



PREVALENCE OF NECK PAIN AMONG TAILORS IN NORTH GUJARAT - A CROSS SECTIONAL STUDY

Physiotherapy

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ABSTRACT

Background: - Neck pain is one of the common musculoskeletal problems faced by tailors due to constant work on the sewing machine with the awkward posture.

Aim:- The aim of study is to find out the prevalence of neck pain among Tailors.

Objective:- To find out the prevalence of neck pain among Tailors use of self questionnaire.

Materials And Methodology:- A cross sectional study was performed among 100 tailors working in North Gujarat to determine the prevalence of neck pain in them. A self-questionnaire was used.

Result: - 91% prevalence of neck pain was found among the tailors in North Gujarat. Also 67% tailors have activity limitation.

Conclusion: - The prevalence of neck pain among Tailors in North Gujarat is found to be highest (91%). Neck pain is one of the common condition contributing to the increase in functional disability

KEYWORDS

Neck pain, Tailors, Prevalence rate, Activity limitation

INTRODUCTION

Work-related musculoskeletal problems are common nowadays. Musculoskeletal problems are mostly occurring due to occupational posture. Neck pain is one of the common musculoskeletal problems faced by population.¹⁻²

The high rate of WMSDs is characterized by a continuous sitting posture with the worker's arms flexed and abducted, head and trunk flexed forward.² WMSDs are found in the workers with continuous and overuse movements in incorrect posture.³

The cervical spine is the most movable region than the other spine segments. Cervical spine involves complex structures and major forces & stresses are transmitted through the cervical spine which leads to discomforts.⁴

Cervical spine is the top most spine in vertebral column, among all it is first weight bearing spine. The neck and shoulders are intimately connected by muscles and multiple nerve pathways, so pain in any one of the structures can lead to pain in the corresponding structure.

Neck is connected to the other structures by muscles and various nerve pathways, therefore pain in the neck leads to pain in the corresponding structures.⁵

Neck pain is a common complain which is experienced by two-third of population. Due to neck pain both personal health and well-being are affected.⁶

Musculoskeletal (MS) problems in which neck pain is mostly present in tailors.⁷ People with stitching profession are more prone to work related musculoskeletal disorders.⁸

Tailoring involves repetitive works like cutting, sewing, embroidery, pressing and finishing work, performed with back curved and head and neck bent over the sewing machine. Working in this discomfort posture for long duration increases the pain in the neck.⁹

Lack of awareness or ignorance to such symptoms and health issues may result in tailors becoming victim to many occupational hazards.

In sewing machine workers, it has been found that the prevalence and occurrence of neck pain increases with the working years of experience.⁸

Working in the profession of stitching for the time duration of greater than eight years possibly have some cumulative damaging effects on the neck area.¹⁰

Thus, this study aims at to find the prevalence of neck pain among Tailors in North Gujarat.

Need Of Study

According to previous researches there is no evidence that this type of research has already done in North Gujarat. So the need of study is to assess the prevalence rate of neck pain among Tailors in North Gujarat.

AIM AND OBJECTIVE

Aim: The aim of study is to find out the prevalence of neck pain among Tailors in North Gujarat.

Objective: To find out the prevalence of neck pain among Tailors in North Gujarat with the use of self questionnaire.

METHODOLOGY

Materials:-

- Pen and Paper
- Laptop
- Consent Form
- Google Form

Method:-

- Study design : Cross-Sectional study
- Study setting : Nootan College of Physiotherapy , Sankalchand Patel University, Visnagar
- Sampling technique : Convenience sampling
- Study population : 30-55 years , Tailors (Male and Female)
- Study sample : 100
- Study duration : 6 months

CRITERIA FOR SELECTION:-

- **Inclusion Criteria :-**
Age : 30-55¹¹
Occupation : Tailors
- **Exclusion Criteria :-**
If any type of previous injury related to neck
Any type of previous operation related to neck
Radiating pain to arm

Procedures Of Data Collection:-

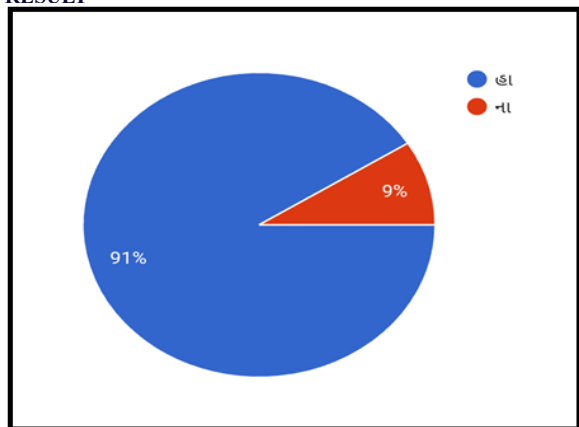
A cross sectional study was conducted after the ethical approval for this study was taken from the institutional ethics committee of Nootan College of Physiotherapy, Sankalchand Patel University, Visnagar, Gujarat, India. The Study was conducted among 100 Tailors working in North Gujarat. Both the genders were included in the study. For digital and quickly collection of the information, questionnaire was prepared in Gujarati language with the help of Google form.

