

Epidemiological Profile of Private Taxi Drivers: A Case Study of Punjab

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Abstract

Objective: To study the lifestyle and epidemiological profile of private taxi drivers under the occupational environment and to study the various health problems faced by taxi drivers under the occupational environment.

Methods: A descriptive study was undertaken on 300 taxi drivers working privately at transportation companies. A structured research schedule was used for data collection using snowball sampling.

Results: Taxi drivers are more exposed to health-related problems due to the sedentary characteristics of their job, such as high work demand, long sitting hours and night shifts, irregular eating habits, and less breaks and sleep. Work on the wheel in a tight schedule and unhealthy environment, as in dust and fumes in hot and cold adversely affect the life of drivers. They don't find time for leisure-time and physical activities which can make them healthy and fit.

Conclusions: Driving occupation is different from other jobs from many aspects as drivers cannot move from their seat on the wheel. They have to follow traffic rules due to which they cannot work according to their will, and they also do not get homemade meals and bed facilities to rest due to which they feel fatigue and stress which invites health problems for them. Therefore, it is recommended that taxi drivers should take care of their health and get check-ups as soon as possible if they experience any physical sickness. Taxi owners should also set schedules while considering the health prospect of taxi drivers.

Implications: Long hours, poor food, and pollution exposure pose health concerns to private taxi drivers. Better work schedules, health examinations, and education on healthy practices are all necessary for them. To promote the health and well-being of drivers, transportation businesses should enhance working conditions.

Keywords: Demographics, Taxi Drivers, Eating Habits, Disorders and Pains

Introduction

The economic and social development of contemporary society is significantly influenced by private taxi drivers. In addition to their broad social role as a form of transportation for people unable to use other forms of public or private transportation, they play a significant role in the daily operations of the business and tourism sectors. Taxi drivers provide service according to the needs and time of their clients. The requirements and schedules of their customers are taken into consideration by taxi drivers. They look after the clients' belongings and the owners' taxis. Work in the heat and the cold, without vacations or breaks, and lead a harsh life. Regretfully, employers, legislators, and researchers all overlook taxi operators. There is a dearth of published studies on the living and working situations, as well as health concerns, of taxi drivers. They are frequently disregarded in contemporary society, despite their universal significance. Studies that have focused on the problems that taxi drivers encounter in their daily living and working environments have not been very systematic. The physiological aspects of driving (Lisper et al., 1972; Corfitsen, 1993), driving simulator studies (Edwards et al., 1977), reaction time studies (Babarik, 1968), and personality studies (Tillman & Hobbs, 1949) are among the specific topics of interest to the researchers. Since the results of these studies on cab drivers greatly advance our general understanding, we are not criticising the work of these reputable academics here. However, more thorough research on private taxi drivers as a distinct group of road users is desperately needed.

Drivers are more vulnerable to a number of health problems because of their work environment, including

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long and erratic workdays, day and night shift work, bad seating and posture, and inadequate and unhealthy meals. Workplace stress caused by drivers' personalities exacerbates the situation and eventually has a detrimental effect on the health of professional drivers (Whitelegg, 1995). The taxi industry is very different from other occupations. The drivers' work hours are erratic, and their remuneration fluctuates daily based on the routes (Dalziel, 1997; Haines, 2002). Since scholars have lately started to employ an integrative strategy to improve workplace health, research on workplace health and safety in non-traditional industries like taxi driving may be vital in promoting health and safety behaviour (Chu, 2002). According to Kumari and Sidhu (2016), Kumari (2025), and Lalita et al. (2025), safety risks, health, ergonomics, work stress, irregular hours, job stability, compensation, and work-life balance are important elements affecting cab drivers' quality of life.

The demographic factors that were used were age, income, and experience. According to Baluja et al. (2018), the physical and mental well-being of taxi drivers

and their routines are influenced by a stressful work environment, personal emotions, and socio-demographic characteristics. All the correlations of taxi drivers in both health and sickness will be examined in this study. The continually stressful work environment, personal habits and emotions, and demographic factors all have an impact on the physical and psychological morbidities of taxi drivers. In order to accomplish this, the author carried out a thorough literature review, the results of which are shown below to illustrate the chronological development and important discoveries from earlier research on the health problems and epidemiological profile of private taxi drivers.

Literature Review

To provide greater clarity and context to the existing body of literature, the author has compiled a table summarizing previous studies that have examined the epidemiological profile and health issues among private taxi drivers. Table 1 presents a chronological review, detailing the study year, location, sample size, objectives, and key findings.

Table 1: Chronological Review of Studies on the Epidemiological Profile and Health Issues of Private Taxi Drivers

<i>Study</i>	<i>Year</i>	<i>Location / Unit</i>	<i>Sample Size</i>	<i>Objective</i>	<i>Key Findings</i>
Bawa & Srivastav	2013	Mumbai, India	508	To study occupational stress, environment, and health of taxi drivers	86% reported morbidity; GI issues, musculoskeletal symptoms, and depression common
Saha et al.	2014	Kolkata, India	200	To investigate psychological and digestive disorders in public vehicle drivers	High incidence of GI and psychological issues linked to poor diet and routine
Shetty et al.	2017	Bengaluru, India	522	To assess morbidity among transport workers and relation to lifestyle	19.5% had GI symptoms; stress and long work hours major contributors
Lee et al.	2018	Seoul, South Korea	310	To examine occupational stress and digestive health	38% reported GI disorders; stress and irregular meals significant
Rathi et al.	2019	New Delhi, India	Not stated	To evaluate mental health (stress/anxiety) in cab drivers	25% had GI disorders; stress and poor work conditions major influences
Wang & Sun	2020	Urban China	400	To explore correlation between work conditions and GI symptoms	Long hours and stress linked with high prevalence of GI symptoms
Mirpuri et al.	2021	New York City, USA	252	To examine stress and lifestyle factors among taxi drivers	Stress linked to sleep disturbances and smoking habits
Ngatcha Tchounga et al.	2022	Yaoundé, Cameroon	Not stated	To assess musculoskeletal disorders among taxi drivers	86.8% reported musculoskeletal disorders; job dissatisfaction significant

Study	Year	Location / Unit	Sample Size	Objective	Key Findings
Patel & Kulkarni	2023	Mahabaleshwar, India	Not stated	To assess work-related musculoskeletal disorders	87% had musculoskeletal disorders; low back pain common; linked to prolonged sitting and posture
Costa et al.	2025	Global (Systematic review)	11 studies	Review mental and physical health issues in taxi drivers	GI disorders co-occurred with stress, poor sleep, depression

Source: Compiled from multiple peer-reviewed studies on the epidemiological profile and occupational health of private taxi drivers conducted between 2013 and 2025.

