

Low Back Pain among Nurses: Compromise Nursing care for Patients

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Abstract

Low back pain which is one of the common health and chronic problems among nurses. Due to this the quality of care for patient is compromised in some instances. *Objective:* assess the prevalence of low back pain among nurses working in tertiary care hospital. *Research Methodology:* Across sectional survey with purposive sampling technique among 133 nursing officers. Informed consent obtained from every sample. *Results:* this survey results proved 40% nursing officers reported low back pain is a gradual onset, Due to low back pain 22% having in standing, 16% problem in sitting and other daily physical activity. *Conclusion:* Nurses low back pain gradually increasing as they start to enter into patient carrier. They should plan their activities inbetween their daily activities which should include regular relaxation techniques and rest.

Keywords: Low Back Pain; Quality of Care; Daily Activities of Nursing Officers.

Introduction

Low back pain (LBP) is one of the most serious health problem of tremendous medical and socioeconomic dimension and a major cause of disability. Low back pain is a localized between the 12th rib and the interior gluteal folds, with or without leg pain. Nurses are known to be a high risk group for occupational low back pain [1]. Direct care nursing personnel around the world report high numbers of work-related musculoskeletal disorders. The impact of LBP for nurses includes time off work, increased risk of becoming chronic, as well as associated personal and economic costs. Nurses who suffer from chronic back pain will have an impact on them while standing up from sitting and lifting the patients. For direct care nursing staff, manual handling of patients such as moving or repositioning a patient using their own body

strength is the major cause of these injuries. Indeed, 80% of the general active population suffers from LBP at least temporarily [2].

A study among nurses in Sudayr region revealed that 53.2% of the nurses had worked related LBP and a positive correlation was seen between place of work and pain duration [4]. The nature of work influences the prevalence of LBP among nurses. Nurses working in areas requiring strenuous physical activity are more prone for LBP. Improper postural mechanics also has a direct effect on the prevalence of LBP. Patient lifting and postural requirements during the work poses a high risk to nurses in a hospital environment [5]. Especially in the developing countries absence or lack of lifting aids forces the nurses to strain during shifting of patients. It is reported that poor knowledge of back care ergonomics and unavailability of lifting equipment are major predisposing factors to LBP among nurses [5]. Overweight and obesity also seem to worsen the condition among adults. Nurses are the major work force of any health care. Their wellbeing will reflect on the standard and quality of patient care. LBP is a common occupational hazard which can affect the performance of nurses in the clinical area.

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Statement of Problem: "A Cross Sectional Study to Assess the prevalence of low back pain among staff nurses"

Aim and Objectives: To assess the prevalence of low back pain among staff nurses working in clinical services at tertiary care hospital.

Review of Literature

An extensive review of literature has done. The literature reviewed on following headings which useful to formulate tool are:

Low back pain and activities of daily livings Low back pain and nurse

Low back pain among nurses of their activities of daily livings

Research Methodology

Research Design: A cross sectional Survey Method

Study Settings: The study setting is tertiary hospital

Population: the staff nurses working in tertiary care hospital.

Sampling Technique: A purposive sampling method will be used to collect data.

Inclusive criteria

- The Nursing Officers of both genders.
- The Nursing Officers who are working in tertiary care hospitals

Exclusive criteria

They are not willing to participate.

Tool

The study tool consists of demographic, clinical variables, self-structured questionnaire on low back pain, and low back pain disability proforma.

Data Analysis

The data will be analysed by descriptive and inferential statistics.

Results

Most of nurses were in age group of 24-27 as 62% (80/133) were 57% (74/133) females from participated nurses only 37% were married 8% were

having one child, 5% were having two children, 22% were having no child.

In regard of physical characteristics most then 55% were between 158-167 cm of height and 35% were from 51-60 kg. Of body weight the 24% of from 61-70 kg. of weight.

In regard of professional experience most of them having 4-5 Year of clinical nursing services in providing bedside care as in various units.

On the Account of low back pain most of Nurses 40% were having mild pain. 15% had moderate pain, 5% were having severe pain. According to physical built most of them were standard height and weight 51-60 kg which corresponds their standard physical built up.

Regarding their previous health status, 12% having previous problem leading to pain, 7% only undergone previous surgery and 66% got only previous serious infections. 12% were suffering from urinary tract infections.

In non-pharma logical strategies for pain management most of them 35% were take rest in bed, 12% were undergoing physiotherapy method and 13% were in relaxation techniques in pharmacological strategies 12% were regularly using analgesics.

In Regard on causes of pain to nurses most of them 52% told this due to work activity and 48% told unknown.

In Regard of the location of pain in back 38% had lumbar region. 25% had 2-5 year, 26% had since 1 year and 9% had more than five years. Most of them 49% reported back pain was gradual onset.

Associated factors movement due to low back pain. Pain intensity while moving, 28% were mild pain, 29% were moderate pain, 16% were in severe pain and 3% had worst pain.

On regarding personal care 30% of them have painful when look after self and which needs careful activity 22% had some help but manage most of personal care.

In lifting of objects 32% can lift heavy weights but extra pain 23% have pain which prevents them from lifting object from floor, but can do, 10% had manage to lift light weight from floor and 19% card lift only very light weight objects only.

Regarding walking 27% told pain presents from walking more than 1.6 km and 28% load pain 28% from walking more their half kilometre 3% told while walking with walking aid.

