Academia Journal of Medicine Year 2024, Volume-7, Issue- 2 (July- December)



Tailoring: The Healthiest Profession -An observational Retrospective study

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ARTICLE INFO

ABSTRACT

Keywords- Tailoring, sedentary behavior, calf muscle push-ups, leg fidgeting, lifestyle diseases, health benefits, foot pedal, prolonged sitting.

doi: 10.48165/ajm.2024.7.02.10

Background: - It is a proven fact that the job involving sitting for long hours leads to increase in mortality¹ and morbidity² and is one of the major causes of life style diseases. However recently, it is proven that calf muscle pushup³ while sitting causes improved blood sugar level and even fidgeting^{4,5} of legs while sitting has many health benefits and potential to prevent life style diseases. While the tailoring job involves sitting for long hours, but at the same time, action of their feet to make sewing machine work, is synonymous to calf muscle pushups. To work on the sewing machine, they have to continuously move their feet on foot pedal of the machine while sitting. The purpose of this retrospective observational study is to find out if the adverse effect due to long hours of sitting can be mitigated by calf muscle pushups and leg fidgeting. Aim.: To find the status of health condition of tailors (working on sewing machine with foot pedal) Material and Methods Sample Size: A total sample size of 250 tailors from and nearby Kurti Nagar, Meerut-UP India, which is the major hub of tailoring business was considered for this study. Tailors of every age group were included (with no age criteria). There were no exclusion criteria. Questionnaire-The following questions were asked from the tailors and the response was recorded through videography. Results: The study revealed that none of the 250 tailors reported any health issues or use of medication. The consistent movement of the feet during tailoring work appeared to have a protective effect against the adverse outcomes of prolonged sitting. **Discussion & Conclusion:** This study highlights tailoring as a potentially healthier profession among sedentary jobs, owing to the inherent physical activity of operating a sewing machine's foot pedal. The findings suggest that integrating similar movements into other sedentary occupations could mitigate health risks associated with prolonged sitting.

Introduction

Prolonged sitting has been identified as a significant risk factor for lifestyle-related diseases, contributing to increased mortality and morbidity globally. Jobs that involve sitting for extended periods, such as desk-based professions, are often associated with poor circulation, metabolic imbalances, and an elevated risk of cardiovascular disease, diabetes, and musculoskeletal issues. Recent studies have highlighted the

role of intermittent leg movements, such as calf muscle pushups and leg fidgeting, in mitigating these adverse effects.³ These movements enhance blood flow, improve glucose metabolism, and counteract the negative impact of sedentary behavior, offering a potential intervention for reducing health risks in individuals with sedentary lifestyles.⁴

Tailoring is a unique profession that, despite requiring long hours of sitting, involves continuous foot activity to operate sewing machine pedals.⁵ This action resembles calf muscle

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push-ups and incorporates repetitive leg movements, which may confer health benefits. However, limited research exists to explore the potential protective effects of such movements on the health of tailors. This retrospective observational study aims to assess the health status of tailors working on foot-pedal-operated sewing machines and to determine whether their work-related physical activity mitigates the adverse effects typically associated with prolonged sitting.⁶

- 1. Name
- 2. Age
- 3. Address
- 4. Number of years working as tailor
- 5. Avg. number of hours of work everyday
- 6. Any health issues they have
- 7. Are they taking any medications for any health issue.
- 8. Do they have Hypertension or Diabetes
- 9. Are they taking any medication for BP or Sugar
- 10. Have they experienced any pain in leg or feet

Aim and Objectives

To find the status of health condition of tailors (working on sewing machine with foot pedal)

Methodology

Door-to-Door observations were made. Questions were asked verbally and responses were recorded through videography as some of the tailors were uneducated/ illiterate, some of them were unwilling to write the answers as it meant waste of their time.

Minimum Age of the person in the study sample	15 years
Maximum Age of the person in the study sample	75 years
Minimum Years spent in tailoring	3 years
Maximum Years spent in tailoring	45 years
Average numbers of hours spent per day on sewing machine	8 hours
Number of Males	89%
Number of Females	11%

Result

According to the presented data of 250 tailors, the

Tailoring: The Healthiest Profession –An observational Retrospective observational study found that:

- 1. None of the 250 tailors reported suffering from any health-related issues.
- 2. None of the tailors were on any form of medication for health concerns.
- 3. No reports of leg or foot pain were found among the tailors.

Discussion

Through this observational study, it is concluded that the working professionals whose job involves sitting for long hours, if they include fidgeting in their habit or intermittingly perform calf muscle pushups as a part of their sitting habit, then adverse effects of sitting can be mitigated and one can protect, reduce or reverse diseases associated with sitting for long hours. Our result is in line with the previously done UK Women's Cohort Study⁶.

This observational study suggests that the profession of tailoring, which involves long hours of sitting, may not lead to the health risks commonly associated with such sedentary jobs. The constant movement of the feet on the sewing machine foot pedal could effectively serve as a form of calf muscle push-up. This movement, akin to intermittent fidgeting, helps mitigate the detrimental effects of prolonged sitting, such as poor circulation and increased risk of lifestyle diseases.

These findings are consistent with the UK Women's Cohort Study, which found positive health effects related to leg movement during sitting periods. It appears that integrating such simple movements into sedentary routines can potentially reduce or even reverse the health problems typically linked to sitting for long periods.

Conclusion

The results of this study suggest that among all professions requiring extended sitting periods, tailoring may be one of the healthiest professions. The foot pedal action, resembling calf muscle push-ups and encouraging leg movement, can mitigate the adverse health effects associated with prolonged sitting. Therefore, tailoring not only offers a livelihood but also a potential health benefit through the unique movements involved in the profession. It is also concluded that among all the professions where sitting for long hours is involved, tailoring seems to be the healthiest profession.

Conflict of Interest-

Nil

Source of Support -

None

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