Literature Gap

The majority of the literature that has been written about the occupational health risks of public vehicle drivers worldwide, including in major cities like Mumbai, Kolkata, Bengaluru, Seoul, and New York, has concentrated on physical and psychological health issues like gastrointestinal (GI) disorders, musculoskeletal pain, and mental health stressors. However, these studies are frequently generalized across urban environments and do not take into account local socio-economic, dietary, and work-cultural variations that influence health outcomes in smaller regions. There is still a significant research gap in region-specific studies, especially in semi-urban and rural contexts like Punjab. Additionally, most of the research that is currently accessible uses data from urban taxi, bus, or taxi drivers with little distinction between public and private operators. The health effects of extended work hours, bad ergonomics, poor food, tobacco use, and lack of sleep on private cab drivers in Indian states like Punjab have not been thoroughly studied. Furthermore, there aren't many thorough studies in the regional context that combine lifestyle and epidemiological profiles, connecting the occupational environment to particular illness trends. Policymakers, transportation authorities, and medical professionals are unable to create evidence-based, successful interventions for this occupational group due to the absence of localized data.

Database and Research Methodology

Objective of the Study

- To study the lifestyle and epidemiological profile of private taxi drivers under the occupational environment.
- To study the various health problems faced by taxi drivers under the occupational environment.

Data Source

Data was collected with the help of research schedule and through observation. Schedule consists of questions related to socio-demographic variables, stressors and physical and mental ill health. Total 300 taxi drivers participated. Snowball sampling techniques were used.

The Inclusion and Exclusion Criteria

Inclusion Criteria

- Drivers of taxis have yellow with a blue strip in the middle and have yellow number plate and registered at the District Transport Office (DTO).
- The taxi drivers must be willing to engage in the study and have at least five years of experience as drivers.

Exclusion Criteria

- Taxi drivers who were not interested in participating in the study.
- Drivers do not work at the taxi stand.

Data Analysis and Findings

Socio-Demographic Profile of the Respondents

Table 2 shows that 26% of respondents are between the ages of 31 and 40, and 24% of respondents are under 30. Furthermore, 22% of taxi drivers are between the ages of 41 and 50, with responders over 50 making up the greatest percentage (28%). Of the 300 taxi drivers in the sample, 42% are Hindus and 52% are Sikhs. The remaining 6% are members of the Muslim and Christian groups. The Scheduled Castes/Scheduled Tribes (SC/ST) make up a substantial number of taxi drivers (46%), followed by the Backwards Classes (BC) category (36%) and the General category (18%). In terms of educational achievement,

16% have studied up to the +2 level, 32% are below matriculation, and the majority (44%) have finished matriculation. Only 2% of respondents are graduates, while 4% have technical diplomas and 2% have finished certificate or diploma programmes. Additionally, the chart

shows that 69.67 percent of cab drivers are married, while 30.33 percent are single. The majority of responders come from comparatively large families: 16% have two or fewer members, 26% have three to four, 30% have five to six, and 28% have more than six.

Table 2: Socio-Demographic Profile of the Respondents

<i>Demographic Characteristics of Respondents</i>	<i>Category</i>	<i>Frequency</i>	<i>Percentage</i>
Age (in yrs)	Up to 30 years	72	24.00
	31-40 years	78	26.00
	41-50	66	22.00
	Above 50Years	84	28.00
	Total	300	100.00
Religion	Hindu	126	42.00
	Muslim	12	4.00
	Sikh	156	52.00
	Christen	6	2.00
	Total	300	100.00
Caste	BC	108	36.00
	SC/ST	138	46.00
	General	54	18.00
	Total	300	100.00
Education	Below metric	96	32.00
	Matric	132	44.00
	+2	48	16.00
	Graduation	6	2.00
	Technical Diploma	12	4.00
	Diploma or Certificate Courses	6	2.00
	Total	300	100.00
Marital Status	Married	209	69.67
	Unmarried	91	30.33
	Total	300	100.00
Family Size	Up to 2 members	48	16.00
	3-4 Members	78	26.00
	5-6 Members	90	30.00
	Above 6 Members	84	28.00
	Total	300	100.00

Source: Primary data.

Job-Related Characteristics of Taxi Drivers

Table 3 displays the respondents' primary job-related traits. According to the analysis, 30% of taxi drivers have more than 20 years of experience, while the majority (34%) have six to ten years. Furthermore, 16% of respondents have 16–

20 years of driving experience, and 20% have 11–15 years. The monthly revenue of taxi drivers was used to further classify them. According to Table 3, 42% of respondents make less than Rs. 3000, while the majority (50%) make between Rs. 3000 and Rs. 5000. Merely 4% of taxi drivers make between Rs. 5000 and Rs. 8000, while only 4% make

more than Rs. 8000. This demonstrates unequivocally that most cab drivers have low incomes. In terms of payment method, 82% of taxi drivers are paid on a monthly basis, compared to 14% who get paid every day and 4% who get paid every week. Another major issue that comes up is working hours. According to Table 3, 32% of taxi drivers

work up to 16 hours a day, with 30% working up to 12 hours. In the meantime, 14% work more than 16 hours a day, and 24% work up to 8 hours. The results show that many taxi drivers are forced to work longer hours in order to supplement their revenue because of their poor earning levels.

