**Research Article** 

# HEALTH PROBLEMS IN HEAVY VEHICLES DRIVERS IN FAR WESTERN NEPAL

## <sup>\*</sup>Lal Bahadur Kunwar<sup>1</sup>, Bir Bahadur Kunwar<sup>2</sup>, Poshan Thapa<sup>1</sup>, Hari Prasad Kaphle<sup>1</sup>, Prakash chandra Lekhak<sup>3</sup>

<sup>1</sup>Pokhara University, School of Health and Allied Sciences, Department of Public health <sup>2</sup> Health post in-charge in Dankota Health Post Doti <sup>3</sup> Regional Tuberculosis Coordination officer Nepal TB Center Thimi Bhakatapur \*Author for Correspondence

#### ABSTRACT

The health of drivers is an important issue in public health, fatigue and musculoskeletal problems are not the only major problems they also face lot of physical and mental health problems. Although there have been lot of studies done in developed countries but in developing countries it's not a concern subject matter so still few studies has done. This descriptive study was carried out during the month of February and March in Far Western region Nepal. Drivers who were in this profession from more than five years were taken as respondents. In the study, data was collected using the pre-structured interview schedule. The study found that maximum (55.09%) of respondents had been suffering from common cold, 35.01 percent from Gastritis, 4.17 percent from Diabetes and 31 percent of respondents had been suffering from musculo-skeletal problems. Psychological problem like fatigue was observed in maximum (55.09%) of the respondents. It was found that 11 .5 per cent of the respondents were suffering from hearing loss due to day by day increasing noise pollution and 29.16% of them started using power optical glass after they got involved in driving. It was founded that majority (77.31%) of the respondents were not aware about the routine health check-ups, they only visited when they were suffering from any major problem which was not neglect able and minimum 1.85% of them were having their routine health check up monthly or bi-annually. Many health problems are present in the heavy vehicles drivers although they know about the cause of problem but majority of drivers do not take precaution for prevention. It is neglected sector, it need urgent attention from government, and NGO/INGO.

#### Keywords: Driver, Physical Health Problems, Psychological Health Problems, Physical Injuries

### INTRODUCTION

A worker who drives heavy vehicle with the capacity of more than 3 tons, to transport materials from specified destinations. Heavy vehicles Drivers are at increased risk of road accidents due to lengthy driving periods, especially at night, under bad weather and road conditions. They may get injured while doing field repairs, changing tires, climbing and descending from a high truck, etc. They may suffer from back, legs, arms and hands pains, caused by uncomfortable seating for long times and vehicle vibrations. They may also be targets of crime aimed at a valuable load, etc. Another problem now days appearing in drivers HIV/AIDS & STI, due to the long time staying out of their family and day by day increasing prostitution in road side hotel and motel, unknown and unavailability of condom. Lack of knowledge towards transmission of HIV/AIDS & STI therefore they increase risk.

Far Western Nepal Scenario shows that due to bad road conditions and wider of road is comparatively not sufficient for passing two heavy vehicles therefore chance of road traffic accident is high. Cause of bad road conditions, easily available of alcohol, and drive in night are responsible for crash the heavy vehicles. Annually many drivers lost their life, and become a handicraft due to accidents. Continuous and lack of adopt safety measures drivers are suffering from muscular skeleton problem.

Heavy vehicles drivers are suffer from many types of accidental problems: Overturning of heavily loaded truck due to mechanical failure, difficult road conditions and/or excessive speed, head-on collisions, etc. with resulting life-threatening trapping of driver inside cabin or under the truck. There is also chance of injuries while performing various functions of a heavy truck driver (e.g., field repair-work, tire change,

### **Research Article**

unfastening tight bands and ropes, etc.). They can also suffer from traumas, such as hernia rupture, due to physical overexertion (changing tires, moving heavy pieces of cargo, fastening ropes, etc.). There is increased risk of road accidents due to lengthy driving periods (esp. for long-haul truck drivers), at night, under bad weather and road conditions, and through traffic jams (risk is increased by fatigue due to long driving hours, short rest periods, drowsiness, hunger and thirst, use of alcohol, explosion of over-inflated tires driving at high speeds due to the bonus wages system)

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.

