



# KNOWLEDGE REGARDING FIRST AID TRAINING SKILLS AMONG COMMERCIAL DRIVERS IN HIMACHAL PRADESH

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## ABSTRACT

First aid is critical for preserving life, preventing further injury, and alleviating suffering until medical assistance is available. Road traffic accidents, a prevalent cause of injuries and fatalities, underscore the need for immediate first aid. This study assesses first aid knowledge among 200 commercial drivers in Chamba district, Himachal Pradesh. Using a structured questionnaire, socio-demographic data and first aid knowledge were collected and analyzed with SPSS-16. Results indicate 99% awareness of first aid, but only 30% had formal training. Key skills like controlling severe bleeding (73%) and splinting fractures (76.5%) were well-known, yet knowledge on airway management (36%) and correct patient positioning (25%) was lacking. Despite 56% recognizing chest compressions as a priority, only 20% emphasized breathing maintenance. The study highlights the necessity for comprehensive first aid training programs tailored for commercial drivers, who are frequently first responders to accidents. Enhanced training can improve emergency response, reduce economic and social impacts of traffic injuries, and promote better public health and safety outcomes. The findings stress the need for structured, recurring training sessions to bridge knowledge gaps and equip drivers with essential life-saving skills.

**KEYWORDS:** First aid, commercial drivers, road traffic accidents, Chamba district, Himachal Pradesh, emergency response, training programs.

## KNOWLEDGE REGARDING FIRST AID TRAINING SKILLS AMONG COMMERCIAL DRIVERS IN HIMACHAL PRADESH

The first aid is the emergency assistance given to a victim sick or injured in order to preserve life, prevent further injury and relieve suffering until qualified medical care is available.<sup>1</sup> In the modern world where in addition to natural disasters the manmade disasters like road traffic accident has become very common. According to World Health Organization, every year the lives of approximately 1.19 million people die as a result of road traffic accidents. Between 20 and 50 million more people suffer non-fatal injuries, with many incurring a disability.<sup>2</sup> As per Government of Himachal Pradesh data during year 2023 a total of 1,399 accidents are reported, among them 564 are killed and 830 are injured.<sup>3</sup> Road traffic injuries cause considerable economic losses to individuals, their families, and to nations as a whole. These losses arise from the cost of treatment as well as lost productivity for those killed and disabled by their injuries, and for family members who need to take time off work or school to care for the injured. The Government considers it necessary to protect the Good Samaritans from harassment on the actions being taken by them to save the life of the road accident victims and, therefore, the Government had issues guidelines to be followed by hospitals, police and all other authorities for the protection of Good Samaritans from legal complications.<sup>4</sup>

The road side injuries/ emergencies require immediate intervention at the spot to save the life of victim. So the

importance of first aid becomes very important in such scenario. If the awareness about various life saving emergency procedures like cardiopulmonary resuscitation, artificial respiration, application of splints, correct use of fire extinguisher, triage the precious life can be saved. The knowledge of first aid is important for every individual but is more so for commercial drivers as they are more likely to witness/ involved in road traffic accidents. Also, studies among commercial drivers regarding first aid knowledge are very less. Hence, this study was carried out with the aim to assess the knowledge among the commercial drivers from Chamba district of Himachal Pradesh in India, regarding first aid.

## MATERIAL AND METHODS

A cross-sectional study was conducted in the Chamba district of Himachal Pradesh in 2023. In this the 200 commercial drivers are selected by simple random sampling. All the participants who were willing to participate were enrolled in the study. This was a questionnaires based study in which the closed ended questions are used to assess the knowledge about first aid among participants. The questionnaire included two sections, in which the first section includes questions about socio-demographic details of participants. The second section includes questions regarding knowledge about first aid, first aid kit and components of first aid kit along with its uses. The data was collected entered in the MS-Excel and analysed using SPSS version-16.