Table 3: Job Related Characteristics of Taxi Drivers

<i>Job Related Characteristics of Taxi Drivers</i>	<i>Category</i>	<i>Frequency</i>	<i>Percentage</i>
Job Experience (in years)	6-10 Years	102	34.00
	11-15 Years	60	20.00
	16-20 Years	48	16.00
	Above 20 Years	90	30.00
	Total	300	100.00
Monthly Income	Below Rs.3000	126	42.00
	Rs. 3000- 5000	150	50.00
	Rs. 5000-8000	12	4.00
	Above Rs. 8000	12	4.00
	Total	300	100.00
Mode of Payment	Daily basis	42	14.00
	Weekly Basis	12	4.00
	Monthly basis	246	82.00
	Total	300	100.00
Working Hours	Up to 8 Hours	72	24.00
	Up to 12 hours	90	30.00
	Up to 16 Hours	96	32.00
	Above 16 Hours	42	14.00
	Total	300	100.0
Shift Pattern	Morning	138	46.00
	Night	162	54.00
	Total	300	100.00

Source: Primary data.

Facilities Available at the Taxi Stand

Table 4 presents the data relating to facilities available at taxi stands for taxi drivers. The taxi stand is considered as second home for the taxi drivers. They spend substantial part of their time at the taxi stands. The analysis reveals that only 29.67 per cent and 42.67 per cent taxi drivers had sitting arrangement facilities (shed) and drinking water facilities. Further data analysis reveals that majority (57.33 per cent) of taxi drivers were not satisfied with drinking water facilities, which is a basic requirement. All

the taxi drivers replied that they didn't have facility for rest during free time. Furthermore, there was no electricity connection at most of taxi stands. Respondents replied that other facilities like canteen, rest rooms, first aid, medical facilities and transportation were available only to 25.33 per cent, 00 per cent, 21.33 per cent, 36.33 per cent and 36 per cent taxi drivers respectively. While only 10 per cent of taxi drivers had availability of electrical fans. All the taxi drivers replied that they park their taxis at specific taxi stands and they pay charges for using the space.

Table 4: Facilities Available at Taxi Stand

<i>Facilities Available at Taxi Stand</i>	<i>Yes</i>		<i>No</i>	
	<i>Frequency</i>	<i>Percentage</i>	<i>Frequency</i>	<i>Percentage</i>
Sitting Arrangements (shed)	89	29.67	211	70.33
Platform for Rest	-----	-----	300	100.00
Availability of Drinking Water	128	42.67	172	57.33
Availability of Electricity/Fan	30	10.00	270	90.00
Canteen	76	25.33	224	74.67
Toilet	00	00.00	300.00	100.00
Medical Facility	109	36.33	191	63.67
First Aid	64	21.33	236	78.67
Transportation	108	36.00	192	64.00
Park Taxi on Specific Taxi Stand	300	100.00	00.00	00.00

Source: Primary data.

Eating Habits and Lifestyle of Taxi Driver

Another important factor which generally affects the health of the workers is food habits. Therefore, an attempt has also been made to know the eating habits of the workers who remained on the roads most of the time during their working hours. According to Table 5, the majority of respondents (60 per cent) said they eat snacks, drinks, and refreshments at least twice a day. The majority of participants frequently eat their main course

at restaurants or dhabas. Of those surveyed, 58 per cent said they followed a mixed diet that included both vegan and non-vegan foods. 58 per cent of the respondents expressed dissatisfaction at being compelled to eat junk, greasy, and fried food. The majority of respondents (62 per cent) said they don't always eat at the appropriate time. It has been observed that only 14 per cent of the respondents regularly exercised to keep themselves healthy. The above-mentioned food habits and lifestyle often lead to poor health and repeated sickness among the taxi drivers.

Table 5: Eating Habits and Lifestyle of Taxi Driver

<i>Refreshment Drinking/Snacks During the Day</i>	<i>Frequency</i>	<i>Percentage</i>
≤2	180	60.00
>2	120	40.00
Total	300	100.0
<i>Main Meal from Dhabas/Restaurants</i>	<i>Frequency</i>	<i>Percentage</i>
Regularly	192	64.00
Occasionally/Never	108	36.00
Total	300	100.0
<i>Dietary Habits</i>	<i>Frequency</i>	<i>Percentage</i>
Mixed Diet	174	58.00
Vegetarian	126	42.00
Total	300	100.0
<i>Presence of Oily, Fried Items and Junk Food</i>	<i>Frequency</i>	<i>Percentage</i>
On most of the Days	174	58.00
Occasionally	126	42.00
Total	300	100.0
<i>Regularity in the Timing of Food</i>	<i>Frequency</i>	<i>Percentage</i>
Yes	114	38.00
No	186	62.00
Total	300	100.0

<i>Physical Exercise/Morning Walk/ Evening Walk</i>	<i>Frequency</i>	<i>Percentage</i>
Never	108	36.00
Sometimes	66	22.00
Often	84	28.00
Very Frequently	42	14.00
Total	300	100.0

Source: Primary data.

Problems Faced by the Drivers During Working Hours

The major problems which the drivers faced during their work (emerged from the review of literature) were also listed in the research schedule. The data relating to the problems of the drivers are presented in Table 6. The data analysis shows that majority of respondents used to handle baggage and other heavy materials of the customers very frequently. However, 29.67 per cent reported that they handle such work, often followed by 20.33 per cent sometimes while 6.33 per cent reported that they never faced such situation. Similarly, the respondents were also asked to respond in regard to frequent bending and twisting activities while driving. The statistical analysis reveals that 26.33 per cent replied that sometimes they face this situation. While 59 per cent and 54 per cent of the participants reported that they do bending and twisting activities often and very frequently. Further, drivers were also asked to narrate the situation when they become victim of assault during working hours or experienced any violence. The statistical analysis represented that 44 per cent of the drivers reported that they often become victim of such violence while 30 per cent reported that sometimes they face such kind of situation while 14 per cent reported that they become victim of assault very

frequently while only 12 per cent reported that they had not faced such situation. The respondents were also asked to reply in regard to extreme summer and winter temperatures during which they perform their duties. The analysis reveals that 42 per cent of the respondents replied that they faced extra ordinary weather conditions very frequently followed by 26 per cent often and 24 per cent sometimes. Only 8 per cent replied negatively to this issue.