#### MATERIALS AND METHODS

The study was designed as a descriptive cross - sectional study. The study was carried from, February to July 2012 by researcher. The Study was done in Far Western region where Heavy Vehicle driver (Truck who carries more than 3 tones, Bus who have more than 15 seats, Tanker who carry fuel more than 10,000 liters, were taken as respondent. 216 sample size was determine through this formula  $n=z^2pq/e^2$ , (where Prevalence of lose motion in driver 16.41)

Far western region was selected purposively. All heavy vehicle drivers from Dhangadhi Bus station and Attariya Chauraha station are included in the study. These are the main station of Far Western, thousand of heavy vehicle are standing therefore it was easier to collect sample of as required for study. First come first interviewed method was applied till the required sample was met. Data were collected by visiting Bus station and Attariya Chauraha using structured interview schedule and face to face interview was conducted by researcher.

#### Inclusion Criteria

• Driver more than five years in this profession were considered as respondents.

#### Exclusion Criteria

• Driver involved less than five year in this profession and unable to speak.

### **RESULTS AND DISCUSSION**

Table 1: Type of vehicle		N=216	
Type of vehicle	Frequency	Percentage	
Bus	91	42.19	
Truck	83	38.42	
Tanker	42	19.44	
Total	216	100	

The majority (42.19%) of the drivers were driving Bus while 19.44% of drivers were driving Tanker, the table above shows.

#### Table 2: Routine of Health check up

Tuble 2. Routine of freutin check up			
Health check up	Frequency	Percentage	
Monthly	5	2.31	
Quarterly	17	7.87	
Bi-annually	4	1.85	
Annually	0	0	
Others (when necessary)	167	77.31	
No	23	10.64	
Total	216	100	

The table above shows that the majority majority (77.31%) of the respondents were not aware about the routine health check-ups, they only visited when they were suffering from any major problem which was

#### **Research Article**

not neglect able and minimum 1.85% of them were having their routine health check up monthly or biannually. Lack of knowledge and importance of regular health check, busy schedule, unavailability of health facilities when required.

Problems frequency Percentage			
	1 1	0	
Common cold	119	55.09	
Muscular-skeletal problems	67	31.01	
Gastritis	75	34.72	
Hypertension	23	10.64	
Typhoid	7	3.24	
Diarrhea	16	7.40	
Ulcer	3	1.38	
Diabetes	9	4.16	
Asthma	13	6.01	
Fever	10	4.62	
Eye problems	5	2.31	
Oral problems	0	0.00	
Surgical cases	7	3.24	
Others	23	10.64	

Table 3: Common physical health problem in this profession since last one year

#### Multiple Responses

The above table shows the major cause of health problems in heavy drivers was dusty air, lot of smoke from traffic, irregular food habit, personal hygiene, communicate with the passengers who are suffering from communicable diseases and prolong sitting posture in same position were the main responsible factors for these health problems. Some common health problems were observed in respondents maximum (55.09%) were having common cold, 35.01% had Gastritis problem, 4.17% of drivers had Diabetes and 31% of respondents were suffering from musculo-skeletal problems due to prolong sitting

Table 4: Most common psychological problems			
Problems	Frequency	Percentage	
Fatigue	119	55.09	
Sleeping Problems	54	25.00	
Tension Don't know	43	19.90	

# . .

### Multiple Responses

Mental overload

others

Tension

The above table shows the psychological problems of respondents. The majority (55.09%) of the respondents had problem of fatigue.

5.09

7.87

2.31

Tuble of fleating problems of respondent at the time of auta concertoin			
Health Problems	Frequency	Percentage	
Diabetes	9	4.16	
Hypertension	23	10.64	
Common cold	47	21.75	
Gastritis	35	16.20	
Headache	17	7.87	
Back pain	35	16.20	
No problem	117	54.16	

Table 5: Health problems of respondent at the time of data collection.

