

"A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING PROPER BODY MECHANIC TECHNIQUES AMONG STAFF NURSES

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Abstract	Nursing is a healthcare profession focused on the detail-oriented care of individuals, families
	and communities in attaining, maintaining and recovering optimal health and functioning. The
	goal of nursing is healing the sick, so it's ironic that nursing as a profession sees some of the
	highest rates of musculo-skeletal injuries. A muscular-skeletal injury might disrupt a nurse's
	career. There are many nurses who love direct patient care but have been forced to either leave
	nursing or leave the type of nursing they enjoy because of injury. Many injuries can be avoided
	by the conscious use of proper body mechanics when performing physical labour. Quantitative
	descriptive survey study approach and non-experimental research design was used. Total 60
	staff nurse working in hospital were selected by purposive sampling technique. Data collection
	by structured knowledge questionnaire and analysed by using descriptive and inferential
	statistics. Total level of knowledge regarding proper body mechanic is poor with mean
	knowledge score 11.02 ± 4.96 and mean percent 36.72%. The finding is significant between level
	of knowledge of staff nurses regarding proper body mechanic and selected demographic
	variables are age (7.178). The knowledge score of staff nurses according to the different aspects
	of the proper body mechanic have been poor in all the aspects of the proper body mechanic

Keywords Knowledge, Staff nurse, body mechanic, Sims

INTRODUCTION

In the present world, musculoskeletal disorders are one among the serious health problems that are related to working environment. Intensification of work, rising demands on employees add additional pressure and stress on individuals. Low back pain (LBP) is one among the common work- related injury involving all occupations. The employees are opened to inappropriate postures, lifting techniques, heavy weight and repetitive activities.

Nursing is a profession with a leading risk for the development of back pain and related deficits. LBP prevalence will alter amidst different countries because nurses use a variety of muscle groups for each nursing activity that requires a lot of lifting and forceful movements which influence the body movement. When these forces are used incorrectly, efficiency of nurse decreases to a greater extent.

The concept of "body mechanics" was introduced by Wright (1945), a physician, in an article in the American Journal of Nursing. The intent of body mechanics was to provide a program to protect nurses and patients while nurses repositioned patients by shifting their weight in certain ways thought to protect the back. Correct body alignment reduces strain on musculoskeletal structures, maintain adequate muscle care and contribute to balance.

Body mechanics is the coordinated use of the body parts to produce motion and to maintain balance. The use of good body mechanics promotes the efficient use of muscles and conserves energy. Through the knowledge of the correct application of their own muscles, medical nursing personnel can instruct patients on how to use theirs. The combination of good posture and body mechanics benefits both medical personnel and the patients.

Body mechanics" is a two-word phrase used to describe the movements we make each day during normal activities, including lying in bed, sitting, standing, lifting, pulling, pushing and walking. Body mechanics can be both good and bad and can have direct effects on back pain.



Good body mechanics will help remedy and prevent future back problems, while bad body mechanics contribute to back problems and other muscle and bone problems. Jobs of healthcare team members require pushing, pulling, carrying and lifting during patient care activities. Prolonged performance of these actions leads to muscles injury the patients as well as nurses. To avoid these problems, proper body mechanics should completing a task can cause severe musculoskeletal strains and fatigue thereby increasing the risk be consciously used in performing a physical activity.

Compared to other profession nursing personnel are among the highest at risk for musculoskeletal disorders. The bureau of Labor Statistics lists, registered nurses 6th in a list of at-risk occupations for strains and sprains. Research on the impact of musculoskeletal injuries among nurses in US showed that 52% of nurses complain of back pain, 12% of nurses 'leaving for good' because of back pain, 20% transferred to different unit or employment and 38% suffered occupational related back pain severe enough to require leave from work and 6%, 8% and 11% of registered nurses reported even changing jobs for neck, shoulder and back problems respectively.

MATERIAL AND METHODS

A quantitative descriptive design was adopted in the study. The population consisted of shriram hospitals at Jodhpur. A sample size of 60 staff nurses was selected using purposive sampling. A structure questionnaire was adopted by the investigator for data collection. The tool structured knowledge questionnaire is validated by experts. Reliability of the tool was done using Chronbac's Alpha formula.