In this study Google form was used. It comprised 11 questions which included consent form and aimed at collecting data from Tailors from North Gujarat.

The sample was raised using convenience sampling technique from among local tailors aged 30-55 years, having their own small and medium enterprises.

Participants who were willing to participate in the study and those with age between 30-55 years were included and participants who were not willing to participate, those with no neck pain, past neck injury, past neck operation and radiating pain to arm were excluded.

RESULT



Graph 4.1: Prevalence of neck pain

In this study, 100 tailors were included for investigate prevalence of neck pain among tailors in North Gujarat, out of which (91%) tailors were having neck pain and 9% tailors were not having neck pain.

So, according to graph 4.1, prevalence of neck pain among tailors is high in North Gujarat (91%). Both male and female included; in which 64% were male and 34% were female, the mean age of male was 37.6364 ± 5.28754 and female was 39.2941 ± 5.77103 .

According to result 46% participants who work as a tailors since 8-15 years, 36% since 0-7 years and 18% since >15 years. Tailors who work for many years, having more neck pain. Majority of working hours of per day were 6-7 hours.

Result indicates 35% tailors have mild pain, 25% moderate pain, 24% no pain and 16% severe pain. There are 67% tailors having activity limitation and 33% tailors have no activity limitation.

Result indicates 53% of tailors reduce their pain with the help of self care, 33% of tailors use painkiller of pain reduction and 14% of tailors receive Physiotherapy treatment for relieving pain.

DISCUSSION

From the available and accessible literature, there is no single study on the prevalence of neck pain among tailors in North Gujarat area in any published literature.

The study was conducted to determine the prevalence of Neck pain in 100 tailors in the age group of 30-55. The population was selected according to the inclusion criteria of age of tailors.

According to Bandyopadhyay et al. and concluded that the prevalence of MSD among small scale garment industry workers were 78.5% and 69.64% respectively and neck was the commonest site of involvement in both the studies.¹²

In this study, the prevalence of neck pain among the tailors was reported to be 91%. Continuous looking down with neck flexed and eye straining due to improper task lighting causing high prevalence of neck involvement among tailors. According to result Severity of neck pain divided into four category; No pain, Mild pain, Moderate pain, Severe pain. There were 35% tailors who had mild pain, 25% moderate pain, 24% no pain and 16% severe pain.

According to Kumail Hassan et al (2017) in their study concluded that among the whole population of the female sewing machine workers, majority of them reported pain in their neck regions i.e. out of 70

individuals, 55 were having neck pain.¹¹

According to study both male and female included; 66% were male and 34% were female. Male were more prone to neck pain than the female. The mean age of male was 37.6364 ± 5.28754 and female was 39.2941 ± 5.77103 .

Working for extended period with bad posture results in health related issues. Like, consequences of working from several years and for prolonged time period are the adoption of incorrect postures and disturbed biomechanics which in turn causes various muscular issues like pain in the neck region. Leisure and work activities of working population are then limited due to these problems.¹¹

Correct and proper posture is very importance for healthy and fit life. At working places problems create greatly due to working hours and incorrect posture. In case of prolonged working duration, individuals acquire bad posture to compensate the workload limits.

In this study 46% participants who work as a tailors since 8-15 years, 36% since 0-7 years and 18% since >15 years. Tailors who work for many years, having more neck pain. Majority of Working hours of per day were 6-7 hours.

Pain is not only affect physically but also affect the person's work or daily life, specially if the pain is related to the occupation. Pranita Ganjave et al. investigate the pain in the neck restricts 80% of the subjects from their work, but they also reported that their pain used to reduce with rest or change in the posture. Stiffness and pain caused due to prolonged posture is relieved by change in position or with movements.¹³

This type of neck pain limits the ADLs. In this study 67% tailors have activity limitation and 33% tailors have no activity limitation. Women face mainly problems in house chores and men face problem in sewing work and neck movement.

According to result 53% of tailors reduce their pain with the help of self care, 33% of tailors use painkiller of pain reduction and 14% of tailors receive Physiotherapy treatment for relieving pain.

Thus, the awareness of physiotherapy treatment is necessary among tailors to cope up with neck pain.

CONCLUSION

The findings of the study that there is 91% prevalence of neck pain among tailors in North Gujarat. Male are more prone to develop neck pain than the female.

Also neck pain is found to be one of the factors contributing to the increase the limitation of ADLs.

Limitations Of The Study:-

- Small sample size
- An only Selected sample in North Gujarat

Future Recommendations Of The Study:-

- Carry out the study with a large sample size
- Awareness of Physiotherapy among Tailors
- Ergonomics advise and Exercise protocol

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List Of Abbreviations

WMSDs – Work-related Musculoskeletal Disorders

RSIs – Repetitive Strain Injuries

MS – Musculoskeletal

ADLs – Activities of Daily Living

MSD – Musculoskeletal Disorder

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