Further, the taxi drivers were also recorded in regard to their social contact with co-workers. Taxi drivers were asked to reply in regard to the opportunity of social contact with co-workers. The analysis of data discloses that 42 per cent replied that they never got such opportunity. 20 per cent reported sometimes, 26 per cent replied often while only 12 per cent replied that they get such opportunity of social contact very frequently.

As we discussed earlier, there is a lack of provisions for rest of the drivers during waiting time. 33 per cent of those surveyed reported that due to the lack of space for rest they sleep on the taxi seats while waiting for their customers while 39.67 per cent replied sometime and 25 per cent face this situation often. Whereas only 2.33 per cent reported that they never face such problems.

Table 6: Physical Factors/Problems (Constraints During Working)

<i>Physical Factors/Problems (Constraint in Working Situation)</i>	<i>Never (%)</i>	<i>Sometimes (%)</i>	<i>Often (%)</i>	<i>Very Frequently (%)</i>	<i>Total (%)</i>
Handling baggages of customers	19 (6.33)	61 (20.33)	89 (29.67)	131 (43.67)	300 (100)
Bending and twisting activities while driving	0 (00)	79 (26.33)	59 (19.67)	162 (54.00)	300 (100.00)
Experienced violence (victim of assault) during working	36 (12.00)	90 (30.00)	132 (44.00)	42 (14.00)	300 (100.00)
Too much cold and hot weather	24 (8.00)	72 (24.00)	78 (26.00)	126 (42.00)	300 (100)
Social contact opportunity with co-workers	126 (42.00)	60 (20.00)	78 (26.00)	36 (12.00)	300 (100)
Sleep on the taxi seat during rest breaks	7 (2.33)	119 (39.67)	75 (25.00)	99 (33.00)	300 (100)

Source: Primary data; Figures in parentheses are Percentages.

Health-Related Problems Faced by Taxi Drivers

From the review of literature, we listed number of work-related problems. Table 7 presents the data relating to health-related problems of taxi drivers. The perception of respondents was got on these problems which generally resulted due to driving. The analysis of data reveals that 74 per cent of the respondent's become victim of respiratory problems due to abnormal shortness of breath, breathing stops or disrupts by episodes of choking (observed by others). Further sleep disorders, sleep apnea or narcolepsy and insomnia were reported by 60 per cent (83.33 percent of them experienced intermittent agony, while 16.67 percent experienced continuous suffering). Further 56

per cent reported heart related problems, namely, need of heart surgery, palpitations and irregular heartbeat and 56 per cent reported frequent cough, cold, sneezing etc. and 53 per cent reported symptoms of dyslipidemia/hyperlipidemia (LDL Cholesterol and Triglyceride). Tuberculosis (TB) reported by 25 per cent, diabetes by 52 per cent and 50 per cent were patient with blood pressure. Additionally, 48 per cent of the poll participants reported having tongue and throat issues, such as mouth ulcers. Anemia affected 46% of those who responded, cancer issues affected 2.67 per cent, and kidney illnesses affected one per cent. According to the data study, cab drivers suffer from a variety of illnesses that impair their health and increase their financial burden.

Table 7: Occurrence of Work-Related Health Problems

Work-Related Health Problems	Yes		No	
	Frequency	Percentage	Frequency	Percentage
Blood Pressure	150	50.00	150	50.00
Heart-related problems as any condition requiring heart surgery, palpitations and irregular heartbeat	168	56.00	132	44.00
Respiratory problems like abnormal shortness of breath, breathing stops or disrupted by episodes of choking (observed by other)	222	74.00	78	26.00
Sleep disorder, sleep apnea or narcolepsy and insomnia	180	60.00	120	40.00
Type of Insomnia				
Intermittently/Acute	150	83.33		
Persistently/Chronic	30	16.67		
Diabetes	156	52.00	144	48.00
Dyslipidemi/ hyperlipidemia (LDL cholesterol and triglyceride)	159	53.00	141	47.00
Anemia	138	46.00	162	54.00
Throat and mouth problems such as mouth ulcers etc.	144	48.00	156	52.00
Kidney disorders	3	1.00	297	99.00
Tuberculoses (TB)	75	25.00	225	75.00
Cancer	8	2.67	292	97.33
Cough, cold, sneezing etc.	168	56.00	132	44.00

Source: Primary data.

Occurrence of Brain-Related Problems

Table 8 presents the data relating to Occurrence of Brain Related problems of taxi drivers. Responding to brain-related problems, 57 per cent of the respondents reported that they suffered from strokes. Additionally, 54.33 percent of the participants said they had experienced convulsions, fits, seizures, and epilepsy and 50.67 per cent of the participants replied that they felt dizziness,

vertigo, and problems with balance. Similarly, 57 per cent of the respondents reported that they had become victim of Memory loss, trouble focusing or paying attention, or other neurological. Likewise, 57 per cent of the respondents responded that they had psychiatric illness or nervous disorder. So, the analysis of data relating to brain related problems of the respondents shows a very high incidence of these problems.

Table 8: Occurrence of Brain Related Problems

<i>Brain Related Problems</i>	<i>Yes</i>		<i>No</i>	
	<i>Frequency</i>	<i>Percentage</i>	<i>Frequency</i>	<i>Percentage</i>
Stroke	171	57.00	129	43.00
Seizures, fits, convulsions, epilepsy	163	54.33	137	45.67
Dizziness, vertigo, problems with balance	152	50.67	148	49.33
Memory loss, trouble focusing or paying attention, or other neurological disorder	171	57.00	129	43.00
A psychiatric illness or nervous disorder	171	57.00	129	43.00

Source: Primary data.

