Academia Open
Vol 9 No 1 (2024): June
DOI: 10.21070/acopen.9.2024.10363 . Article type: (Medicine)

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Vol 9 No 1 (2024): June
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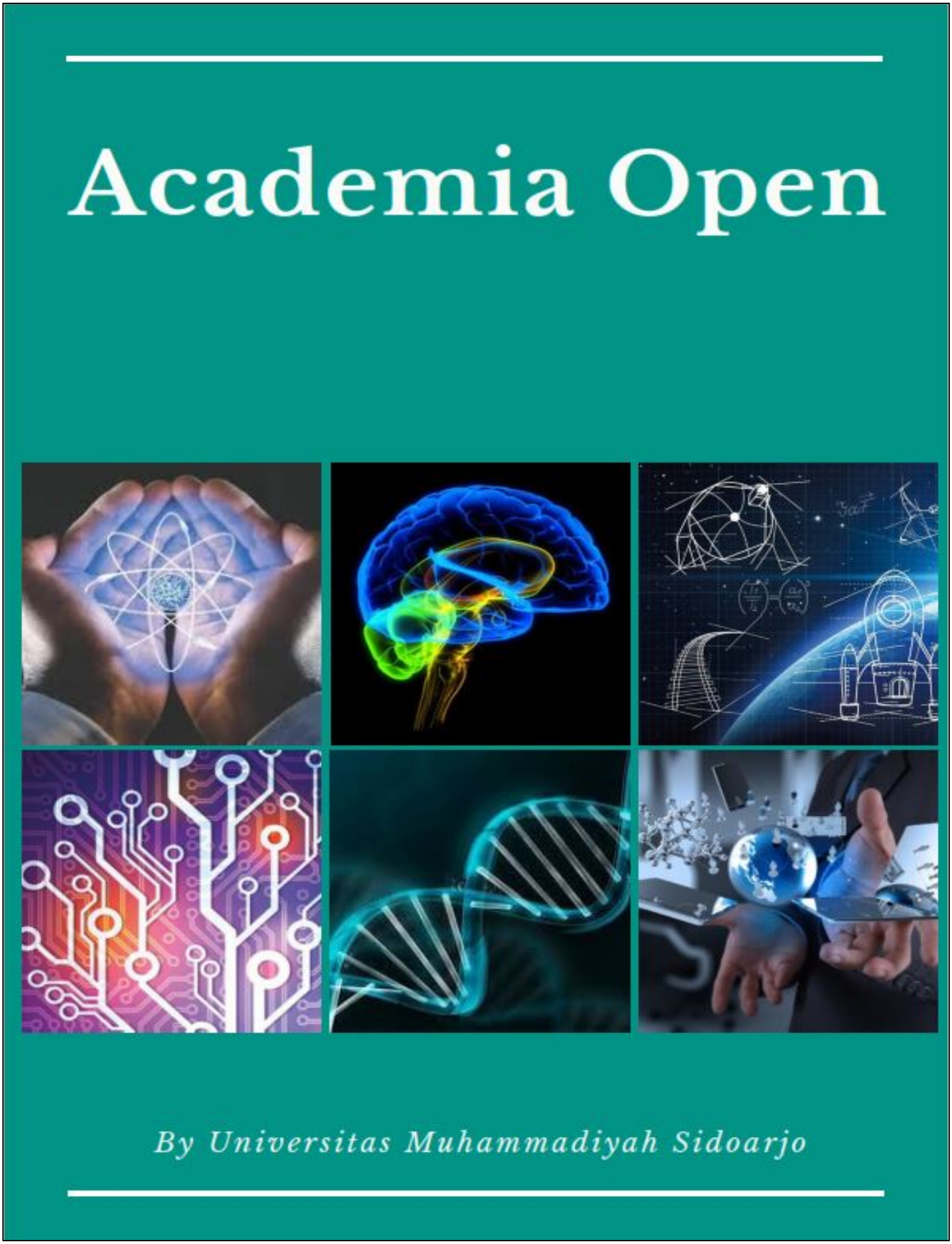

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Vol 9 No 1 (2024): June
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DOI: 10.21070/acopen.9.2024.10363 . Article type: (Medicine)

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DOI: 10.21070/acopen.9.2024.10363 . Article type: (Medicine)

Nurses' Knowledge Toward Lower Back Pain: A Cross-Sectional Study

Pengetahuan Perawat Terhadap Nyeri Punggung Bawah: Sebuah Studi Cross-Sectional

Mahfoudh Falih Hasan, mahfoudh@gmail.com, (0)
College of Nursing, University of Basrah, Basrah, Iraq, Iraq

Wathiq Faraon Hussein, wathiqfarawn@gmail.com, (1)
Department of Basic Science, College of Nursing, University of Basrah, Basrah, Iraq, Iraq

Ali Malik Tiryag, ali@gmail.com, (0)
College of Nursing, University of Basrah, Basrah, Iraq, Iraq

