ORIGINAL ARTICLE

Knowledge, Attitude and Perception of Low Back Pain Exercise among Nurses at a Clinical Setting in Public Tertiary Hospital Lahore, Pakistan

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ABSTRACT

Background: Nursing is a profession that is concerned with maintaining and promoting the health and well-being of patients. Many occupational health problems arise due to workload in the clinical setting. Among these occupational health problems low back pain is a major problem.

Objectives: The purpose of this study was to determine the Knowledge, Attitude, and Perception of low back pain exercise among nurses at a clinical setting in a public tertiary hospital in Lahore, Pakistan.

Method: This study was, descriptive cross-sectional conducted at the Departments of Jinnah hospital Lahore. The population of this study was registered nurses of Jinnah hospital Lahore. The data collection period was nine months after the approval from the institutional review board.

Results: Total 191 registered nurses were included in current study. The mean age of nurses was 33.72+9.10. The majority of the nurses were from the surgical ward. All the participants were female nurses. 49.7% were married and 64.4% were nursing diploma holders. 64.9% were charge nurses and 52.9 % of respondents were 1-5 years stay in the organization. The knowledge of nurses was 45.3%, perception was 54.5% and attitude was 28.3%. In this study, the average score of knowledge was 45.3%. Nurses need more knowledge regarding low back pain exercise.

Conclusion: Low back pain is a crucial problem among nurses but nurses' knowledge regarding low back pain exercise is slight. Still, there is no prevention and active treatment to address this serious issue. A comprehensive treatment policy, as well as low back pain exercise, should be included for the treatment of low back pain.

Keywords: Knowledge, Attitude, Perception, Low back pain exercise

INTRODUCTION

Nursing is a profession that is concerned with maintaining and promoting the health and well-being of patients. Many occupational health problems arise due to workload in the clinical setting. Among these occupational health problems low back pain is a major problem. Low Back pain can be well defined as pain, solid pressure, or inflexibility that is nearby among the coastal edge and the lower gluteal folds, besides leg pain or not. [1]

Low Back pain of mechanical cause is produced due to any injury or it is happened due to degenerative changes in the body. Low Back pain is caused by the defective dissemination of forces inside the soft tissue. Furthermore, Low back pain is caused by disc herniation, trauma, and compression fatigue fracture [2]. Obesity can also cause lower back pain and incorrect posture during work [3].

According to World Health Organization, almost 70% population in industrialized countries experience non-specific low back pain which may be interconnected to intervertebral disc damage such as herniation or fractures, infection of vertebras, etc. such as malignancy and spondyloarthritis in their lifetime seem [4]. Low Back pain is considered the second most cause of disability in the world [5,6]. Moreover, chronic low back pain affects 20% of the population globally. Although, 24 - 80 % of patients have declined pain during the first year. Additionally, 31% of patients with chronic low back pain exhibit perfection within six months. The reappearance of moderate pain is reported among 33% of cases and 15% of patients suffer from acute low back pain within 1-2 year [6]. Low back pain exercise is suggested as a foremost treatment of low back pain [7]. Furthermore, exercises regarding low back pain including pelvic tilting, back extension, and knee to chest. These exercises are recommended at least three days a week for 12weeks [1]. These exercises reduce the lower back pain. So, pelvic tilting exercise has been prolonging executed for low back pain relief. Moreover, it is still recommended inpatient teaching [8]. These exercises are also called stretching exercises. These exercises reduce pain and disability and improve the functional ability of the body [9].

When patients perform these exercises regularly, these exercises decrease the low back pain of the patients and improve the steadiness of the lower pelvis, and increase the extent of movement [10]. These exercises should be done for a long duration of at least four months. The time of performing these exercises is 10 to 20 minutes. [11] The third exercise is back extension. Besides, regular stretching and strengthening exercises reduced lower back pain, increased muscle strength and stamina. [12,13]

There are a limited number of studies that examine the knowledge, attitude, and perception of nurses regarding low back pain exercise. Although, nursing is a very risky profession due to bending, long-standing, working extensive duty hours, and lifting heavyweight material during duty hours. So, low back pain exercise knowledge is very crucial for nurses to prevent further disability. [14] Knowledge, attitude and perception regarding low back pain exercise play a dynamic role among nurses in the choice of treatment for the management low back pain [15].

