

Prevalence of Neck Pain in Drivers

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ABSTRACT

Background: Neck pain is a common problem. About two-thirds of people will experience neck pain at some point in their lives. People in general, and drivers in particular, often have neck pain that doesn't go away. Neck pain is a common cause of disability, but not much is known about how often it happens or how it acts.

Objective: The goal of this study was to find out how many drivers have neck pain.

Methodology: A cross-sectional study was done, and the data were gathered through convenient sampling. From different taxi stands in Lahore, Pakistan, 150 people filled out self-reported questionnaires to gather data. The SPSS20.0 software was used to analyze the data that was collected, and the results were figured out.

Results: We can say that physical work, driving, and sitting in a chair are the main things that can make neck pain worse or better. The Visual Analogue Scale is used to measure how often and how bad neck pain is caused by driving (VAS). We found that 65 percent of the people who answered the survey have neck pain. 42 of the 150 people who answered said they had mild pain. The other 39 people who answered said they had average pain while driving, and only 17 of the 150 people who answered said they had high pain. On the other hand, Neck Disability Index NDI checked the pain level for physical work and sitting in a chair. Also, "during physical work and sitting on chair" are two things that have more to do with how bad the neck pain is because these two things also make it worse for drivers to have neck pain.

Keywords: Prevalence of Neck Pain, Physical Work, Sitting on Chair, Driving.

INTRODUCTION

Pain in the neck is a common problem. About two-thirds of people will have pain in their necks at some point in their lives (1). People in general and drivers often complain that their necks hurt all the time. Even though neck pain is a common reason why people can't work, not much is known about how it happens and what it looks like. Cervicospinal kinesiesthesia and conventional anomalies of the front head position both have a major impact on the development of posterior cervical pain; however, neither of these factors has been thoroughly studied in a clinical population with identical symptoms (2). In most instances, women are more likely to have the illness than men (3). People with neck pain are far more likely to call in sick to work, which costs the economy a substantial amount of money (4). The major goal of treatment is to improve the patient's ability to do daily tasks. In order to maximize the possibility of treatment success, it is crucial to comprehend the variables that influence an individual's functional status (5). One of these is having improper posture. Due to the association between musculoskeletal disorders and bad sitting posture among these professionals, the fact that millions of individuals around the globe spend their days working at tables provides researchers with motivation (6). Maintaining proper neck function is a crucial component of being able to conduct daily tasks effectively. Approximately 67 percent of the general population may have neck pain and dysfunction at some point in their lives (7). A poll of Chinese citizens in Hong Kong indicated that 32% of respondents had had neck pain within the past year (8). In the majority of cases, however, the pathophysiological processes that cause neck pain remain poorly understood. These "non-specific" neck problems are responsible for a substantial amount of lost productivity and disability payments. (9)

Numerous studies have been conducted on the elements that can cause neck pain (10). Various daily activities (11), such as driving, sitting in a chair, reading, sleeping, having a headache, going to work, and concentrating, are regarded to be part of a person's daily routine, according to the findings of a study. However, the most important components were highlighted throughout this study. The effects of neck pain on both public health and the economy must be considered. People with persistent neck pain are twice as likely as the general population to contact their primary care physician. The majority of neck pain research has been undertaken in countries with high levels of wealth and industrialization. Regarding the working population and the general population, there is limited data available in low- and

middle-income nations. Pakistan is a digital novice, and its corporate culture and work ethic are still evolving. In order to avoid these problems from escalating out of hand, there is an essential need to comprehend how they operate. To the best of the researchers' knowledge, no study has been conducted in Lahore to investigate the prevalence of neck pain, particularly among drivers. The major purpose of this study was to identify the proportion of Lahore taxi drivers who have neck pain at each of the city's numerous taxi stands.

Woods V conducted research on behalf of a United Kingdom labor union. The frequency with which people feel neck pain is related to personal factors, as well as physical and psychological components of the workplace, according to the findings of this study (12). These patterns of linkages also suggest areas where intervention strategies could be implemented to enhance the ergonomics of the workplace and make it a pleasant place to work. These modifications could make the workplace healthier and more fun for employees (11). Mohammad A. Mohseni Bandpei conducted a study to investigate the prevalence and risk factors for neck soreness among university teachers and drivers in Iran. There is an association between neck pain and age, general health, time spent at work, regular exercise, and overall job satisfaction (13). The most prevalent concerns were with the neck and shoulders (33% and 31%, respectively), followed by the hand and upper arm (11 to 12%), elbow, lower arm, and wrist (all 11 to 12%). (6 percent to 7 percent). (14). Several studies have found an alarming correlation between computer use and neck pain, which has reiterated the need to educate new computer users (such as schoolchildren) on the need of correct posture and ergonomics when using a computer (15). P. Janwantanakul and P. Pensri conducted another study to determine the prevalence of musculoskeletal disorders among drivers. 1428 individuals responded to the survey, representing a 71 percent response rate; however, only 1185 of these individuals matched the inclusion requirements for the study. Sixty-three percent of those who self-reported having musculoskeletal symptoms at work did so annually. Head and neck was the most common area for symptoms (42%), followed by the low back (34%), the upper back (28%), the wrists/hands (20%), the shoulders (16%), the ankles/feet (13%), the knees (12%), the hips (6%) and the elbows (6%). (5 percent). Female drivers were more likely than male drivers to report concerns with their head/neck, shoulder, upper back, and ankles/feet. It was determined that persons under 30 were more likely to experience upper back pain than those over

49. There are parts of the body that are more prone to musculoskeletal issues based on gender and age. It is evident that we must develop specific ways to prevent drivers from exhibiting these symptoms (16).

