



# Prevalence And Factors Contributing To Low Back Pain (LBP) Among Staff Nurses Working In Operation Theatre

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**Abstract:** Background: Low back pain (LBP) is a prevalent issue affecting healthcare professionals, including staff nurses working in the operation theatre. This study aims to assess the prevalence of LBP in this specific population and identify the factors contributing to its occurrence. The findings of this research are intended to support the development of an informational booklet on exercises to alleviate low back pain.

**Objectives:** This study pursues two primary objectives: firstly, to evaluate the prevalence of low back pain among staff nurses working in the operation theatre, and secondly, to identify and assess the factors contributing to the development of low back pain in this occupational group.

**Methodology:** A cross-sectional study was conducted, involving 108 staff nurses working in the operation theatre. The sample was purposively selected, and the Oswestry Disability Index (ODI) was used to assess the prevalence of low back pain, categorized into five levels of severity. The study identified and examined nine factors contributing to low back pain, including frequent standing, excessive workload, stress, patient assistance, frequent patient lifting, staff shortage, poor body mechanics, frequent bed movements, and carrying heavy medical equipment.

**Results:** The results of this study revealed that among the participating nurses, 50 (46.29%) reported no low back pain, 42 (38.88%) experienced mild LBP, 15 (13.88%) had moderate LBP, while one (0.92%) reported severe LBP. Notably, no participant had a complete LBP disability. The nine identified contributing factors were ranked as follows: frequent standing (89.81%), excessive workload (79.63%), stress (77.78%), patient assistance (72.22%), frequent patient lifting (59.25%), staff shortage (53.70%), poor body mechanics and frequent bed movements (52.78%), and carrying heavy medical equipment (42.59%).

**Conclusion:** Low back pain is a prevalent issue among staff nurses in the operation theatre. This study's findings provide a comprehensive understanding of LBP's prevalence and contributing factors in this specific work environment. The insights gained will be instrumental in creating an exercise information booklet tailored to the needs of staff nurses, offering strategies for LBP relief and prevention.

**Index Terms** - low back pain, staff nurses, operation theatre, prevalence, contributing factors, exercise booklet, healthcare professionals, occupational health.

## I. INTRODUCTION

Low back pain (LBP) is a global health concern that affects individuals across various professions and age groups, with considerable implications for the quality of life and work performance. Among healthcare professionals, staff nurses are particularly vulnerable to the development of LBP due to the physically demanding nature of their job, including frequent patient handling, prolonged periods of standing, and the stress associated with patient care. The operating theatre is a crucial environment within healthcare settings, where staff nurses play an integral role in ensuring the success of surgical procedures. However, this dynamic work environment poses unique challenges that may contribute to the occurrence of LBP among staff nurses.

The prevalence and contributing factors of low back pain among staff nurses working in the operation theatre have gained attention in recent years, as healthcare institutions strive to enhance the well-being of their workforce and mitigate the consequences of occupational injuries. This study aims to shed light on the prevalence of LBP and the specific factors contributing to its occurrence within the context of the operation theatre. Furthermore, it seeks to provide valuable insights that will support the development of an exercise information booklet tailored to the needs of staff nurses, offering strategies for LBP relief and prevention.

### Objectives:

To assess the Prevalence of low back pain among staff nurses working in tertiary care hospitals

To assess the factors contributing to low back pain among staff nurses working in tertiary care hospitals

### Method:

A cross-sectional survey was employed to identify the prevalence and factors contributing a low back pain among staff nurses working in the operation theatre. Participants were asked to rate 0-6 grades as per their experiences in OSWESTRY low back pain scale. The study included 108 staff nurses working in Operation Theatre from various hospitals. Descriptive statistics were used to analyze the frequency and percentages of responses.

### Results:

The results of this study revealed that among the participating nurses, 50 (46.29%) reported no low back pain, 42 (38.88%) experienced mild LBP, 15 (13.88%) had moderate LBP, while one (0.92%) reported severe LBP. Notably, no participant had a complete LBP disability. The nine identified contributing factors were ranked as follows: frequent standing (89.81%), excessive workload (79.63%), stress (77.78%), patient assistance (72.22%), frequent patient lifting (59.25%), staff shortage (53.70%), poor body mechanics and frequent bed movements (52.78%), and carrying heavy medical equipment (42.59%).

### Conclusion:

This study underscores the significance of low back pain (LBP) as a prevalent concern among staff nurses in the challenging work environment of the operation theatre. The findings reveal that while nearly half of the participating nurses reported no LBP, a substantial portion experienced varying degree of discomfort. Frequent standing emerged as the predominant contributing factor, followed by factors such as excessive workload, stress, and patient assistance. These insights illuminate the multifaceted nature of LBP in this specific occupational group. The absence of complete LBP disability suggests that early intervention and prevention strategies hold promise. These findings are invaluable for healthcare institutions and policymakers, as they inform the development of an exercise information booklet tailored to the unique needs of staff nurses, offering effective strategies for both LBP relief and prevention. This research contributes to the broader effort to improve the overall well-being and performance of staff nurses in operation theatres and, by extension, the quality of patient care.

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