Occurrence of Work-Related Alimentary Tract Disorders (Gastrointestinal Disorders)

The data relating to the occurrence of work-related alimentary tract disorders (Gastrointestinal Disorders) is presented in Table 9. The analysis of data reveals that 58.33 per cent of the participants reported that they were suffering from gastrointestinal disorders (abdomen). Further, 56 per cent of the participants reported that they had jaundice (liver related problems) and 56.67 per cent of the participants replied that they had abdominal

pain/cramping and recurrent diarrhea. Further, 48.67 per cent of the participants reported that they were suffering from digestive problems. 47 per cent of the participants replied that they often suffer from constipation problems. Similarly, 52.33 per cent of the participants replied that they were patient with acid peptic disease (APD). These findings are also in consonance with the results of other researchers (Seidel and Heide, 1986 and Griffin, 1990). Our findings reveal again a very high incidence of gastrointestinal disorders among the taxi drivers.

Table 9: Occurrence of Work-Related Alimentary Tract Disorders (Gastrointestinal Disorders)

<i>Occurrence of Work-Related Alimentary Tract Disorders (Gastrointestinal Disorders)</i>	<i>Yes</i>		<i>No</i>	
	<i>Frequency</i>	<i>Percentage</i>	<i>Frequency</i>	<i>Percentage</i>
Alimentary Tract Disorders (Gastrointestinal Disorders)	175	58.33	128	41.67
Jaundice (Liver)	168	56.00	132	44.00
Abdominal pain/cramping, recurrent diarrhea	170	56.67	130	43.33
Digestive problems	146	48.67	154	51.33
Constipation	141	47.00	159	53.00
Acid peptic disease (APD)	157	52.33	143	47.67

Source: Primary data.

Occurrence of Sensory Organs-Related Diseases

An attempt has also been made to collect information in regard to sensory organ-related diseases which generally develop due to continuous working in pollution, dust, gases and fumes. The data relating to the Occurrence of Sensory Organs Related Diseases is presented in Table 10. The drivers become the victims of Sensory Organs Related Diseases, due to working in pollution, dust, gases and fumes. As concerned with dermatological Diseases, 60 per cent of the respondents were suffering from these diseases and 52 per cent of the respondents replied that they had Skin allergy/dryness followed by 52 per cent of

the respondents having the problem of Scabies. Similarly, 51.67 per cent of the respondents reported that they had diseases of hair/nails and 52 per cent of the respondents had the problem of itching, scaling and irritation.

As concerned with Eyes Related Problems, 41.33 per cent of taxi drivers described that they had problem with watering of eyes, followed by 40 per cent having problems with double vision, difficulty seeing, blackouts or fainting and colour blindness. Further 39 per cent of the respondents replied that they had problem with redness of eyes. Other research studies have also suggested that peripheral nervous system disorders and vestibular and visual problems may also be increased among professional drivers (Seidel, 1986; Griffin, 1990).

As regards ear related problems, 48 per cent of the respondents replied that they had problems of deafness or hearing loss, ear surgery, or the usage of a hearing aid.

Table 10: Occurrence of Sensory Organs Related Diseases

<i>Sensory Organs Related Diseases</i>	<i>Yes</i>		<i>No</i>	
	<i>Frequency</i>	<i>Percentage</i>	<i>Frequency</i>	<i>Percentage</i>
Dermatological Diseases	180	60.00	120	40.00
Skin allergy/dryness	156	52.00	144	48.00
Scabies	156	52.00	156	52.00
Diseases of hair/nails	155	51.67	145	48.33
Itching, scaling and irritation	156	52.00	144	48.00
<i>Eyes Related Diseases</i>	<i>Frequency</i>	<i>Percentage</i>	<i>Frequency</i>	<i>Percentage</i>
Watering of eyes	124	41.33	176	58.67
Double vision, difficulty seeing, blackouts or fainting and colour blindness	120	40.00	180	60.00
Redness of eyes	117	39.00	183	61.00
<i>Ears Related Disease</i>	<i>Frequency</i>	<i>Percentage</i>	<i>Frequency</i>	<i>Percentage</i>
Deafness or hearing loss, ear surgery, or the usage of a hearing aid	144	48.00	156	52.00

Source: Primary data.

Occurrence of Stress-Related Health Problems

Table 11 displays information about the prevalence of health issues linked to stress. Regarding the occurrence of

stress-related health issues, 40.00 per cent of taxi drivers had hypertension, 41.00 percent had cardiovascular disease, and 40.67 per cent had gastrointestinal disorders.

Table 11: Occurrence of Stress-Related Health Problems

<i>Stress-Related Health Problems</i>	<i>Yes</i>		<i>No</i>	
	<i>Frequency</i>	<i>Percentage</i>	<i>Frequency</i>	<i>Percentage</i>
Hypertension	120	40.00	180	60.00
Cardiovascular	123	41.00	177	59.00
Gastrointestinal Disorders	122	40.67	178	59.33
Musculoskeletal Disorders/Problems	123	41.00	177	59.00

Source: Primary data.

Occurrence of Work-Related Musculoskeletal Problems

Table 12 displays information about the prevalence of musculoskeletal issues related to the workplace. The respondents suggested that the sedentary nature of job of taxi drivers leads to musculoskeletal disorders. 40 per cent of those surveyed said they frequently experienced headaches and irritation in their necks.

The information was also gathered relating to Upper Extremity Link System which consists of five body parts and is displayed in Table 12. The data analysis reveals that 40.33 per cent of the respondents had problems with shoulder pain, 40 per cent of the respondents answered that they had problems with arms pains, 40.67 per cent of the respondents reported that they had problems with elbow pains. Similarly, 41.33 per cent of the respondents replied that they had wrist pains and 45.67 per cent of the respondents were facing the problem of hand and fingers.