METHODOLOGY

This study was based on cross sectional and purely qualitative (primary) data. Several drivers in Lahore were given questionnaires to complete out as part of this research effort, which took place in Lahore. Only information gathered through the use of questionnaires and interviews was used in this study. A total of 150 distinct samples were used in this investigation. A total of 150 questionnaires were handed out to drivers in Lahore, Pakistan, at various points in the city. Convenience sampling was used in this study since it was the most convenient way to collect data. The size of the sample was estimated using a mathematical technique (17, 18). There were 185 people in the group, therefore there was a 5% chance that something would go wrong. According to the 95 percent confidence interval, there was a fifty percent prevalence. (19).

Sample Size = $\frac{(Z^2 \cdot \sigma^2)}{E^2}$

Variables: Variables were used as factors of neck pain are driving, sitting on chair, reading, sleeping, headache, work, concentration and intensity of pain.

Outcome Measure Tools: Self reported Questionnaire was used in study (19). Statistical Package for Social Science (SPSS) was used to analyze the prevalence of postural neck pain.

RESULTS

This chapter was all about the statistical results, how they were explained, and how often the factors in this study came up. First the descriptive table is below.

Table 1: Age of Respondents

Class Interval	Frequency
20-23	17
24-27	14
28-31	21
32-35	29
36-39	22
40-43	28
44-48	19
Total	150

The above table is showing the frequency of the age factor according to class intervals. It can be noticed that most of the respondent was the age between 20 to 48. That's why the mean value of age was 35.2.

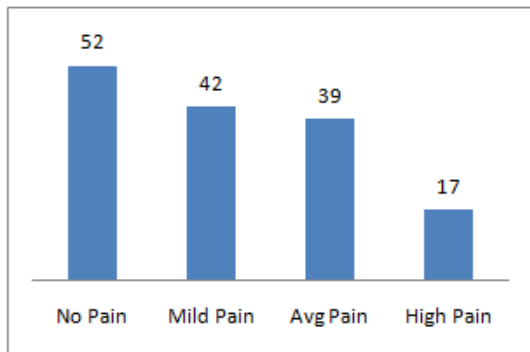


Figure 1: Pain Intensity During drive by Visual Analogue Scale (VAS)

In this case, drivers were asked how bad the pain was. Only 65% of drivers had pain, because 52 of the 150 people who answered the survey didn't have pain. Also, 42 of the 150 people who replied said they had mild pain. The other 39 people who answered said they had average pain while driving, and only 17 of the 150 people who answered said they had high pain. This means that driving causes mild pain for most of the people who answered the survey.

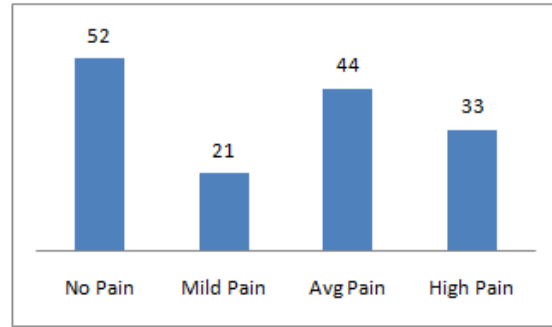


Figure 2: Pain Intensity During Physical Work By Neck Disability Index NDI

Here, people were asked at work about how bad their disability was. 21 of the 150 people who answered said they had mild pain and disability. The other 44 respondents said that their disability and pain at work were about average, and 33 of the 150 respondents said that their disability and pain were high.

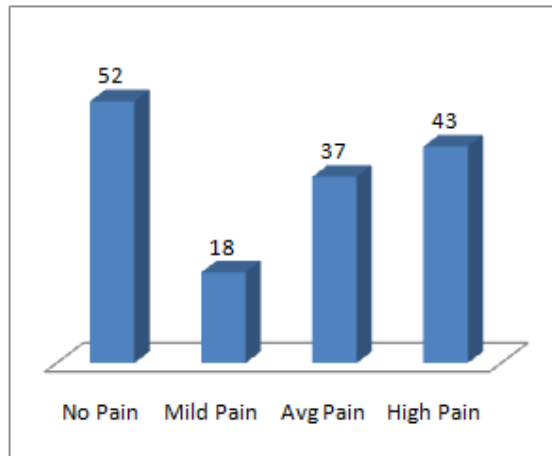


Figure 3: Pain Intensity When Sitting on Chair By Neck Disability Index NDI

Here the intensity of pain and disability was asked from respondents when they sit on chair. 18 out of 150 respondents said that they faced mild disability and pain. The other 37 respondents said that they were faced average disability and pain when they sit on chair and 43 out of 150 respondents said that they faced high disability and pain.

CONCLUSION

There were many factors which change neck pain intensity. Some variables were more effective, on the other hand some were not. It is concluded that physical work, driving and sitting on chair are the major factors which can change the intensity of neck pain. Prevalence of neck pain and pain intensity due to driving is checked by Visual Analogue Scale (VAS). It has been seen that neck pain is common in 65% of the respondents. 42 of the 150 people who answered said they had mild pain. The other 39 people who answered said they had average pain while driving,

and only 17 of the 150 people who answered said they had high pain. On the other hand, the Neck Disability Index (NDI) measured how bad the pain or disability was when the person was doing physical work or sitting in a chair. Also, "during physical work and sitting on chair" are two things that have more to do with how bad the neck pain is. Because these two things make neck pain worse when compared to other things.

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