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EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE AND PRACTICE OF BODY MECHANISM AMONG STAFF NURSES OF SELECTED HOSPITALS, JHANSI.

Nursing

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ABSTRACT

Background: Good practise and knowledge of body mechanics is essential specifically for the staff nurses as it may directly affect their back. **Aim:** The aim of the study was to evaluate the effectiveness of structured teaching programme on the level of knowledge and practise of body mechanics. **Materials And Methods:** Quasi-experimental research was adopted and self-structured questionnaire and self-structured checklist used to explore the knowledge and practise regarding body mechanics. **Results:** Major findings of the study revealed that the mean knowledge level of the experimental group was 14.65 + 1.93 while that of control group was 7.15 + 1.98. The mean difference was calculated to be 7.15 and the standard error was found to be 0.619. The computed 't' value was 11.541 at the degree of freedom 38 at the level of $p< 0.05$. While the mean practise level of the experimental group was 10.9 + 2.09 while that of control group was 6.55 + 1.28. The mean difference was calculated to be 4.35 and the standard error was found to be 0.54. The computed 't' value was 7.91 at the degree of freedom 38 at the level of $p< 0.05$. **Conclusion:** It was revealed that staff nurses had better knowledge after administration of structured teaching programme. This shows that it is essential for safe practise of the nurse.

KEYWORDS

Body mechanics, knowledge score, practise score, staff nurses.

INTRODUCTION

'Body mechanics' is a term that indicates a coordinated effort of the musculoskeletal and nervous systems to maintain balance, posture, and body alignment in daily life, which is directly related to effective bodily functioning. Improper working posture increases the risk of damage to the body. Body mechanics refers to the method of efficiently using the body when making movements, such as bending the body, lifting a heavy object or person, stretching an arm, sitting, standing, or lying while performing tasks **(Lee, 2002a, Karahan and Bayraktar, 2004)**.

Everyday ten nurses have to leave the profession as a direct result of back injury. Back injury accounts for more time away from work than any other single complaint. Patient handling, lifting and moving patients exert more pressure on nurses- backs than any other aspect of their daily working routine. Various research studies have shown that there is a strong relation between back pain and poor posture in healthcare workers. A recent research study revealed that staff nurses had good knowledge of body mechanics but average practice. Though majority of the nurses had good knowledge regarding body mechanic still only 11% were into good practise of it.

Back injury being one of the most disabling and frequent work-related injury leaves a high risk for the staff nurses. Thus, it has become utmost essential to educate the nurses in the efficient use of human body while performing work. Educating the nurses at the grassroots level will help to reduce much of the complications in future.

Objectives:

The Objectives Of The Study Were As Follows:

- To assess the knowledge and practice of nurses towards body mechanism technique.
- To evaluate the effectiveness of structured teaching program on the level of knowledge and practice of body mechanism.

With this aim in mind, this study was conducted to help the nurses practise good body mechanics which help to reduce pertinent issues like back pain.

MATERIALS AND METHODS:

A quantitative research approach was adopted in the present research study. Non-equivalent control group pretest- post-test research design was adopted to full fill the objectives of the study. The sample of the study were the staff nurses selected using the non-probability convenient sampling technique. A total of 40 samples who fulfilled the inclusion criteria were selected and randomly allocated into experimental and control group (20 samples in each group).

Instruments:

The Research Tool For The Data Collection Comprised Of 3 Sections.

- Section A of the tool consisted of the socio-demographic variable comprising of a total of 9 items like age, gender, religion, educational qualification, family income, type of family, area of residence, previous knowledge and the source of knowledge.
- Section B comprised of the 20 self-structured questionnaire to assess the knowledge regarding the body mechanics.
- Section C comprised of the self-structured checklist to assess the practise of correct body mechanics.

Data Collection:

Before the collection of data, permissions were taken from the concerned authorities of the college and hospital. Samples were selected as per the inclusion criteria of the study. Prior to the data collection, nature and purpose of the study was explained to the samples. Consent was taken and confidentiality was maintained. It started with pre-test data collection there after implementation of structured teaching program and followed by post test data collection.

RESULTS

Data was presented mainly as frequency and percentage distribution of knowledge score and that of practise score. Un-paired t test was used to compare means of the groups. Descriptive and inferential statistics was applied to draw final inference of the study.

Description Of Demographic Characteristics:

Total 9 items were assessed to collect the baseline data about the samples. It included age, gender, religion, educational qualification, family income, type of family, area of residence, previous knowledge and the source of knowledge.

Knowledge Level Regarding Boody Mechanics

Knowledge level regarding body mechanics was assessed and it was distributed into 3 different categories depending on the knowledge score. Table 1 depicts the distribution of the samples according to their post-test knowledge level regarding body mechanics.