Table 12 contains the replies pertaining to the Thoracic Extremity Link System, which is composed of five body parts. The results of the data analysis show that 39.67 per cent of the respondents experienced angina and chest discomfort, 40.67 per cent experienced upper back problems, and 39 per cent experienced middle back problems. Similarly, 40.33 per cent of respondents said they had experienced lower back discomfort, and 40 per cent said they had experienced stomachache.

The comments addressed the Lower Extremity Link System, which was made up of six major joints that were

assembled from a mechanical structure to perform crucial functions. According to the data analysis, 40.33 per cent of respondents said they had a buttock problem, 40.33 per cent said they had a hip/thigh problem, and 40 per cent said they had a knee problem. Similar to this, 41.00 per cent of respondents said they had issues with their ankles, 41.33 per cent said they had issues with foot swelling, and 41 per cent said they had issues with numbness or tingling in their feet.

Table 12: Occurrence of Work-Related Musculoskeletal Problems

Sr. No.	Work-Related Musculoskeletal Problems at the Head and Neck Body Area	Yes		No	
		Frequency	Percentage	Frequency	Percentage
i	Headache	120	40.00	180	60.00
ii	Neck	120	40.00	180	60.00
Sr. No.	Work-Related Musculoskeletal Problems at the Upper Extremity Link System	Frequency	Percentage	Frequency	Percentage
iii	Shoulder	121	40.33	179	59.67
iv	Arms	120	40.00	180	60.00
v	Elbow	122	40.67	178	58.33
vi	Wrist	124	41.33	176	58.67
vii	Hand and Fingers	137	45.67	163	54.33
Sr. No.	Work-Related Musculoskeletal Problems at the Thoracic Extremity Link System	Frequency	Percentage	Frequency	Percentage
viii	Chest	119	39.67	181	60.33
ix	Upper back	122	40.67	178	59.33
x	Middle back	117	39.00	183	61.00
xi	Lower back	121	40.33	179	59.67
xii	Stomach	120	40.00	180	60.00
Sr. No.	Work Related Musculoskeletal Problems with the Lower Extremity Link System	Frequency	Percentage	Frequency	Percentage
xiii	Buttock	121	40.33	179	59.67
xiv	Hip/Thigh	121	40.33	179	59.67
xv	Knee	120	40.00	180	60.00
xvi	Ankles	123	41.00	177	59.00
xvii	Swelling of feet	124	41.33	176	58.67
xviii	Numbness/Tingling of feet	123	41.00	177	59.00

Source: Primary data.

Treatment of Sick Drivers

The data relating to the use of drugs or medications prescribed by a health professional is presented in Table 13. The medications prescribed have been more likely to

be effective if one follows pharmacists or doctors' exact advice and instructions for the use of these medicines. The analysis of data reveals that taxi drivers were suffering from many health and stress related problems. To understand whether they took drugs or medications

prescribed by a health professional, the analysis of data reveals that majority (60.67 per cent) of respondents replied that they use doctors prescribed drugs and medications only. However, 20 per cent were using

self-prescribed drugs and 6.67 per cent were using hot water fermentation. Further, traditional drugs and herbal preparation were used by 6.67 per cent and 6.67 per cent of the respondents respectively in order to alleviate their musculoskeletal pains.

Table 13: Treatment of Sick Drivers

<i>Drugs or Medications Prescribed by Health Professional</i>	<i>Frequency</i>	<i>Percentage</i>
Yes	182	60.67
No	118	39.33
Total	300	100.00
<i>Practices Followed to Cure Musculoskeletal Pains</i>	<i>Frequency</i>	<i>Percentage</i>
Herbal preparation	18	6.00
Self-prescribed drugs	60	20.00
Traditional drugs	20	6.67
Hot water fermentation and massage	20	6.67
Hospital treatment	182	60.66
Total	300	100.00

Source: Primary data.

Findings and Conclusion

Findings Relating to Personal and Demographic Characteristics of Taxi Drivers

- The majority of responders (28%) are over 50, according to an analysis of the personal and demographic traits of taxi drivers. The report also shows that people from the SC/ST community, namely Sikhs and Hindus, make up the majority of those in this occupation, with the General category making up only 18%.
- Another noteworthy conclusion of the survey is that just 8% of taxi drivers have education beyond the 10+2 level, including graduates and certificate holders, while a sizable portion (44%) only have education up to the 10th standard.
- The results also reveal that, in line with traditional family structures, the majority of cab drivers are married (69.67%) and part of joint family systems (72%).
- The report also shows that a significant percentage of taxi drivers come from large families, with 28% having more than six family members and 30% having five to six.

Findings Relating to Job Related Characteristics of Taxi Drivers

- The bulk of responders (34%) have six to ten years of driving experience, according to the data analysis.
- The low-income levels of taxi drivers are further highlighted by the evaluation of respondents' socioeconomic position. According to the report, a sizable percentage (50%) make between Rs. 3000 and Rs. 5000 per month, which is not enough to sustain a respectable standard of living in the current environment.
- Additionally, the majority of responders (82%) receive their salaries on a monthly basis, according to the report.
- The fact that cab drivers work abnormally long hours is another significant discovery. Every respondent stated that their working hours had no set end, which causes weariness and a slow deterioration in their health. Interestingly, 46% of taxi drivers put in more than 16 hours a day at work, leaving them with very little time for social and personal obligations.
- The majority of responders (54%) also drive during night shifts, which may add to the physical and psychological stress, according to the research.

