



Research Paper

Assessment Of Neck Pain in Workers Carrying Weight: An Observational Study

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ABSTRACT

Background and Purpose: Neck pain is a major problem in modern society. Neck pain is assumed to be a multifactorial disease, and therefore it is assumed that there are several risk factors contributing to its development. Risk factors can be work-related or nonwork-related, and they can be divided roughly into 3 categories (i.e., physical, psychosocial, and individual risk factors). This study was conducted for Assessment of Neck pain in workers carrying weight

Materials & Methods: Voluntary participation is taken of 120(n=120)(age=18-45) workers in the study. All participants have history of Neck pain. All participants have major complain of neck pain after their work period. A questionnaire was developed using Neck Pain and Disability Scale. The Neck Pain and Disability scale (NPAD) is a composite index including 20 items which measure the intensity of neck pain and related disability. Data was collected in the google forms and analyzed with the help of SPSS 26 and MS Excel.

Results: The results are very clear and show that there is indeed neck pain in the workers carrying heavy weight (77.47 ± 20.475). The correlation between Age and Pain score is (.291) which show a positive correlation meaning as the age increases the pain also increased.

Conclusion: As a result of this study, we may conclude that workers who carry weight in their daily employment experience severe neck pain. The age is also linked to the pain.

Keywords: Neck pain

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I. INTRODUCTION

The neck is the portion of the body that connects the head to the torso and allows the head to move. It is made up of numerous vertebrates(1). The cervical vertebrae are housed in the vertebral compartment, which is separated by cartilaginous discs. The human neck's shape is determined by the vertebrae's alignment. Cervicalgia, or neck pain, is a common condition that affects two-thirds of the population at some point in their lives. Neck pain can be caused by a variety of spinal disorders, despite the fact that it is felt in the neck(2). Muscle tension in the neck and upper back, as well as pinching of nerves exiting the cervical vertebrae, can produce neck discomfort. Pain is caused by joint disturbance in the neck, as well as joint disruption in the upper back. The head is supported by the lower neck and upper back, and pain in these areas is common. The neck and head move the most at the top three joints of the neck. The lower neck and upper back joints provide a sturdy platform for the head to rest on. The muscles in the area tense when this support system is weakened, resulting in neck pain(3).

II. MATERIALS AND METHODOLOGY

Study Design: Observational study design

Sample Selection: simple random sampling was used.

Sample size: 120

Inclusion Criteria:

1. Between 16 to 35 years
2. Healthy population
3. Daily carrying heavy weight

Exclusion Criteria:

1. On any type of medication
2. Not daily worker

Instrumentation:

1. Neck Pain and Disability Scale
2. Clipboard and pen

Procedure: A google form was developed with the help of Neck Pain and Disability Scale. All participants first filled up the consent form and gave consent for their study and then the demographics which included the name, age, height, weight, gender, and occupation were filled in the demographic part of google forms. The subjects were asked to fill the Neck Pain and Disability Scale questions. All data was stored in M.S excel and Google form.

III. RESULTS

A total of 120 subjects were included in the study.

The results are very clear and show that there is indeed neck pain in the workers carrying heavy weight (77.47 ± 20.475). The correlation between Age and Pain score is (.291) which show a positive correlation meaning as the age increases the pain also increased.

TABLE NO 1: DEMOGRAPHIC DESCRIPTIVE

| | AGE(18-45) | HEIGHT | WEIGHT |
|----------------|------------|---------|--------|
| Mean | 36.60 | 7.7752 | 76.95 |
| N | 120 | 120 | 120 |
| Std. Deviation | 9.748 | 9.39165 | 10.115 |

TABLE NO 2: WORKING HOURS AND WORKING DAYS

| | WORKING HOURS (6-10) | WORKING DAYS(5-7) |
|----------------|----------------------|-------------------|
| Mean | 6.20 | 5.50 |
| N | 120 | 120 |
| Std. Deviation | .791 | .679 |

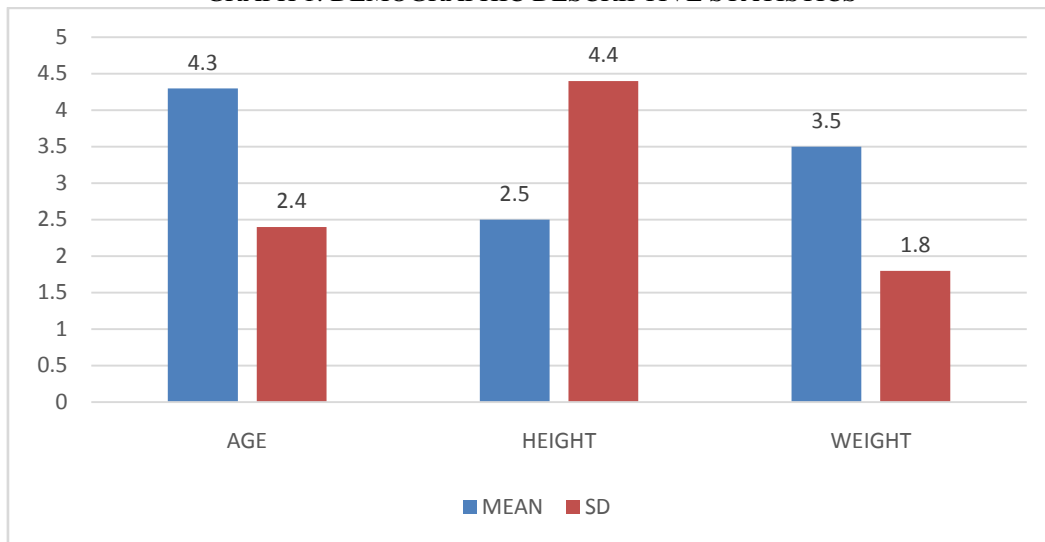
TABLE NO 3: CORRELATION OF AGE AND NPDS SCORE