Imama J Ali, imama@gmail.com, (0)
College of Nursing, University of Basrah, Basrah, Iraq, Iraq

Zainab M Shaker, Zainab@gmail.com, (0)
College of Nursing, University of Basrah, Basrah, Iraq, Iraq

(1) Corresponding author

Abstract

Background: Nursing is one of the occupations with the highest risk of developing musculoskeletal issues. Objectives: To assess the level of nurses' knowledge toward lower back pain. Methods: This study was carried out on the nursing staff in different hospitals and comprised a sample of sixty nurses, twenty-six of whom were male and thirty-four of whom were female. The questionnaire was used to gather the necessary data. It consists of 24 questions about lower back pain and its exercises in various situations, with an overall score of 48 (I strongly agree = 2, I agree = 1, I don't agree = 0) and variables (education level and years of experience). And examine the outcomes using the statistical software (spss). The data was analyzed in version 26 of the Statistical Package for Social Sciences (SPSS). Results: Nursing Staff's knowledge via ANOVA test. Poor level mean was (13.00), and Sd was (3.46). Medium level mean was (25.06), Sd was (3.43). Good level mean was (36.14), Sd (7.20). Conclusion: Most of the nurses are pass regarding exercise domain of lower back pain. Demographic factors and nurses' physiotherapy knowledge do not significantly correlate.

Highlight:

1. Nurses face high risk of musculoskeletal issues, including lower back pain.
2. Surveyed 60 nurses using 24-questionnaire; analyzed with SPSS version 26.
3. Most nurses passed; no significant correlation with demographic factors.

Keywords: Nurses, Knowledge, Lower Back Pain

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Academia Open
Vol 9 No 1 (2024): June
DOI: 10.21070/acopen.9.2024.10363 . Article type: (Medicine)

Published date: 2024-06-24 00:00:00

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Introduction

Low back pain (LBP) is more likely to develop in nurses than in other occupations [1]. Each country has a different prevalence of LBP among nursing workers. The prevalence of LBP among nurses ranged from 41% to 75% in European nations, 40% to 60% in Asian nations, and 47% in the US [2]. There is a dearth of information on the incidence of LBP among nurses in sub-Saharan Africa, which is concerning because developing nations are expected to experience the largest increase in LBP prevalence [3-5]. Low back pain that cannot be linked to a specific, identifiable pathology is known as non-specific low back pain [6].

LBP is increasingly acknowledged as a significant public health issue since over 84% of people globally will experience it at some point in their lives [6,7]. According to recent data, the percentage of doctor visits attributable to LBP has remained constant over the last ten years, but the expense of treating LBP has significantly increased. Ten to fifteen percent of patients will experience acute LBP that progresses to chronic LBP. Despite being a tiny fraction, this group uses the most resources due to direct and indirect expenditures, which results in a loss of earnings and productivity [4,7].

In a recent American survey, nurses were placed sixth out of 126 jobs in terms of lost workdays due to musculoskeletal ailments [8]. This is due to a combination of internal and extrinsic risk factors that are pertinent to this line of work. Environmental and physical variables are examples of extrinsic elements, while ergonomic and personal risk factors are examples of intrinsic factors [2,9]. The number of employees on duty, the organizational atmosphere, and the working circumstances are all environmental risk factors. LBP and night shifts have been proven to be significantly correlated because nurses' disrupted sleep habits can lead to muscle tension [2]. Furthermore, it has been established that mechanical factors, such as frequent patient transfers or lifting and repetitive operations performed with poor or incorrect body posture, are risk factors for the development of LBP [1].

Intrinsic variables include psychosocial predictors such as psychological discomfort, coping strategies, and attitudes toward LBP. Additionally, smoking, being overweight, and having poor general health have been identified as possible intrinsic risk factors for the development of LBP [10,11]. Although the risk factors for LBP in nurses have been well-established, there isn't much research that assesses nurses' understanding of the principles of LBP prevention and self-treatment [12]. Since addressing this issue should consider both clinical evidence and patient preferences, nurses who have a greater understanding of inherent risk factors will be better able to manage the symptom or medical condition [6].

Methods

To ascertain and assess nurses' knowledge of lower back pain exercises at Basra hospitals, a cross-sectional study was conducted on the nursing teams. The study ran from January 19, 2021, to April 16, 2021.

60 nurses from Basrah hospitals make up the study's sample; 36 of them are female and 26 are male. They all had varying educational backgrounds, including secondary school nursing, diplomas, and college degrees, and they were all currently employed. To evaluate nurses' knowledge of lower back pain exercises, the project questionnaire structure was established using twenty-four items. Incorporate other characteristics such as hospital name, sex, age, marital status, years of service, years spent working as a physiotherapist, and academic accomplishments.