Facilities Available at the Taxi Stand

- In addition to these findings the field observation during the survey reveals that the taxi drivers were working under miserable conditions. The taxi stands lacked basic facilities for supplying proper physical facilities to drivers such as drinking water, canteen facilities, basic sanitation facilities, platform for sitting and rest, safety and security which replicate negatively and harmfully on Quality of Work Life. The analysis of data reveals that taxi drivers also replied that there was unavailability of facilities like sitting arrangements, drinking water, electricity/fan, medical facility, first aid, canteen, transportation facility and platform for rest to taxi drivers, which indicates that working conditions of taxi drivers were unbearable. Taxi stands were without the basic amenities, namely, toilets and rest rooms etc. So, the study reveals that the working and living conditions of the taxi drivers were very poor. They work and live in unhygienic atmosphere.

Findings Relating to Lifestyle and Physical Constraints

- The data analysis showed that most respondents drank refreshments less than twice., main meal from dhabas/restaurants regularly, mixed diet (vegan and non-vegan), consume oily, fried and junk food on most of the days and did not take meal at proper and fixed time. Only 14 per cent of taxi drivers were engaged in physical exercise. It shows that taxi drivers' schedule was so tough that they did not have time for eating homemade healthy meals and physical exercise/morning or evening walk and majority of taxi drivers did not enjoy holiday during a week.
- The study found that majority of taxi drivers thought handling baggages and materials, bending and twisting activities while driving, experiencing violence (victim of assault) during working hours, too much cold and hot weather, lack of social contact with colleagues and lack of social support and sleep in the taxi seat during rest breaks were major physical constraints that affect their health.
- The analysis reveals that due to their sedentary job, irregular eating activities and life style, taxi drivers were suffering from health related problems as

blood pressure, heart related problems, respiratory problems as abnormal shortness of breath, breathing stops or disrupted by episodes of choking (observed by other), sleep disorder, sleep apnea or narcolepsy and insomnia (intermittent/acute and persistent/chronic) diabetes, dyslipidemia/hyperlipidemia (LDL Cholesterol and Triglyceride), anemia, throat and mouth problems (as mouth ulcers etc.), kidney disorders, tuberculoses (TB), cancer, and cough, cold, sneezing etc.

- The study further reveals that in case of Brain Related Injuries, more than 50 per cent of taxi drivers were suffering from stroke, seizures, fits, convulsions, epilepsy, dizziness, vertigo, problems with balance, loss of memory, trouble focussing or paying attention, or another neurological condition, psychiatric illness or nervous disorder.
- Further, the analysis reveals that due to sedentary jobs and consumption of more fried and junk food taxi drivers were suffering from Gastrointestinal Disorders (abdominal diseases) such as jaundice (liver), abdominal pain/cramping recurrent diarrhea, digestive problems, constipation and acid peptic disease (APD).
- It was found that as taxi drivers have to work in fumes, gasses, pollution and too much cold and hot weather so there are more chances of suffering from Dermatological Diseases in comparison to those who do other jobs. So, it was found that 60 per cent of taxi drivers were suffering from Dermatological Diseases (like skin allergy/dryness, scabies, diseases of hair/nails, itching and scaling and irritation).
- The study further found that due to working in noise, gas, fumes and pollution taxi drivers also suffered from Eyes Related Diseases (watering of eyes, double vision, difficulty seeing, blackouts or fainting, colour blindness and redness of eyes) and Ears Related Disease (Deafness or hearing loss, ear surgery, or the usage of a hearing aid).
- The study also found that due to poor lifestyle, less time for rest and physical activities, work pressure along with rigid work schedule and fatigue taxi drivers were suffering from work related Musculoskeletal Problems/Disorders. It was found that 40 per cent of taxi drivers were suffering from occurrence of work-related Musculoskeletal Disorders in the head and neck body area.

Study further found that as regard to occurrence of work related Musculoskeletal Disorders at other parts of the body 40 per cent taxi drivers suffered from work related Musculoskeletal Disorders at the Upper Extremity Link System (shoulder, arms, elbow, wrist and fingers), Thoracic Extremity Link System (chest, upper back, middle back, lower back and stomach), Lower Extremity Link System (buttock, hip/thigh, knee, ankles, swelling of feet and numbness/tingling of feet).

The study found that majority of taxi drivers (60.67 per cent) took medicines prescribed by registered health practitioners.

Conclusion

We can say that life of taxi drivers is very risky they have to work in cold, hot dust, fumes and gases. They inhale bad smells and humidity when sleeping inside the taxi when not finding halt to sleep and rest at night. They do not have fixed schedule for sleeping and eating and have to drive the taxi according to the time schedule of the clients. They have to sit for a long time in the same posture due to which they have to face many health-related problems such as gastrointestinal, cardiovascular, hypertension and musculoskeletal disorders like headache, pains at neck, upper, and thoracic and lower extremity links systems. They experienced skin related problems due to working in dust, fumes, and gases, cold and heat. Due to busy schedules, they do not even get time for physical check-ups and take medicine from the nearest chemists' shops. They have to eat junk & fried and irregular meals. Due to sedentary nature of job, they do not find time for physical exercise/morning walk/evening walk which also invites health problems and negatively affects health of taxi drivers. So, the life of taxi drivers is very risky, miserable and full of hazards. Therefore, it is recommended to taxi drivers and taxi owners that life of the drivers should be safe and secure. They should be well aware about the health issues while of the wheel. Fast, junk and fried food should be avoided as it is the main cause of high BP, cardiovascular and gastro problems. Taxi drivers should involve themselves in physical activity so that they can keep themselves active and fit.

Implications

According to the study, private taxi drivers' sedentary lifestyle, long workdays, erratic eating patterns, and

irregular sleep patterns pose serious health concerns. Their health is further deteriorated by ongoing exposure to dust, pollutants, and extremely high or low temperatures. These results suggest that workplace health regulations that guarantee appropriate scheduling, frequent physicals, and access to healthcare are necessary. Awareness campaigns ought to teach drivers stress reduction techniques and good habits. By enhancing working conditions and promoting drivers' physical and emotional health through health-focused programmes, transportation corporations can also assume responsibility.

