique (i.e) simple random sampling technique. The findings revealed that in the pre-test, regarding the level of knowledge, majority 48 (48%) of them had inadequate, 44 (44%) had moderate, 8 (8%) had adequate level of knowledge, regarding the attitude, majority 75 (75%) of them had favorable and 25 (25%) are had moderate favorable attitude, regarding the practice, majority 89 (89%) of them had average and 11 (11%) had good level of practice. In the Post-test, regarding the level of knowledge, majority 74 (74%) of them had adequate and 26 (26%) had moderate level of knowledge, regarding the attitude, majority 97 (97%) of them had favorable and 3(3%) had moderate favorable attitude, regarding the practice, majority 62 (62%) of them had average and 38 (38%) had good practice towards body mechanics. This showed that the demonstration on body mechanics was effective.

KEYWORDS : Demonstration, Body mechanics.

INTRODUCTION:

Nursing, the biggest health care profession. Today nursing is not limited to just delivering expert physical care to the sick, it also includes guiding the patient to prevent illness through hygienic living and helping him to use the available community resource for the same. So modern day "Nursing" may be defined as a process of action, reaction, interaction and transaction in which nurses assist individuals of any age group to meet their basic human needs in coping with their health status at some particular point in their cycle.

However, in course of providing health care, nursing personnel themselves become affected by complex interactive factors including social, cultural, economic and political situations. Body mechanics is the term used to describe the efficient, coordinated and safe use of the body to move objects and carryout the activities of daily living. The Bureau of Labour Statistics (2016) lists registered nurse's 6th in a list of at-risk occupation for sprain and strain due to improper usage of Body Mechanics. Various Research Findings states that, Nurses does not use the Body Mechanics correctly and safely, the spine is subjected to abnormal stresses that over time it can lead to degeneration of spinal structures like disc and joints, injury and unnecessary wear and tear. Proper body mechanics are vitally important for keeping our spine healthy and safe but before that they should have thorough scientific knowledge on body mechanics and its proper use in their daily practice. Body mechanics will be more effective for nurses if they know how to use it as well as practice it in a correct way while performing procedures that requires its use.

Deepti Majumdar et.al., (2014) conducted a cross sectional study to assess the work-related musculoskeletal disorder among Indian Nurses. Survey research design was employed among 627 Indian nursing officers. The result shows that the maximum of 67% suffered from back pain and 47.4% suffered from neck pain and 36% suffered from feet and ankle pain. The result also concluded that the married subjects were found to face more problems rather than single subjects in working area.

Statement Of The Problem

A Study to Evaluate the Effectiveness of Body Mechanics Demonstration among Nursing Officers at Selected Hospitals Puducherry.

OBJECTIVES

- To assess the pre and post-test level of knowledge, attitude and practice regarding body mechanics among Nursing Officers.

- To evaluate the effectiveness of body mechanics demonstration on knowledge, attitude and practice among Nursing Officers.
- To associate the pre-test level of Knowledge, Attitude and Practice regarding body mechanics with selected demographic variables.

Hypothesis

H₁: There will be a significant difference between the pre and post-test level of knowledge, attitude and practice regarding body mechanics among Nursing Officers.

H₂: There will be a significant association between the pre-test level of knowledge, attitude and practice regarding body mechanics among nursing officers with the demographic variables.

MATERIALS AND METHODS

Research approach: Quantitative research approach.

Research design: Quasi Experimental one group pre-test post-test research design.

Variables of the study:

Independent Variable:

Body mechanics demonstration.

Dependent Variable:

Knowledge, Attitude and Practice on Body mechanics.

Setting of the study

The study was conducted in Indira Gandhi Government General Hospital and Post Graduate Institute (IGGGH & PGI), Puducherry.

Population:

Nursing Officers working in the Government Hospitals (IGGGH & PGI, Puducherry).

Accessible population

Nursing officers working in Intensive care unit, Operation Theater, Trauma/Casualty and General ward by fulfilling all the inclusion and exclusion criteria in IGGGH & PGI, Puducherry.

Sample and Sampling technique

- The sample consists of the Nursing Officers working in IGGGH & PGI, Puducherry.
- Simple Random Sampling technique was used to select the sample from the Government hospital.

Sample size

The sample size for the study was 100 Nursing Officers (N=100) IGGGH & PGI, Puducherry.

Criteria for selection of the sample**Inclusive criteria:**

Nursing officers

- Registered and having RN & RM certificate or number.
- Working in Government hospital residing in Puducherry.

