

**Correlation Between Bad Habbits And Health Status: A Study Of Auto Rickshaw Drivers  
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**Abstract:** The World Health Organization estimates occupational health risks is one of the leading cause of morbidity and mortality. Many drivers spend most of their daily life on the road. This means they get to see more of the world and enjoy a rewarding career. It also means that they spend a large portion of our lives in a seated position with minimal movement. This makes it difficult to keep their health in good order. The job of the auto driver involves high stress which causes innumerable diseases. He has to deal with other errant drivers on the road. The process of maneuvering the school bus through traffic jams and road accidents is extremely stressful. Drivers have to drive the auto safely through the busiest streets in the cities through peak hour. Drivers reported substantial prevalence of sinus problems, back pain, migraine headaches, and hypertension. Drivers ignored symptoms or self-medicated when working, more than 40% expressed dissatisfaction with health care while "on the road."

Keywords: Auto-rickshaw, Health status, Occupational Hazards,

**Introduction:**

Health has always been closely linked with occupation. Sound health in relation to vocation and employment is the most important aspect of the very life of an individual who works and to the society as a whole. Occupational hazards natural in the work environment have become more prominent in the post-industrial societies. These include a wide range of health problems ranging from asthma, heart attack, high blood pressure, stress and other psychological disorders, with many more to list. Occupational health is therefore, an aspect seeking attention at the individual, group and community levels. Occupational diseases usually develop over an extended period of time. They are slow and generally cumulative in their effects, and often become complicated by non-occupational factors. They result due to constant exposure to certain process, contaminations and stress producing elements. Long term exposure to whole-body vibration and impact while driving over bumps in the roads and rough road surfaces can result in musculoskeletal problems. Long hours behind the wheel for any owner/operator can often lead to several health issues. Some of these health issues can be prevented before becoming serious. Extended periods of sitting and poor eating habits are often the cause of such ailments. Paying

close attention to symptoms is extremely important when trying to prevent health issues. Staying educated can also help recognize symptoms and what measures can be taken to avoid them. As the quality of sleep worsens, the person tends to gain weight. This sort of weight gain not based on diet but on stress tends to make such people prone to developing high blood pressure, obesity and heart disease. Sitting for a long period of time can lead to several health concerns, including obesity and metabolic problems. The gradual increase in traffic and competitiveness of the transport sector has increased the stress that professional drivers have to deal with on a daily basis over the last few decades. Traffic pollution adds other health concerns to an occupation that is sedentary and generally bad for health. As drivers are often on the coal face of dealing with customers, there is added stress caused by unrealistic schedules causing lateness for buses and truck deliveries creating anguish and conflict with customers. The report found that drivers are prone to increased blood pressure and higher levels of stress hormones -- factors that contribute to sickness and death from heart and blood vessel problems. Drivers are exposed to whole-body vibration, diesel exhaust, and noise while keeping them in a combat-like state of vigilance in order to deal with threatening passengers and crazy motorists. Increased blood pressure, high blood sugar, excess body fat in the abdomen, and spiking cholesterol levels should also be considered. These health issues may increase the risk of death from cardiovascular disease and cancer. Symptoms as simple as a headache can be an early sign of an underlying health concern.

### **Objectives of the Study**

Nevertheless, the unambiguous objectives of the present study are

1. Aims to analyze the relationship between habits and health status of auto drivers in Madurai north, Tamilnadu .

### **Methodology of study**

The present study, primary data 150 samples were randomly collected from Madurai north district through questionnaire method. Percentage analysis and chi-square test were used through SPSS for analytical purpose.

### **Review of Literature**

Magnusson et al (1996)<sup>1</sup> reported 60.0% prevalence of LBP for the group of American and Swedish bus drivers, which required on average, 18 days of sick leave period. Compared to a complementary group of truck and sedentary workers, the bus drivers experienced far more mild episodes of back pain than non drivers.

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<sup>1</sup>Magnusson, ML, Pope, MH, Wilder, DG & Areskoug, B 1996, 'Are occupational drivers at an increased risk for developing musculoskeletal disorders?', Spine, vol. 21, no. 6, pp. 710-717.

Krause et al (1997)<sup>2</sup> carried out a cross-sectional study of 1449 urban transit workers. Drivers in the highest category for self-reported ergonomic risk factors had a four-fold increased risk of developing back/neck pain. The contribution was highly significant as the odds ratio associated with greater than 10 years of driving exposure was reduced to 2.55 from 3.43 when ergonomic risk factors were included in the multivariate analysis.

