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Prevalence of Occupational Health Disorders in Auto Rikshaw Drivers -Meerut City - A Cross Sectional Study

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Abstract

Purpose : To find out the prevalence of occupational disorder in auto -rickshaw drivers.

Participants and Methods: A total number of 150 Participants (auto rickshaw drivers) were included in the study.The questionnaire was explained to them in their native language. All the components of questionnaire were explained to the participants. A consent form was been filled by all the participants..All the information like name, age, gender , and the sort of problems they were suffering were noted.

In this questionnaire the following questions are: Have you at any time had numbness, tingling or dullness in the fingers, palms or feet?

(1) Yes (2) No

Have you at any time had pain in any part of your body?

(1)Yes (2) No

How long does the pain continue?

(1) A long time (2) about one week

(2) about one day (4) about half a day

Result: We use Nordic questionnaire there are total 8 questions which has been use to represent the prevalence of Musculoskeletal disorder in various body parts. We have seen the maximum problem in their Eyes (32%) followed by Lower back pain (15.33%).

Conclusion:. In conclusion, we found in this present study the most common problem was Eyes problems than followed by Back pain problems. The longer the years of driving experience the greater the chances of developing musculoskeletal pain**.** A large number of Auto Rickshaw drivers with musculoskeletal pain are using alternative therapies and self prescribe drugs.

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Introduction

Auto rickshaw driving involve prolonged sitting in a fixed posture also exposes the drivers to a number of harmful element such as vibration , noise , glare and which over the period of time may lead to one or more

of occupational disorder .1

Driving as a task involves prolonged sitting, a fixed posture and vibration, any of which could directly lead to musculoskeletal trouble. Drivers sit while driving, but more importantly have to sit for long hours while waiting for fares. Sitting in the driving position exerts considerable forces on the spine and can cause a number of problems with the musculoskeletal system especially, backaches, neck problems, pulled muscles, and general stiffness[2].

It is also observed that transport related sitting is one of the domain of sedentary behavior that has been linked to increased risk of chronic disease[3] .

Further harmful lifestyle is practiced like irregularity of meals, no proper restrooms, bad posture while driving and stressful occupational conditions are found to be associated with many gastrointestinal, respiratory, musculoskeletal, cardiovascular and increase probability of disability or illness like hearing impairment and lowering efficacy of ocular system [4].

Sitting in driving position exerts considerable force on spine and can cause number of problems with skeletal system, in particular, back pain, headache, stress and general stiffness. The incidence of smoking, drinking is also higher among auto rickshaw drivers which poses risk to non-communicable diseases[5].

Physical risk factors such as high forces, high repetition ,working with arms overhead long term static posture , local contact forces and vibration have been commonly identified[6] .

Work- related Musculoskeletal disorders can affect almost all parts of the body especially the back, neck, and upper limbs, depending upon the physical movement characteristics and the ergonomics and mechanical design of work task.[7]

The factor that contribute to the pain may include prolonged sitting, poor postures, exposure to whole-body vibration, long driving time, heavy lifting, manual materials handlings, poor diet.[8]

Drivers are exposed ergonomic and mechanical design of work tasks.[9]The prevalence of Musculoskeletal pain may has also been reported to be high among occupational drivers in developing countries such as India.[10]

It has been suggested that the people have varying perceptions about their Musculoskeletal problem and perceptions about illness may influence health outcomes such as pain and disability directly or indirectly by their effect on coping.[11]

If a person consider that Musculoskeletal problem is a serious disease that medical care or the health services can do little about this belief may have an impact on the level of interference in daily life from that disease that the person report on their decision to consult or seek treatment.[12]

Work related musculo- skeletal disorders affect workers in many occupations including drivers of large vehicles.[13]

Professional drivers have been found to be at high risk of developing Low back pain due to prolong sitting and vehicle vibration.[14] Psychosocial stress can cause muscle tension mechanical strain of spinal cord and fatigue all of which could lead to traumatic injury. [15]

It is also observed that transport related sitting is one domain of sedentary behavior that has been linked to increased risk of chronic disease. [16]

Material and Methods

Design of study-survey questionnaire

Sample size- There were total 150 Male participants were included in the study.

Source of Data- Begumpul Auto Stand, Cantt Station,

-Daurala Auto Stand.

The research work has been approved by the research committee of college of applied education and health sciences. A total number of 150 auto rickshaw drivers were included .The questionnaire was explained to them in their native language. All the components of questionnaire were explained to the participants. A consent form was been filled by all the participants.

1.All the information like name, age, gender , and the sort of problems they were suffering were noted.

2.In this questionnaire the following questions are : Have you at any time had numbness, tingling or dullness in the fingers, palms or feet?

(2) Yes (2) No

3.Have you at any time had pain in any part of your body?

(1)Yes (2) No

4.How long does the pain continue?

