

Physiotherapist and Nurse Prevalence of Spinal Pain is Influenced by Occupation

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Introduction

One of the leading causes of disability worldwide is common musculoskeletal disorders like neck pain (NP) and low back pain (LBP). The second most common cause of physical disability worldwide is LBP. The assessed predominance of neck torment among medical care labourers during one year was from 45.8% to 54.7%. Sleep disorders, reduced participation in recreational activities and shorter work hours are all possible outcomes of neck pain. When all conditions were taken into consideration, the Global Burden of Disease, Injuries and Risk Factors Study (GBD 2017) found that LBP was the leading cause of years lived with disability (YLDs). Between 75% and 80% of people worldwide will experience acute LBP at least once in their lifetime. The majority of patients who experience acute LBP recover within about a month. However, many patients experience recurrent episodes of LBP or persistent low-intensity pain within a year of the previous pain episode. The prevalence of LBP among young and middle-aged people has been highlighted in recent reports. The most prevalent occupational-related musculoskeletal disorder is LBP. It is estimated that 37% of cases of LBP worldwide involve work. It is estimated that work-related LBP results in 818,000 disability cases annually. As a result, LBP is a significant economic issue in industrialized nations.

Description

In the majority of EU nations, 40 to 60% of people of working age report having occupational diseases. Women, older workers, people who work harder and for longer hours and those with lower socioeconomic status typically take longer sick days. Injuries, poor mental health and back pain are the primary causes of long-term absence from work, according to an Irish study. Musculoskeletal diseases (MSDs) are the most prevalent occupational health issue in EU nations. MSDs are the leading risk factor for occupational disability, especially among women and frequently result in early retirement. MSDs are also the most prevalent occupational health issue among hospital staff, particularly nurses, according to studies. NP and LBP may be related to the various mechanical stresses nurses and physiotherapists face on a daily basis, particularly when caring for patients who are dependent or in a bed. Age, gender, work experience, obesity, sedentary lifestyle, psychological stress, manual patient mobilization and care and inadequate ergonomics education are the most significant risk factors for NP and LBP. A fast-paced work environment, repetitive movement patterns, insufficient recovery time, weight lifting, other strenuous manual effort, awkward postures, mechanical pressure, bending, twisting, vibrations and low temperature are occupational factors associated with NP and LBP [1].

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LBP is the most significant of the musculoskeletal diseases that pose a serious threat to working nurses and physiotherapists, with a prevalence of 30–60%. Absenteeism from work, loss of optimal functionality, rising treatment and care costs and occupational disability are all negative outcomes of occupational back pain. In order to develop screening plans and preventive programs, physiotherapists and nurses must identify risk factors for NP and LBP. The purpose of this study was to ascertain the relationship between the prevalence of spinal pain, functional status and the degree of disability and the medical occupation (physiotherapist and nurse). Spinal torment, chiefly LBP, is perceived in created nations as a successive reason for bleakness in different work related areas, particularly in medical care labourers, doctors, attendants, physiotherapists, paramedics and maternity specialists. Patients who gain weight and become obese are likely to experience more back pain. As a result, more work is required to anticipate these issues by regularly assessing the physical factors associated with early spinal pain. The majority of physiotherapists and nurses, according to our research, were limited by spinal pain [2].

Nurses were older, shorter and had a higher BMI than physiotherapists in the population that was examined. BMI affected torment power estimated with VAS, despite the fact that medical caretakers had a higher BMI than physiotherapists. However, there is no conclusive evidence from previous studies by other authors, reported that women with lumbosacral pain were more likely to be overweight. In contrast to these observations, other researchers did not demonstrate a significant link between nurses suffering from low back pain and being overweight or obese. In our study, nurses and physiotherapists levels of back pain were correlated with their age and years of experience. Other researchers also made observations that were similar to these. They said that nurses work experience decreased the frequency of non-specific recurrent LBP. They also suggested that this might have something to do with medical staff developing protective responses to increased workload. Similar outcomes were observed in the work of podiatrists, with younger age groups experiencing back issues [3].