Sixty nurses, all having at least a year of experience, were given the questionnaire. Through both in-person and electronic interviews, each participant responded to roughly twenty-four questions. We then tallied the scores based on the most accurate responses. I strongly agree = 2, I agree = 1, and I do not agree = 0 were the item scores, with a total score of 48. A three-point rating system that went from zero to two regarding nurses' understanding of lower back pain and its treatment. There are thirty-four (24) items on the study questionnaire. There are three scores for each item (0,1,2). Based on the sample responses, the overall score (48) Table 2 lists the assessment levels and their range score for sample evaluation when every response is accurate..

Result and Discussion

Result

Demographic Data	Classes	Frequency	Percentage
Gender	Male	26	43 %
	Female	34	57 %
	Total	60	100 %
Age	22 – 30	23	38 %

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	31 – 39	18	30 %
	40 – 48	10	17 %
	49 – 58	9	15 %
	Total	60	100 %
Marital status	Single	12	20 %
	Married	48	80 %
	Total	60	100 %
Education level	High school	17	28 %
	diploma	35	58 %
	College	8	13 %
	Total	60	100 %
physiotherapy	Work	32	47 %
	No work	28	43 %
	Total	60	100 %
Years of experience	1 – 10	28	47 %
	11 – 20	19	32 %
	21 – 30	9	15 %
	31 – 40	4	7 %
	Total	60	100 %

Table 1. *Descriptive of Demographic Data*

Table 3 shows that there were more females than males, that the majority of the study sample was between the ages of 31 and 39, that 80% of the sample was married, that 58% of them had a diploma in education, that 47% had physiotherapy experience, and that the majority of the study sample had years of experience between 1 and 10.

Nurses' knowledge									
Ass. Levels	F	%	Scale	Mean	Sd	Total			
						Ass.	ANOVA	P - value	Sig.
Poor	3	5 %	0 – 15	13.00	3.46	Medium	107.28	0.00	S
Medium	35	58 %	16 – 31	25.06	3.43				
Good	22	37 %	32 – 48	36.14	3.21				
Sum	60	7.203		28.52	7.20				

Table 2. *Nurses' knowledge about lower back pain*

Descriptive data of the ANOVA test comparison of nursing staff knowledge are shown in Table 2. The Sd was 3.46 and the poor level mean was 13.00. The Sd was 3.43 and the medium-level mean was 25.06. The Sd was 7.20 and the good level mean was 36.14.

Information Domain			Significant				
Statistics	N	%	Mean	Sd	T-test	P – value	Sig.
Pass	50	83 %	14.82	3.62	2.5	0.015	S
Not Pass	10	17 %					
Total	60	100 %					
Exercise Domain							
Pass	43	72 %	13.70	4.33			
Not Pass	17	28 %					
Total	60	100 %					

Table 3. *Pass and not pass for domains of the questionnaire*

According to this table, most of the nurses passed the knowledge about lower back pain with percent (83%), and (17%) did not pass. Also, most of the nurses passed the knowledge about exercise with a percentage (72%), and (28%) did not pass.

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Discussion

Women made up the bulk of participants with a percentage (57%). The majority of the nurses were female, according to a study [13,14] that supports the findings of this one.

The majority of nurses (38%) are between the ages of 22 and 29. The majority of the nurses were between the ages of 22 and 29, according to a study [15,16] that supports the findings of this one.

Diploma holders made up the majority of the sample (58%) and were followed by high school and college graduates. The findings of this study are consistent with a study [17,18] that found the majority of nurses had diplomas.

Each of our married couples has the highest participation rate (80%). The majority of the nurses were married, according to a study [19,20] that supports the findings of this one.

The study's findings showed that roughly 47% of participants had years of experience ranging from 1 to 10. The majority of the nurses were between the ages of one and ten, according to a study [21, 22, 23] that supports the findings of this one.

Table 2 indicates that the majority of nurses had medium to good knowledge of low back pain, which is significant. These findings are in line with [24] in the evaluation of nurses' physical therapy technique knowledge.

Therefore, we think that to improve nurses' educational and practical proficiency in physical therapy techniques and approaches, physical therapy curricula should be added to nursing schools [24].

The results demonstrate that nurses' responses to questions about lower back pain are more and better than their responses to questions about lower back pain exercises, and this is significant as indicated in Table 2. The results are a result of the nurses' scientific background and good practice, which stems from the fact that lower back pain is a very common problem. According to the expert team's 2010 Global Burden of Disease (GBD) assessment, lower back pain is among the top ten high-burden illnesses and injuries. Compared to HIV, traffic accidents, TB, lung cancer, chronic obstructive pulmonary disease, and preterm labor problems, it has higher average disability-adjusted life years (DALYS) [25].

Conclusion

In terms of their understanding of lower back pain, the majority of nurses passed. In terms of the exercise domain, the majority of nurses also passed. Demographic factors and nurses' understanding of physiotherapy do not significantly correlate.

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