In regard of time of the worse back pain most of them reported 21% at night and majority 25% reported intermittent pain. While assessing aggravating factors of pain, most of them 22%

Table 1:

S. No	Demographic Variable	Frequency	Percentage
1	Age		
	20-23	15	12
	24-27	80	62
	28-31	27	21
2	32-35	11	8
	Gender		
	Male	59	45
	Female	74	57
3	Marital status		
	Married	48	37
	No of children	0	0
	One child	11	8
	Two children	7	5
	Three children	1	1
	No children	29	22
4	Single	85	65
	Years of experience		
	1-3 years	58	45
	4-6 years	68	48
	7-9 years	8	6
5	10-12 years	4	3
	Height		
	148-157 CM	23	18
	158-167 CM	71	55
	168-177 CM	28	22
6	178-187 CM	8	6
	188-197 CM	3	2
	Weight		
	41-50KG	27	21
	51-60KG	46	35
9	61-70KG	31	24
	71-80KG	19	15
	81-90KG	10	8
	Level of Pain		
	No pain	54	42
Mild pain	52	40	
Moderate pain	20	15.	
Severe pain	7	5	
10	Clinical Variables		
	Any Previous Problem leading To Pain		
	Yes	15	12
11	No	118	91
	Previous surgery		
12	Yes	9	7
	No	124	95
13	Previous Infections		
	No	86	66
	Fever	21	16
	Urinary tract infections	16	12
	Any injuries	10	0
14	Strategic of non-pharmacological management		
	Rest in bed	46	35
	Binder	1	1
	Physiotherapy	16	12
	Hot compresses	10	8
	Relaxation	17	13
14	Distraction	5	4
	Pharmacological strategies		
	Analgesics	16	12
Anti-inflammatory	9	7	
None	97	75	

15	Causes of pain		
	Know due to work activity	49	52
	Unknown	63	48
16	Location of pain		
	Cervical	29	22
	Lumbar	49	38
	Cervical and lumbar	16	12
17	Persistent of pain since		
	One year ago	34	26
	2-6 year	33	25
	>5 years	12	9
18	Quality of back pain		
	Throbbing	24	18
	Shooting	21	16
	Knife like pain	20	15
	Hot burning	14	11
19	Onset of back pain		
	Sudden	15	12
	Gradually	64	49
20	Time of the worse back pain		
	In the morning	15	12
	In the afternoon	16	12
	In the evening	21	16
	Late at night	27	21
21	Intensity of back pain defer with time		
	Constantly	18	14
	Nearly constantly	14	11
	Intermittently	32	25
	Occasionally	25	19
22	Factors aggregating pain		
	Standing	28	22
	Sitting	21	16
	Walking	17	13
	Physical effort	13	10

reported standing, 16% reported sitting, 13% reported walking and 10% reported physical effort. (Table 1).

Discussion

Nursing is a healthcare profession focused on the care of individuals, families, and communities so they may attain, maintain, or recover optimal health and quality of life from conception to death. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. The unique function of the nurse is to assist the sick individual, in the performance of those activities contributing to health or activities that he would perform unaided if he had the necessary strength, will or knowledge. Nurses who work in orthopaedic, surgical, emergency department and ICU, where all patients are highly dependent; constant attention, immediate and quick action from nurses is needed. So the nurses have to ignore their own safety to save the patients of life. Nursing officers work in these units are also very prone to back problems. These nurses

often deal with patients who are in need of wholly dependent care is a unique challenge. Nurses make more frequent rounds to ensure patients receive all dependent and needed treatment. These patients must also be moved or turned every few hours in prevention of pressure sore. The number of patients turned multiplied by the two hour turn over frequency, creates an atmosphere ripe with the possibility of back pain and problems. Transferring patients and making up patient beds is really hard on a nurse's back. This is compounded by the fact that a nurse repeats these actions multiple times during a day, for days on end. Typically, nurses may find themselves lifting an average of twenty patients daily. This is in addition to moving an average eight patients from their bed to a chair and back. "Patients are sicker and bigger than they've been historically," explains Schaumleffel, making nurses' jobs more dangerous to their own health. The frequency of manual labor on the job also increases the risk throughout a career. "Back injuries are micro traumas the damage accumulates over time," she says. The more work in awkward postures or lift heavy loads, the greater at risk.

In avoidance of getting low back pain nurses should maintain posture while providing nursing care, maintain good body mechanics, relaxation or rest in their hectic daily. In their personal activities practice daily physical exercises yoga and other relaxation techniques. Many nurses complain of getting low back pain in their certain period of career. This shows that, nurses are started to suffer with low back pain in their initial phases of career. Then it is becoming chronic problem for their life time. However with this chronic low back pain they are performing routine professional, personal daily activities will be aggravating the problems.

Conclusion

On the basis of organization, the nurses to be allocate duty according to their efficient, skill, specialty training. Nurses to be rotated in caring the patient such as with a scheduled time interval they can assign to care of patient with wholly dependent, partial dependent and independent. Nurses are providing continuous quality care to sick and needy should not become sick. Nurses to be taken care by themselves to maintain their health and organizations provide supportive system and

educate them to prevent low back pain which is not having any pathological background. Nurses should provide quality care which improves patient satisfaction, increase health status of every individual includes nurses and patients.

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