In our study, nurses had more severe VAS-measured spinal pain (mean 5.37) than physiotherapists did (mean 4.64). Due to nurses older age, their work experience was longer than that of physiotherapists. Nurses high rates of LBP have traditionally been attributed to the physical demands of their jobs, such as moving patients and lifting heavy objects. During work, attendants curve and turn while giving consideration to patients and inadequately frequently utilize the essential guides to forestall outer muscle injury while dealing with incapacitated patients. This could be because there isn't enough training in occupational ergonomics, there isn't enough time, the culture of the workplace, or there isn't enough of the right equipment to help care for patients. For example, sliding boards, repositioning devices and mechanical lifts can lower the risk of injury to the spine and musculoskeletal system. Adherence to ergonomic principles, appropriate work organization and specific information provided by the employer about potential risks are the primary components of LBP prevention [4].

The prevalence of spinal pain among nurses and physiotherapists was comparable in our study. However, when physiotherapists measured pain using NDI and ODI, it was less intense and caused less disability. This may be because physiotherapists have a better understanding of the musculoskeletal systems structure and function as well as ways to prevent musculoskeletal system pain. However, the alarming fact that 90.9% of physiotherapists and 97.7% of nurses suffer from spinal pain during their careers is troubling. 35%

of physiotherapists said they had back pain at least once in their lives, while 56.6% of nurses said they had pain once a day. The majority of physiotherapists said that spinal pain limited or prevented them from doing any physical activity at all (44.2%). In nurses, spinal pain resulted in either a minimal (45.1%) or a significant (39.8%) reduction in work-related activity. The lowest rates for pain in the thoracic spine (17.7%) and the highest for low back pain (80.5%) were found in both of the subgroups that were examined. Respondents from the two subgroups most often revealed focal agony, situated in the neck (15.1%), The spine (13.6%) and low back (46.9%) and less every now and again torment emanating to a couple of appendages.

According to a Polish study 91.7% of physiotherapists have experienced pain in the loco motor system during their careers, with 82% experiencing LBP and 67% experiencing NP. Be that as it may, the force of torment was higher in the cervical spine. In the current study, nurses had NP (21.1%), The Pain (6.6%) and LBP (88.5%), while physiotherapists had NP (41.3%), The Pain (31.7%) and LBP (70.4%). According to systematic review, nurses more frequently suffered from MSDs that affected the low back, neck and shoulders. The literature indicates that between 43 and 77.1% of nurses suffer from LBP. According to studies 70.87% and 57% of nurses reported experiencing low back pain in the previous year. According to a study, 85.9% of nurses had LBP. Physiotherapists said that they first had spinal pain when they were in school that after providing rehabilitation to patients, 27% of physiotherapy students in their final year complained of spinal pain. According to the findings of other researchers, complaints of spinal pain begin within the first four or five years of employment. Physiotherapists had a lifetime prevalence of back pain ranging from 57% to 73%, a one-year prevalence of back pain of 45% and a lifetime exposure to any kind of injury of 90% reported that musculoskeletal disorders affected 94% of Iranian physiotherapists [5].

Conclusion

These disorders were most common in the lumbar region (65%), neck (57.4%), shoulder (50.2%) and upper back (49%) and knee (45.5%) a comprehensive analysis focusing on work-related spinal pain risk factors revealed a significant link between lumbosacral radiculopathy and manual labour, torso bending/twisting, lifting and moving torso-bending/twisting-

related objects. Lumbosacral radiculopathy can be considered an occupational disease, according to the findings of the study presented findings that were similar regarding the relationship between lifting and carrying and low back pain. Physiotherapists identified lifting (59.2%), standing (37.5%), bending (32.9%) and sitting (35.0%) as the primary activities that caused pain in our study. On the other hand, nurses reported that lifting (58.6%), bending (54.3%), sitting (26.6%) and standing (26.0%) were the primary causes of back pain.

Acknowledgement

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Conflict of Interest

None.

References

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