Table 2 depicts the comparative data showing the effectiveness of structured teaching programme on the knowledge level. The mean knowledge level of the experimental group was 14.65 + 1.93 while that of control group was 7.15 + 1.98. The mean difference was calculated to be 7.15 and the standard error was found to be 0.619. The computed 't' value was 11.541 at the degree of freedom 38 at the level of $p< 0.05$.

Figure 1 depicts that knowledge level after the post test of both experimental and control group. In the experimental group, the majority 17 (85%) of the samples had their post-test knowledge level in the average category (score between 8-16). While in the control group, the majority 11 (55%) of the samples had their post-test knowledge level in the average category (score between 8-16).

Table 1: Frequency And Percentage Distribution Of The Post-test

Knowledge Level Of The Samples (n= 20+20)

Knowledge Score (in marks)	Experimental Group		Control Group	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Excellent/Outstanding Knowledge (>16)	3	15%	0	0
Average Knowledge (8-16)	17	85%	11	55%
Poor Knowledge (<8)	0	0	9	45%

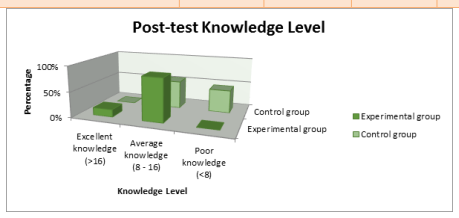

Figure 1: Graph depicting the post test knowledge level of the samples (n = 20+20)

Table 2: Comparative Data Showing The Effectiveness Of Structured Teaching Programme On The Knowledge Level (n= 20 +20)

Group	Mean	Mean Difference	SD	SE	df	Calculated t-value	Tabulated t-value
Experimental Group	14.65	7.15	1.9306	0.6195	38	**11.541 *S**	2.0144
Control Group	7.5		1.9874				

*p< 0.05 S- Significant

Practise Score

Practise level of body mechanics was assessed and the practise score was distributed into categories.

Table 3 Depicts The Distribution Of The Samples According To The Practise Of Body Mechanics. (n =20 + 20)

Practice Score (in marks)	Experimental Group		Control Group	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Excellent/Outstanding Practice (11-15)	**10**	**50%**	0	0
Average Practice (6-10)	**10**	**50%**	**14**	**70%**
Poor Practice (1-5)	0	0	6	30%

Figure 2 depicts the distribution of the samples according to their practise level regarding body mechanism. In experimental group, 50% of the samples showed excellent practise and 50% showed average practise while in the control group 70% of the samples showed average practise of body mechanics.

Table 4 depicts the comparative data showing the effectiveness of structured teaching programme on the practise level of body mechanism. The mean practise level of the experimental group was 10.9 + 2.09 while that of control group was 6.55 + 1.28. The mean difference was calculated to be 4.35 and the standard error was found to be 0.54. The computed 't' value was 7.91 at the degree of freedom 38 at the level of p< 0.05.

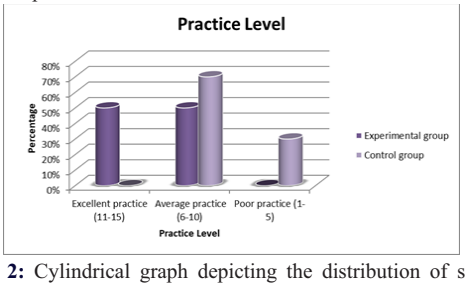

Figure 2: Cylindrical graph depicting the distribution of samples according to their practise level regarding body mechanism (n = 20 + 20)

Table 4: Depicting The Comparative Data Showing The Effectiveness Of Structured Teaching Programme On The Practise Level Of Body Mechanism (n = 20 + 20)

Group	Mean	MD	SD	SE	df	Cal t-value	Tab t-value
Experimental Group	10.9	4.35	2.0952	0.5494	38	**7.9177 *S**	2.0144
Control Group	6.55		1.2835				

*P<0.05, S; Significant

DISCUSSION

Dutta Bhanumati, Iawin Rikpur (2020) conducted a study and generated evidences on the effectiveness of structured teaching programme on the knowledge level and practise regarding body mechanics. The present study explores the staff nurse's knowledge and practice of body mechanisms. The study explores that the knowledge and practice are greatly influenced by each other. The paired 't' test value of knowledge is 11.54 and that of practise score was 7.91. So, the knowledge is a very important factor that affects health of performance significantly

CONCLUSION

It is rightly said that there is a huge gap between knowledge and practise regarding body mechanics. And through this research study it is very much evident that the nurses need to made aware of the correct practise of body mechanics which will help them to practise safe nursing care for the patients.

Financial Support And Sponsorship

No

Conflict Of Interest

No

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