Low Back pain is the crucial cause of absenteeism from duty. So, the nurses must know about low back pain exercises. Consequently 'When the low back pain will be relieved. The efficiency of work will be increased. Absenteeism from duty will be decreased. And when nurses will be healthy, patient care will be improved. Moreover, the nurses will meet the patient expectation about care within a health care setting. Low back pain leads to the premature retirement of nurses; it could be prevented. Furthermore, there is a limited number of studies that evaluated the knowledge, attitude, and perception of low back pain exercise among nurses in a clinical setting. This study was assisted in the understanding of causes, contributing factors, and management of back pain among nurses in developing countries like Pakistan. So, that the burden of disease among nurses could be reduced and prevented from further disability. The objective of the current study was to determine the knowledge, attitude and perception of low back pain exercise among Nurses at a clinical setting in public Tertiary hospital Lahore, Pakistan.

METHODOLOGY

After the approval of from ethics review committee of University of Lahore, a descriptive cross sectional study was conducted at Jinnah hospital, Lahore. Total 191 registered female nurses who have more than 1 year experience were included by using

consecutive sampling technique in current study. The knowledge, attitude and perception of nurses regarding low back pain were assessed by the questionnaire developed by Professor Liezel Cilliers. The first part of the questionnaire includes general information about the nurse's age, education, marital status, designation, experience and the second part of questionnaire consists of knowledge, Attitude, and perception of nurses regarding back pain. The knowledge was categorized (76% to 100%) as good knowledge, 51% to 75 % moderate knowledge and, 0 to 50% slight knowledge. Data was entered and analyzed by SPSS version - 23. Quantitative variables were presented in the form of mean ± standard. Qualitative variables were presented in the form of frequency and percentages.

RESULTS

Total 191 registered nurses were included in current study. The mean age of nurses was 33.72+9.10 (Rang: 23-55). The majority of the nurses were from the surgical ward. All the participants were female nurses. 49.7% were married and 64.4% were nursing diploma holders. 64.9% were charge nurses and 52.9 % of respondents were 1-5 years stay in the organization. (Table 1)

Table 1: Personal History of Nurses

Sr #	Socio-demographic characteristics	Frequency	Percentage
1	Departments		
	Medical	34	17.8
	Surgical	44	23
	Orthopedic	11	5.8
	Gynecology	23	12
	Pediatric	18	9.4
	Emergency	20	10.5
	Urology	14	7.3
	ICU	27	14.1
2	Marital status		
	Married	95	49.7
	Single	76	39.8
	Divorced	16	8.4
	Windowed	4	2.1
3	Qualification		
	Nursing Diploma	123	64.4
	BSN Nursing (Generic)	42	22
	BSN Nursing (Post R.N)	22	11.5
	MSN Nursing	4	2.1
4	Designation		
	Head Nurse	45	23.6
	Senior Nurse	22	11.5
	Charge Nurse	124	64.9
5	Year of Experience		
	1-5 years	101	52.9
	6-10 years	31	16.2
	11-15 years	10	5.2
	16-20 years	12	6.3
	21 and Above	37	19.4

According to table 2 regarding Knowledge about back pain exercises, 101 (53.9 %) nurses answer correctly that back muscles exercises were good for low back pain. 26 (13.6%) nurses were responded Arm muscles, 16 (8.4%) leg muscles while 18 (9.4%) nurses were answered that neck muscles, whereas 12 (6.3%) thoracic muscle, 12 (6.3%) abdominal muscle. Regarding general fitness 72 (37.7%) nurses answer correctly that stretching exercises were good for low back pain, 41 (21.5%) participants were responded general fitness exercises, strengthening exercises 30 (15.7%), while 4 (2.1%), whereas 25 (13.1%) participants replied Stabilizing exercises, 25 (13.1%) Endurance exercises and only 19 (9.9 %) was answered Balancing exercises. Regarding the best way for the treatment of low back was an attitude as follows: 14 (7.3%) participants were attitude that they should consult a doctor, 51 (26.7 %) bed rest and 14 (7.3%) medication while 16 (8.4%) respondents' injections, only 4 (2.1%) corset and 54