Kumar et al (2001)<sup>3</sup> evaluated the effect of whole-body vibrations on degenerative changes in the spine of 50 tractor-driving farmers by comparing them with a control group of 50 non-tractor-driving farmers matched for age, sex, ethnic group, land holding and work routine. All participants were interviewed in detail for occurrence of low back pain, examined clinically and a magnetic resonance image (MRI) of the lumbar spine region was obtained. Evaluation of data revealed that the tractor-driving farmers complain of backache more often than non-tractor-driving farmers but there was no significant objective difference in clinical or magnetic resonance imaging between the two groups.

Bovenzi & colleagues (2002)<sup>4</sup> examined the association between low back disorders, WBV exposure and perceived postural load amongst straddle carrier drivers, fork-lift operators, crane operators and a control group of port maintenance workers. These authors reported a significantly higher 29 12-month prevalence rate of low back symptoms among fork-lift operators who had the highest WBV exposure level and postural loading stress, when compared to a non-exposed control group.

#### **Common health issues auto drivers are facing there are:**

- Obesity and stress, which can lead to high blood pressure and diabetes.
- Poorly designed work spaces (truck cabs) which can cause back and neck injuries.
- Highest rate of musculoskeletal injuries among U.S. workers, often from loading/unloading.
- Exposure to hazardous chemicals.
- Work atmosphere laced with diesel fumes which can cause chronic lung problems.
- Smoking which can cause cancer and chronic lung problems.
- High number of fatal injuries, 2/3 caused by highway accidents.
- Extreme fatigue, 1/3 of trucker accidents caused by dozing at the wheel.
- Dependence on stimulants to stay awake.
- Depression and loneliness from isolation on the job.
- Sleep Apnea

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<sup>2</sup>Krause, N, Ragland, D, Greiner, B, Fisher, J, Holman, B & Selvin, S 1997, 'Physical workload and ergonomic factors associated with prevalence of back and neck pain in urban transit operators', *Spine*, vol. 22, pp. 2117-2126.

<sup>3</sup>Kumar, A, Mahajan, P, Mohan, D & Mathew Varghese, M 2001, 'Information Technology and the Human Interface: Tractor Vibration Severity and Driver Health: a Study from Rural India', *Journal of Agricultural Engineering Research*, vol. 80, pp. 313-328.

<sup>4</sup>Bovenzi, M, Pinto, I & Stacchini, N 2002, 'Low back pain in port machinery operators', *Journal of Sound and Vibration*, vol. 253, no. 1, pp. 3-20.

As mentioned before, bad habits can lead to health issues in very subtle ways. Poor personal hygiene, not getting enough exercise, smoking, improper food choices, and even skipping meals altogether are just a few. Be aware of these behaviors and take steps to avoid them if possible. Habits can be hard to break but, in the face of serious health problems, finding the willpower to do so is important. Use every resource available to find ways change them.

### **Steps to maintain good health**

#### **1. Fundamental safety measures.**

When we think about auto driver health, the first thing that often comes to mind is the sedentary lifestyle and what can be done to promote regular exercise and a healthy diet. Although this is important to address, there are several other safety measures that take priority. First and foremost, all truck drivers and their passengers should wear seat belts when driving. Wearing a seat belt can reduce the risk of death by 80 percent in the case of a serious accident. Drivers should make sure that all of their commercial vehicles are routinely inspected to ensure that vehicles are in proper working order and that all safety related equipment is in optimal condition. Regular truck maintenance can reduce noise, which can protect drivers from work-related hearing loss. It also can reduce excessive vibration that, in some cases, can cause osteoarthritis and chronic back problems with long-term exposure.

#### **2. Prohibit cell phone use while driving.**

With the increasing use of cellphones, distracted driving has become a growing problem in the Tamilnadu. Auto rickshaw association has taken steps to limit cellphone use among drivers. Some employers have even banned the use of all electronic devices while driving. Drivers should be encouraged to pull over and stop if they plan to use a cellphone or other hand-held device. Distracted driving is a major cause of serious accidents, and truck drivers should also be on the lookout for drivers around them who may be driving distracted.