| Correlations | | | |
|---------------------|---------------------|------------|-------|
| | | AGE(18-15) | SCORE |
| AGE(18-15) | Pearson Correlation | 1 | .291 |
| | Sig. (2-tailed) | | .069 |
| | N | 120 | 120 |
| SCORE | Pearson Correlation | .291 | 1 |
| | Sig. (2-tailed) | .069 | |
| | N | 120 | 120 |

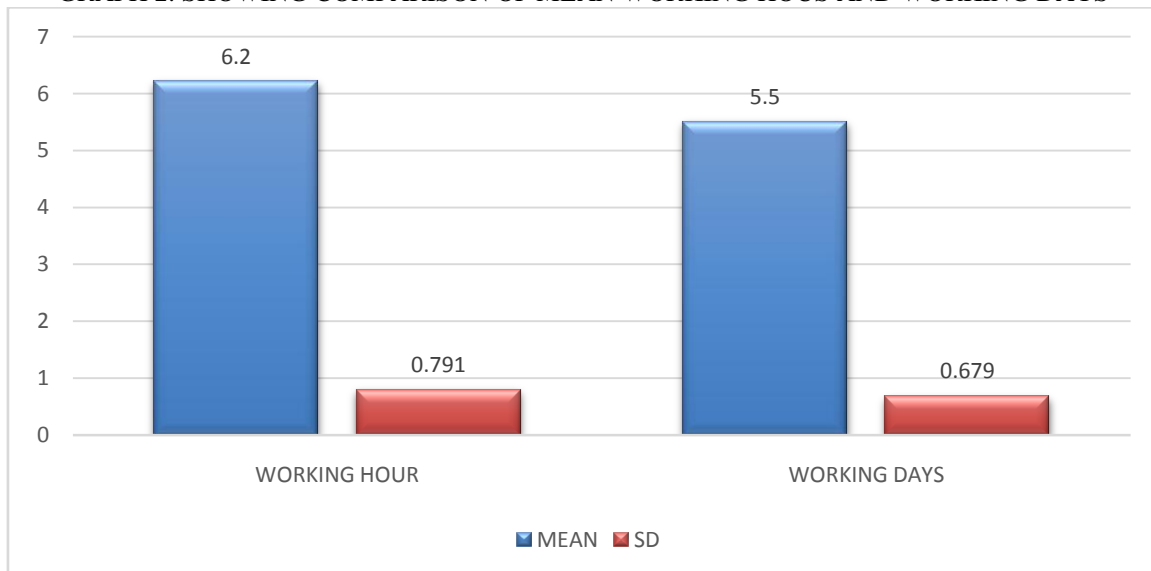
TABLE NO. 4: NECK PAIN AND DISABILITY SCALE SCORE (PAIRED T TEST)

| Neck Pain and Disability Scale Score | | | | |
|---|-----|-------|----------------|-----------------|
| | N | Mean | Std. Deviation | Std. Error Mean |
| SCORE | 120 | 77.47 | 20.475 | 3.237 |

GRAPH 1: DEMOGRAPHIC DESCRIPTIVE STATISTICS



GRAPH 2: SHOWING COMPARISON OF MEAN WORKING HOUS AND WORKING DAYS



IV. DISCUSSION

This study aimed at studying Neck pain in workers carrying weight. This study was designed to see whether there is any Neck pain in workers carrying weight. The results revealed that there is indeed neck pain in the workers carrying heavyweight (77.47 ± 20.475). The correlation between Age and Pain score is (.291) which shows a positive correlation meaning as the age increases the pain also increase. The results of the study cited above are comparable to those of Tariq Umar et al. The majority of the workers were overweight or obese, according to the findings. 43.3 percent of the participants had blood pressure levels that were higher than the recommended level, indicating hypertension. In the last three months, 46.6 percent of workers reported experiencing body pain, with the neck, shoulders, low back, legs, and knees being the most commonly reported areas of pain. One of the factors that led to workers experiencing pain was their sleeping patterns.

V. CONCLUSION

As a result of this study, we may conclude that workers who carry weight in their daily employment experience severe neck pain. The age is also linked to the pain.

FUTURE SCOPE

Further researches can be done with a properly structured exercise program.

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