(28.3%) were the points of view towards exercise regime, 10.5% (20) heat therapy, whereas 8 (4.2%) participants were attitude that as resuming normal activities as soon as possible and10 (5.2 %) participants were attitude towards practice relaxation methods. What, in your opinion, should be included in a program to prevent low back pain treatment were perceived as follows: 6 (3.1%) participants were perceived Ergonomic principles, 15 (7.9%) general fitness exercises, and 2 (1.0%) time management skills while 104 (54.5%) respondents were perceived 'back exercises, only 22 (11.5%) instruction on how to use patient lifting equipment e.g., lifts/pulleys and 10 (5.2%) were perceived others e.g., reduce the workload and increased staffing. Perception about low back pain exercise was 54.5%.

Table 2: Knowledge, Attitude and perception about low back pain exercise

Knowledge about low back pain exercise	Frequency	Percentage	Percentage of correct answer
What specific muscles should be targeted when doing low back pain exercises?			
Arm muscles	26	13.6	
Leg muscles	16	8.4	
Neck muscles	18	9.4	101(53.9%)
Thoracic muscles	18	9.4	
Abdominal muscles	12	6.3	
Back muscles	101	53.9	
What type of exercises should be included in a low back program?			
General fitness exercises	41	21.5	
Strengthening exercises	30	15.7	
Stretching exercises	72	37.7	72(37.7)
Stabilizing exercises	4	2.1	
Endurance exercises	25	13.1	
Balancing exercises	19	9.9	
Attitude about low back pain exercise			
What is the best way to treat low back pain immediately after it developed?			
Consult a doctor	14	7.3	
Bed rest	51	26.7	
Medication	14	7.3	
Injections	16	8.4	
Corset	4	2.1	54(28.3%)
Exercise regime	54	28.3	
Heat therapy	20	10.5	
Resuming normal activities as possible	8	4.2	
Practice relaxation method	10	5.2	
Perception about low back pain exercise			
What, in your opinion, should be included in a program to prevent low back pain?			
Ergonomic principles	6	3.1	
General fitness exercises	15	7.9	
Weight loss information	6	3.1	
Relaxation therapy	26	13.6	
Time management skill	2	1	101(54.5%)
Back exercises	104	54.5	
Instruction on how to use patient lifting equipment e.g., lifts/ pulleys	22	11.5	
Other (Please specify)	10	5.2	

DISCUSSION

The sample of this study has consisted of 191 nurses' working at Jinnah Hospital Lahore. Core findings were, majority of nurses knowledge was slight regarding low back pain exercise.

In this study, the average score of knowledge was (45.3%). The knowledge was categorized (76% to 100%) as good knowledge, 51% to 75 % moderate knowledge and, 0 to 50% slight knowledge. Nurses need more knowledge regarding low back pain exercise. And this study is supported by study [17.] In this study the participant's knowledge regarding low back pain exercise was low. It was 55.3%. Furthermore, this study is also supported by study [18]. There was a lack of knowledge and attitude among physiotherapy students towards low back pain. This was reinforced conducted by

research [19] in which only 55% of respondents were assumed that exercise is more effective for low back pain. Moreover, this study is also reinforced by study. [20] In this study the nursing attitude and perception towards back pain was negative.

There have been limited studies in which nurses Knowledge, Attitude and perception had been measured regarding low back pain exercise. So, further studies should be conducted to measure the Knowledge, Attitude, and perception of nurses regarding low back pain exercise. The current study exhibited slight knowledge of nurses and a negative attitude toward low back pain exercise. Only 55% of the participants believed exercise to be one of the most effective treatments for LBP. Thus, improving the knowledge of nurses would be increased the attitude and perception about low back pain exercise.

CONCLUSION

This study underlined that nurses' knowledge concerning low back pain is slight. Moreover, nurses have a negative attitude and perception about low back pain exercise. So, it can be concluded that education concerning low back pain may improve the knowledge of nurses regarding low back pain exercise and it must be provided in the low back pain managing department intended at empowering the nurses' knowledge about low back pain exercise. Furthermore, changing the negative attitude and perception of nurses about low back pain exercise.

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