#### **3. Stay awake.**

In addition to distracted driving, another major threat to driver safety is drowsy-driving. Risk factors for falling asleep at the wheel include not getting enough sleep every night, shift work with an irregular sleep schedule, an undiagnosed sleep disorder such as sleep apnea, and the use of medications that cause drowsiness. Drivers should actively take steps to make sure a regular sleep schedule and are getting adequate sleep. Flexibility should be built into drivers' schedules to allow for breaks when they feel tired. Drivers also should be given sufficient time to meet deadlines and actively encouraged to pull over when they are tired.

#### **4. Consider important preventive screenings.**

Sleep apnea, a common cause of drowsy driving, has been a major topic of discussion in recent years. Drivers with sleep apnea are known to have increased accident rates compared to drivers without sleep apnea. Major risk factors for sleep apnea include obesity, high blood pressure, having a large neck circumference and daytime sleepiness. The diagnosis of sleep apnea usually is confirmed with an overnight sleep study. In many cases, testing can be performed in a patient's own home without the need to go to the hospital. When drivers with

sleep apnea are adequately treated, it reduces daytime sleepiness, and improves overall concentration and awareness. It also can reduce blood pressure and decrease a driver's overall risk of having a heart attack or stroke. Many employers are starting to offer routine sleep apnea screening for their employees to help reduce accident risk and improve overall worker health.

#### **5. Encourage a healthy lifestyle.**

When on the road for long periods of time it can be challenging to exercise regularly and eat a healthy diet. Drivers should strive for at least 150 minutes of moderate exercise activity, such as brisk walking, each week. Exercise schedules often can be planned before a driver sets off on a trip. Preplanning and sticking to a routine can help improve compliance with regular physical activity recommendations. Employers may consider instituting programs in which they monitor how many steps their drivers are taking each day using electronic devices, such as cellphones and electronic fitness trackers. Regular exercise and a healthy diet not only decrease the risk of heart disease, diabetes, cancer and other health issues; it also improves concentration and awareness on the road, and can reduce chances of motor vehicle collisions.

#### **6. Dismiss tobacco use.**

For those who use tobacco products, smoking cessation is the single most important thing one can do to improve overall health and well-being. Employers should strongly encourage smoking cessation among their drivers. This may include offering incentives and rewards, as well as providing low-cost access to smoking cessation programs and medical providers. Quitting smoking is a difficult undertaking, and the chances for long-term success have been shown to be substantially improved with medical help and supportive services.

#### **7. Be alert.**

Although auto drivers are required to obtain medical clearance to drive at a minimum of every two years, drivers still should remain vigilant in monitoring their health. If an driver has unexpectedly been out of work for an extended period of time, this could be a sign that a driver may have a significant underlying medical problem. Drivers should identify and address specific health needs and concerns as they arise. There are many hazards on our roadways, and it's important to remember that the biggest threats to health and safety are still some of the most obvious and well-known hazards. It's important not to underestimate the importance of the basics, such as wearing a seatbelt and quitting smoking. Tackling these key issues will improve the health and safety of drivers, and the community as a whole.

## **Result and Discussion**

### **Age of the Share-auto drivers**

Age of the respondents is one of the essential factors to study the health status of share auto drivers.

**Table 1: Age wise classification of the respondents**

| S. No | Age            | No. of respondents | Percentage |
|-------|----------------|--------------------|------------|
| 1     | Below 20 years | 1                  | .7         |
| 2     | 20-30 years    | 59                 | 39.3       |
| 3     | 30-40 years    | 74                 | 49.3       |
| 4     | Above 40 years | 16                 | 10.7       |
|       | Total          | 150                | 100.0      |

*Source: Primary data*

Table 1 shows the age wise classification of respondents in the study area. It is infer that majority 49.3 percent of the respondents are belongs to the age group 30-40 years, 39.3 per cent of the respondents belongs to the category of 20-30 years, 10.7 per cent of Share-auto driver's age is above 40, and a very low 0.7 per cent of the respondents belongs to the below 20 years in the study area.

### **Health problems of Share-auto driver's in the study area**

The following table shows that health problems of the sample respondents in the study area.