RESULT

The analysis and interpretation of data collected from 60 staff nurses of selected hospitals of Jodhpur to assess the knowledge regarding proper body mechanic. Descriptive and inferential statistics were used for analysis. It was found that level of knowledge regarding proper body mechanic is poor with mean knowledge score 11.02 ± 4.96 and mean percent 36.72%. However, the majority of the demographic variables such as gender, marital status, qualification, monthly income, clinical experiences, working area, working hours and designation were found not significant association with the level of knowledge regarding proper body mechanic among staff nurses except age.

Table No. 1 and shows that majority (70%) of the sample had poor knowledge, followed by 28.3% had average knowledge and only few (1.7%) samples had good knowledge regarding proper body mechanic

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Level of Awareness	Frequency	Percentage			
Poor	42	70.0%			
Average	17	28.3%			
Good	1	1.7%			

Table No. 1: Frequency and percentage distribution of level of Knowledge regarding proper body
mechanic.(N=60)

Table No. 2 shows that the knowledge score of staff nurses according to the different aspects of the proper body mechanic, was highest (40.95%) regarding the 'Anatomy & Physiology' with the mean 2.87 and SD of ± 1.75 , followed by 39.63% regarding the 'Principles of body mechanics' with the mean 3.57 and SD of ± 1.77 , 36.67% regarding 'Ill effect of improper body mechanics' with the mean 1.83 and SD of ± 1.26 , 31.11% regarding 'General information' with the mean 0.93 and SD of ± 0.90 , and lowest (30.28%) in regarding 'Techniques & Transfer Equipment' with the mean 1.82 and SD of ± 1.49 . The overall knowledge score with mean \pm SD is 11.02 \pm 4.96 and mean percent knowledge of 36.72%.



Table No. 2:Aspects wise mean knowledge score regarding proper body mechanic. (N=60)

Aspects	Maximum	Mean	±S.D.	Mean %
General information	3	0.93	0.90	31.11%
Anatomy & Physiology	7	2.87	1.75	40.95%
Principles of body mechanics	9	3.57	1.77	39.63%
Techniques & Transfer Equipment	6	1.82	1.49	30.28%
Ill effect of improper body mechanics	5	1.83	1.26	36.67%
Overall knowledge Score	30	11.02	4.96	36.72%

CONCLUSION

After the detailed analysis, this study gives the following conclusion

1. The majority (1.7%) of samples were knowledge about the proper body mechanic.

2. Insignificant association between the knowledge of samples with selected socio-demographic variables like gender, marital status, qualification, monthly income, clinical experiences, working area, working hours and designation were found not significant association with the level of knowledge regarding proper body mechanic among staff nurses except age.,

3. According to Age of the samples, older were more aware than the adult.

REFERENCS

- 1. Frey G, Bennett M, Ferguson Denise. The importance of proper body mechanics keeping your spine healthy. Colarado Comprehensive Spine Institute. 2009.
- 2. Fagerberg I, Norberg A. "Learning by doing"–Or how to reach an understanding of the research method phenomenological hermeneutics. Nurse Educ Today. 2009;29(7):7359.
- 3. Foundations in nursing related learning experience. Body mechanics [online]
- 4. [cited on 12-11-12] Available at <u>http://www.slideshare.net/lezzoj/body-</u>mechanics-44596
- 5. Danserean.V. Importance of proper body mechanics, [online][cited on 21-11 18] Avail at <u>http://www.answerbag.com/q_view/1904305#ixzz2BRJJbqUq</u>.
- 6. <u>Spinasanta</u>.S. High-risk Jobs: Is Your Job Putting Your Spine at Risk? Workplace Ergonomics; [online][cited on 28-11-18] Avail. athttp://www.spineuniverse.com/wellness/ergono0mics/high-risk-jobs.
- 7. Aiken L H, Fagin CM. Charting Nursing's Future. 1992; New York: Lippincot Company.
- 8. 7.Jensen RC. Disabling back injuries among nursing Personal: research need and justification. Research Nurses Health 1999 Feb; 10(1): 29-38
- 9. Kalnitsky A. Body mechanics 101.2008;[online][cited on12-11-18]. Availabl at: URL:http://www.spineuniverse.com/display_article.php/article 836.html.
- 10. Kozier&Erb. Fundamentals of nursing concepts and procedure P. 191 193
- 11. Kannan, Srinivasan and Sarma, P.Sankara: Study on workload of publihealth nurses and other women health workers in India.
- 12. Pinto M. Body Mechanics. Nurses of India 2008 Aug; 23:4-5