1)A long time (2) about one week

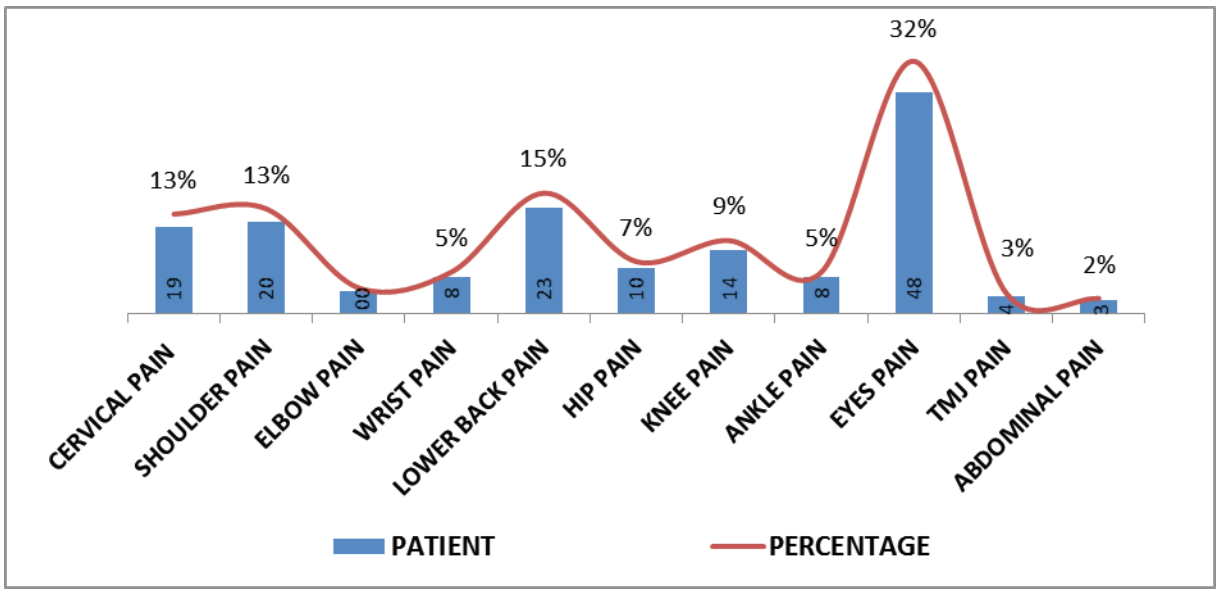
(3) about one day (4) about half a day

Result:

In this study we use Nordic questionnaire there are 8 question which has been use to

represent the prevalence of Musculoskeletal disorder in various body parts.

In this (Bar graph-1) we have seen the maximum problem in their Eyes - 32% followed by 65 Musculoskeletal problem is Lower back pain i.e 15.33%.



Graph 1: Depicts site of injury and percentage

Discussion

The study was aimed at determining the prevalence of occupational disorders among Auto

Rickshaw drivers in Meerut city. In this study, Eye pain was the most common site of musculoskeletal problem, occurring in . 32% of the driver followed by low back pain occurring in 14%.

The condition of the vehicles and roads on which the auto rickshaw drivers in the present study normally drive are probably worse than those in previous studies.

Generally, roads and vehicles in Meerut city are poorly maintained and road worthiness test for vehicles are generally not enforced.

The focus of this study was not to estimate the level of education of drivers, the drivers in this study had low level of education and might explained their health seeking behavior.

Those drivers who did not take medical treatment and felt discomforts in their Eyes, back, hands, fingers, knees, ankles.

Most of the drivers believed that their pain was caused by driving and prolong sitting.

On the basis of the obtained data, this observation calls for health education or enlightenment 80 programme among Auto Rickshaw drivers so that they can be better informed about the cause and prevention of musculoskeletal pain and there by prevent the prevalence and the consequent disabilities.

Conclusion

In conclusion, we found in our present study the most common problem was Eyes problems 84 than followed by Back pain problems.

The longer the years of driving experience the greater the chances of developing musculoskeletal pain**.**

A large number of Auto Rickshaw drivers with musculoskeletal pain are using alternative therapies and self prescribe drugs. There is need to organize enlightenment programmes for drivers on how to avoid or probably reduce the risk factors of musculoskeletal pain Hence there is need for creating awareness regarding Health promotion, balance diet ,stress 91 management and counseling and regular medical checkup.

Health insurance for all the Auto-Rickshaw drivers need to be looked into and implemented 93 by regional transport office. The health of drivers is an important issue in public health,

Occupational health, and transport policy and employment conditions. There has not been a

Concerted assault on those factors that cause poor health and this is an area of neglect that needs urgent attention.

6. Disclosure -

· **Ethical approval -** The research work is approved by ethical committee of College of Applied Education and Health Sciences, Meerut.

· **Source of Funding -** There is no source of funding

· **Conflict of Interest –** There is no conflict of interest

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