**Table 2: Health problems of the respondents**

| S. No | Health problems    | Yes       | No         | Total respondents | Total Percentage |
|-------|--------------------|-----------|------------|-------------------|------------------|
| 1     | Back Pains         | 120 (80)  | 30 (20)    | 150               | 100              |
| 2     | Headaches          | 96 (64)   | 54 (36)    | 150               | 100              |
| 3     | Hypertension       | 128(85.3) | 22 (14.7)  | 150               | 100              |
| 4     | Restless Sleep     | 22 (14.7) | 128 (85.3) | 150               | 100              |
| 5     | Digestive Troubles | 8 (5.3)   | 142 (94.7) | 150               | 100              |
| 6     | Obesity            | 6(0)      | 150 (100)  | 150               | 100              |

*Note : Figures in the parentheses are percentage*

*Source: Primary Data*

Table 2 Clearly implies that majority of the sample respondents 128 (85.3per cent) health problems is Hypertension and 120 sample respondents (80 Per cent) health problems is Back pains in the study area. And also 96 sample respondents (64Per cent) health problems is Headaches. And only 22 sample respondents (14.7per cent) health problems is Restless sleep, remaining 8 sample respondents (5.3 per cent) health problems is Digestive troubles in the study area.

### Influence of bad habits on the health status

The share auto drivers were asked that there are maintain some bad habits like smoking, consuming alcohol, chewing tobacco and consume panprack

The following table shows the influence of bad habits on the health status of the sample respondents in the study area.

**Table 3: Influence of bad habits on the health status**

| No. of. Bad habits | Health status of the respondents |      |      | Total |
|--------------------|----------------------------------|------|------|-------|
|                    | Good                             | Fair | Poor |       |
| One habit          | 0                                | 3    | 0    | 3     |
| Two habits         | 13                               | 89   | 0    | 102   |
| Three habits       | 4                                | 24   | 2    | 30    |
| Four habits        | 1                                | 11   | 3    | 15    |
| Total              | 18                               | 127  | 5    | 150   |

The above table 3 shows the influence of bad habits on the health status of the share auto drivers in the study area. It is observed that 3 sample respondents having only one bad habit and their health status is fair. 102 sample respondents having two bad habits among them 13 are in good health status and the health status is fair for 89 respondents. 30 sample respondents having three bad habits in which 4, 24 and 2 are in good, fair and poor health status respectively. 15 respondents i.e. 10 percentage of the share auto drivers having all the four habits among them 1, 11 and 3 are in good, fair and poor health status respectively.

### Testing of hypothesis

1. **Hypothesis:** There is no association between health status and number of bad habits of the share-auto drivers

In order to study the relationship between health status and number of bad habits of the sample respondents the chi-square test was used

The formula used was

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

where

O- refers to the observed frequencies

E- refers to the expected frequencies

To determine the value of  $\chi^2$  the steps required are:

$$E = \frac{RT \times CT}{N}$$

E- Expected frequency

RT- The row total for the row containing the cell

CT- The column total for the column containing the cell

N- The total number of observation

### Estimated results

|                    | Value  | df | Asymp. Sig. (2-sided) |
|--------------------|--------|----|-----------------------|
| Pearson Chi-Square | 43.087 | 6  | .000*                 |
| Likelihood Ratio   | 16.856 | 6  | .010                  |
| N of Valid Cases   | 150    |    |                       |

\*significant at 5% level.

The estimated results show that the value of Chi-square is 43.078, which is significant at 5 per cent level. Therefore the null hypothesis is rejected. i.e., there is a significant relationship between health status and number of bad habits of the share-auto drivers.

### Conclusion

The job of the auto driver involves high stress which causes innumerable diseases. He has to deal with other errant drivers on the road. Drivers have to drive the auto safely through the busiest streets in the cities through peak hour. Health has always been closely linked with occupation. Occupational hazards natural in the work environment have become more prominent in the post-industrial societies. These include a wide range of health problems ranging from asthma, heart attack, high blood pressure, stress and other psychological disorders, with many more to list. Occupational health is therefore, an aspect seeking attention at the individual, group and community levels. Occupational diseases usually develop over an extended period of time. Long term exposure to whole-body vibration and impact while driving over bumps in the roads and rough road surfaces can result in musculoskeletal problems. Paying close attention to symptoms is extremely important when trying to prevent health issues. Staying educated can also help recognize symptoms and what measures can be taken to avoid them. Auto drivers did not concern about their health its leads to their health worst. And many of the auto drivers skip their main meals, poor diet and improper exercise its adversely affect their health even though the main reason for their health problem is consuming alcohol, smoking, panprack. The drivers using these harmful goods for reduce their stress its leads to worst health and finally death. The government should make awareness about health of the drivers through NSS students and volunteers.