11

17

5

© Copyright 2014 / Centre for Info Bio Technology (CIBTech)

## **Research** Article

#### Multiple Responses

The above table shows health problems of respondents during the study. Most (54.16%) of respondents had no health problems. 21.75 percent were suffering from common cold. 4.17 percent of drivers had problem of Diabetes.

Type of Injuries	Frequency	Percentage	
Hand fracture	3	1.38	
Cut	11	5.09	
Head	7	3.24	
Others	19	8.79	
No injuries	193	89.31	

Table 6: Physical	<b>Injuries</b> rela	ated to RTA	Multiple responses

As mentioned in the above table, most (89.31%) of the respondents had no physical injuries due to RTA. Cut, head and hand fracture is very less in 5.09 percent, 3.24 percent and 1.38 percent of respondents respectively.

#### **Conclusions**

It was concluded that the majority of the respondents drive bus (42%) followed by truck (38%) and tanker (20%). It was surprising to note that more than 77% only went for check up when they fall sick only few respondents were used to go check up in routine. This study even revealed that in physical health problems common cold was maximum (55%), Gastritis (35%) and muscular skeletal pain (31%) were respectively highly and even psychological problems like fatigue (55.09%) were found in heavy vehicle drivers'.

The major cause for these problems was dusty air, lot of smoke from traffic, irregular food habit, lack of personal hygiene, communicating with the passengers who were suffering from communicable diseases and even prolonged sitting in same posture were some of the main responsible factors for these health problems

### ACKNOWLEDGEMENT

I would be grateful to acknowledge the all people who directly and indirectly helped me to complete this study. Especially I would like to thank the driver for participation in the research.

#### REFERENCES

Hartvig P and Midttun O (No Date). Coronary heart disease risk factors in bus and truck drivers A controlled cohort study. *International Archives of Occupational and Environmental Health* **52**(4) 353-360.

Koda S, Yasuda N, Sugihara Y, Ohara H, Udo H, Otani T, Hisashige A, Ogawa T and Aoyama H (2000). Analyses of Work-Relatedness of Health Problems among Truck Drivers by Questionnaire Survey [English Abstract]. *Sangyo Eiseigaku Zasshi* **42**(1) 6-16.

Mark E Howard, Anup V Desai, Ronald R Grunstein, Craig Hukins, John G Armstrong, David Joffe, Philip Swann, Donald A Campbell and Robert J Pierce (2004). Sleepiness, Sleep-disordered Breathing, and Accident Risk Factors in Commercial Vehicle Drivers. *American Journal of Respiratory and Critical Care Medicine* 170(9) 1014-1021.

**Robinson CF and Burnett CA (2005).** Truck Drivers and Heart Disease in the United States, 1979-1990. *American Journal of Industrial Medicine* **47**(2) 113-9.

Siedlecka J (2006). Selected work-related health problems in drivers of public transport vehicles. *Medycyna pracy* 57(1) 47-52.

#### **Research Article**

Spielholz P, Cullen J, Smith C, Howard N, Silverstein B and Bonauto D (2008). Assessment of perceived injury risks and priorities among truck drivers and trucking companies in Washington State. *Journal of Safety Research* **39**(6) 569-76.

Stevenson M, Sharwood LN, Wong K, Elkington J, Meuleners L, Ivers RQ, Grunstein RR, Williamson A, Haworth N and Norton R (2010). The heavy vehicle study: a case-control study investigating risk factors for crash in long distance heavy vehicle drivers in Australia. *BMC Public Health* **10**(1) 162.

Winkleby MA, Ragland DR, Fisher JM and Syme SL (1988). Excess risk of sickness and disease in bus drivers: a review and synthesis of epidemiological studies. *International Journal of Epidemiology* 17(2) 255-62.