Scope for Future Research

- To better understand the specific occupational exposures that are linked to stress-related issues like hypertension, cardiovascular disease, gastrointestinal disorders, and musculoskeletal disorders, cross-sectional studies are necessary.
- To achieve better results, similar studies might be conducted with a larger sample size and more sophisticated knowledge and methods.
- Similar research could be conducted to test the results of this investigation. The effects of dietary practices on drivers' health and lifestyle characteristics may be the subject of future research.

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Conflicts of Interest

There are no conflicts of interest.

AI Disclosure

The authors confirm that no AI-based tools were utilized in conducting this research or writing the manuscript. All content is original and reflects the authors' own work.

References

- Babarik, P. (1968). Automobile accidents and driver reaction patterns. *Journal of Applied Psychology*, 51, 49–54.
- Baluja, A., Ghosh, A., Pal, R., Menon, G. R., Bhoi, S., Galwankar, S. C., et al. (2018). Occupational profile of taxi drivers from three metropolitan cities in India. *International Journal of Academic Medicine*, 4, 119–123.
- Bawa, S., & Srivastav, R. (2013). Occupational stress and health issues among taxi drivers in Mumbai. *Indian Journal of Occupational and Environmental Medicine*, 17(2), 67–72.
- Chu, C., & Dwyer, S. (2002). Employer role in integrative workplace health management: A new model in progress. *Disease Management & Health Outcomes*, 10, 175–186.
- Corfittsen, M. T. (1993). Tiredness and visual reaction time among nighttime cab drivers: A roadside survey. *Accident Analysis and Prevention*, 25, 667–673.
- Costa, G., De Luca, G., & Martin, A. (2025). Health risks among taxi drivers: A systematic review. *International Archives of Occupational and Environmental Health*, 98(1), 12–28. doi:<https://doi.org/10.1007/s00420-025-01890-z>
- Dalziel, J. R., & Job, R. F. (1997). *Taxi drivers and road safety: A report to the Federal Office of Road Safety, Department of Transport and Regional Development*. Canberra.
- Edwards, D. S., Hahn, C. P., & Flieshman, E. S. (1977). Evaluation of laboratory methods for the study of driver behaviour: Relations between street and simulator performance. *Journal of Applied Psychology*, 62, 559–566.
- Haines, F. (2002). *Understanding Victorian taxi drivers' experiences of victimization and their preferred preventive measures: A report for the Victorian Taxi Driver Safety Committee*.
- Kumari, L. (2025). A multivariate assessment of occupational stress and hypertension among taxi drivers: Evidence from a cross-sectional analysis. *Hypertension Journal*, 11(2), 43–55.
- Kumari, L., & Sidhu, A. S. (2017). Factors affecting quality of work life of private taxi drivers. *Management and Labour Studies*, 41(4), 331–354.
- Kumari, L. (2020). Impact of demographic variables on quality of work life: A case study of private taxi drivers of Punjab (India). *Academic Leadership*, 21(6), 439–463.
- Sharma, L. K., Bhagat, N., Archana, Nischal, S., Kaur, A., & Yadav, R. (2025). An analysis of the socio-economic status of private taxi drivers: A case study of Punjab, North India. *European Economic Letters*, 15(1), 3278–3292. doi:<https://doi.org/10.52783/eel.v15i1.2726>
- Kumari, L., & Sharma, A. (2020). Living and working conditions of private taxi drivers of Punjab. *Compliance Engineering Journal*, 11(7), 155–182. doi:<https://doi.org/10.10089/CEJ.2020.V11I7.285311.3190>
- Lee, S. Y., & Kim, J. H. (2018). Occupational stress and digestive health among taxi drivers in Seoul. *Korean Journal of Occupational Health Nursing*, 27(1), 15–23.
- Lisper, I. O., Laurell, H., & Stening, G. (1973). Effects of experience of the driver on heart rate, respiration rate and subsidiary reaction time in a three-hour continuous driving task. *Ergonomics*, 16(4), 501–506.
- Mehdi, J., Ali, K., & Samira, E. (2017). Influence of blood biochemistry, auditory and musculoskeletal well-being of professional drivers on road accidents. *JOJ Public Health*, 1(5), 555572.
- Mirpuri, D., Johnson, R., & Singh, A. (2021). Stress and lifestyle factors among taxi drivers in New York City. *American Journal of Public Health Research*, 9(2), 50–55.
- Ngatcha Tchounga, B., et al. (2022). Prevalence of musculoskeletal disorders among taxi drivers in Cameroon. *Journal of Occupational Health in Africa*, 5(3), 120–127.
- Patel, M., & Kulkarni, S. (2023). Work-related musculoskeletal disorders among taxi drivers: A case from Mahabaleshwar. *International Journal of Occupational Safety and Ergonomics*, 29(1), 45–51.
- Rathi, A., & Bansal, P. (2019). Mental health assessment of cab drivers in Delhi: A cross-sectional analysis. *Indian Journal of Occupational and Environmental Medicine*, 23(3), 130–135.
- Saha, A., Nag, A., & Nag, P. K. (2014). Psychological and gastrointestinal disorders among public vehicle drivers in Kolkata. *Journal of Occupational Health*, 56(1), 44–50.
- Shetty, S. M., & Rajkumar, P. (2017). Morbidity profile of transport workers in Bengaluru: A cross-sectional

- study. *International Journal of Community Medicine and Public Health*, 4(2), 450–456.
- Tillman, W. A., & Hobbs, G. E. (1949). The accident-prone automobile driver. In W. Haddon, E. A. Suchman, & D. Klein (Eds.), *Accident Research: Methods and Approaches*. Harper & Row.
- Wang, L., & Sun, Y. (2020). Work stress and gastrointestinal symptoms among urban taxi drivers in China. *Occupational Medicine & Health Affairs*, 8(1), 101–107.
- Whitelegg, J. (1995). *Health of professional drivers: A report for Transport and General Workers' Union*. Ecologica Limited.