Exclusion criteria:

Nursing officers,

- Undergone previous training programme.
- Are on long leave.
- Having complaint of backpain.
- With less than 1 year of experience.

Description And Score Interpretation Of The Tool**Section-I**

- Demographic variables.

Section- II

- Consists of 30 multiple-choice questionnaires related to the level of knowledge on body mechanics. Correct answer carries '1' mark and wrong answer '0' mark

Level of knowledge	Score	Percentage
Adequate	14-20	>65 – 100%
Moderately adequate	7-13	>30 – 65%
Inadequate	<6	<30%

Section-III

- Consists 10 statements portrayed in 5-point rating scales related to the level of attitude on body mechanics (5 positive statements and 5 negative statements).

Level of attitude	Score	Percentage
Favourable attitude	35-50	>68-100%
Moderately favourable attitude	18-34	>34-68%
Unfavourable attitude	<17	<34%

Section –IV

- Consists 8 statements portrayed in 2 responses (Yes or No) related to the level of practice on body mechanics. “Yes” carries 1 mark and “No” carries 0 mark.

Level of practice	Score	Percentage
Good	7-8	>75-100%
Average	4-6	>38-75%
Poor	<3	<38%

Data Collection Procedure:**Pre-test**

- The group was provided with questionnaire tool to assess the level of knowledge, attitude and practice regarding body mechanics.

Intervention

- Demonstration regarding body mechanics was taught to the group for the time period of 15 mins for three consecutive days. The body mechanics includes,
 - Moving the patient up in the bed – 3 mins
 - Moving the patient to one side of the bed – 3 mins
 - Transferring the patient from bed to wheelchair and stretcher – 5 mins
 - Transferring the patient from wheelchair to bed – 4 min

Post-test

- The group was provided with the same set of questionnaires to evaluate their level of knowledge, attitude and practice after the intervention and also the researcher observed the nursing officer practice of body mechanics in clinical areas for next seven days.

RESULTS AND DISCUSSION:**1. Findings related to socio-demographic variables:**

Majority 51 (51%) of nursing officers are in the age group of 41-50 years, 88 (88%) are female, 54 (54%) are completed GNM, 96 (96%) are married, 82 (82%) are designated as junior nurse, 46 (46%) are working in general wards, 33 (33%) having more than 20 years of experience, 98 (98%) receives income of more than Rs.50000, 54 (54%) are handling totally dependent patient.

2. Percentage distribution of pre and post-test level of knowledge, attitude and practice on body mechanics.

The above table 1 depicts the percentage distribution of body mechanics in pre and post-test regarding,

Level of knowledge,

In the pre-test, majority 48 (48%) of them are having inadequate level of knowledge, 44 (44%) are in moderate level of knowledge and 8 (8%) are in adequate level of knowledge. In the post- test, majority 74 (74%) of them acquired adequate level of knowledge 26 (26%) are in moderate level of knowledge and none of them are in the category of inadequate level of knowledge.

Level of attitude,

In the pre-test, majority 75 (75%) of them are having favorable attitude and 25 (25%) are having moderately favorable attitude. In the post-test, majority 97 (97%) of them are having favorable attitude and 3 (3%) having moderately favorable attitude.

Level of practice,

In the pre-test, majority 89 (89%) of them are having average level of practice and 11 (11%) having good level of practice. In the post-test, majority 62 (62%) of them are having average and 38 (38%) having good practice.

Effectiveness of body mechanics demonstration on Knowledge, Attitude and Practice**3. Association of the pre-test level of knowledge regarding body mechanics with demographic variables**

Knowledge regarding body mechanics was significantly associate with the marital status of the nursing officer at the p- value of 0.004 and the years of experience at the p-value 0.028 at the level of <0.05.

Attitude regarding body mechanics was significantly associate with the gender of the nursing officer at the p-value 0.03 and working area of the nursing officer at the p-value 0.035 at the level of <0.05.

Practice regarding body mechanics was significantly associate with the income of the nursing officers at the p-value 0.005 at the level of <0.05.

CONCLUSION:

The nurses are using body mechanics daily at all the levels of nursing practices as making beds, assisting patient to walk, carrying supplies and equipment's etc., The improper usage of body mechanics leads to many musculoskeletal complications. One way to prevent these from happening is to practice proper body mechanics and help nurses to experience a much better quality of life. This can be achieved by acquiring thorough scientific knowledge on body mechanics. Hence, an attempt has been made through this study, by demonstrating the body mechanics to the nursing officers to enrich their present knowledge regarding it thereby the quality of the life will be improved.

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