## RESULTS

The present study is a cross-sectional study done among commercial drivers in Chamba district of Himachal Pradesh. The table 1 provides a comprehensive socio-demographic profile of the study participants, highlighting their age distribution, education levels, marital status, type of vehicle driven, and daily driving hours. The majority of participants are aged between 30-39 years, comprising 48.5% of the sample. Those aged 20-29 years account for 31.5%, while 17.5% are in the 40-49 years age group. Participants aged 50 years and above constitute the smallest group, making up only 2.5%. The education levels among participants vary, with the largest group having completed education from middle to higher secondary school, representing

73.0% of the sample. Those with graduate-level education and above account for 21.5%, while a small proportion, 5.5% have education up to middle school. The marital status of participants shows that a significant majority, 78.5% are married, whereas 21.5% are unmarried. In terms of vehicle type, a large proportion of participants, 81.5% (163 individuals), drive private vehicles. The remaining 18.5% (37 individuals) operate government vehicles. The distribution of daily driving hours indicates that most participants drive between 6 to 10 hours per day, making up 73.5% (147 individuals) of the sample. Those driving less than 6 hours per day constitute 17.5% (35 individuals), while 9.0% (18 individuals) drive for more than 10 hours daily.

1	Age	
	20-29	63 (31.5%)
	30-39	97 (48.5%)
	40-49	35 (17.5%)
	≥50	05 (2.5%)
2	Education	
	Upto middle	11 (5.5%)
	Middle to higher secondary	146 (73.0%)
	Graduate and above	43 (21.5%)
3	Marital status	
	Married	157 (78.5%)
	Unmarried	43 (21.5%)
4	Vehicle type	
	Government	37 (18.5%)
	Private	163 (81.5%)
5	Hours of driving per day	
	<6 hours	35 (17.5%)
	6-10 hours	147 (73.5%)
	>10 hours	18 (9.0%)

**The Table-1 Showing the socio-demographic details of the participants**

The table-2 is showing the first aid knowledge among participants in Himachal Pradesh, revealing a high level of general awareness but varying degrees of specific knowledge and skills. An overwhelming 99% of participants have heard about first aid, yet only 30% have received formal training. A significant 95% recognize that first aid can save lives, and 90% are aware of the emergency helpline number. Additionally, 87% have heard of 'The Good Samaritan Law,' 80% know when and where to provide first aid, 60% believe bystanders should give first aid, and 68.5% can name at least five items in a first aid kit.

Regarding first aid priorities, 56% identified chest compression as most important, 20% emphasized maintaining breathing, 10.5% prioritized calling an ambulance, 8.5% highlighted splinting fractures, and only 4% thought stopping the bleeding was crucial, with 1% unsure. Specific knowledge revealed that 36% could identify airway problem symptoms, 25% knew the correct safe position for patients, 73% understood how to apply pressure to control severe bleeding, and 76.5% knew how to apply a splint for fractures. When it came to indications for hospital transportation, 15.5% cited unconsciousness, 3.5% mentioned open wounds, 5% noted fractures, and a substantial 76% correctly identified all three conditions as reasons for hospital transport.



Knowledge of participants among first aid in Himachal Pradesh		
S. No.	Knowledge	Frequency (%)
1	Heard about first aid	198 (99%)
2	Ever received training in first aid	60 (30%)
3	First aid saves life	190 (95%)
4	Emergency helpline number known	180 (90%)
5	Heard of 'The good Samaritan Law'	174 (87%)
6	Knowledge of when & where to provide first aid	160 (80%)
7	Bystander should give first aid	120 (60%)
8	First aid kit contents (name any 5 articles)	137 (68.5%)
9	First aid priority:	
	Chest compression	112 (56%)
	Breathing maintenance	40 (20%)
	Call the ambulance	21 (10.5%)
	Splinting fractures 10 (4.0)	17 (8.5%)
	Stop the bleeding 73 (29.0)	08 (4%)
	Don't know 2 (0.8)	02 (1%)
10	Any symptom or sign of airway problem known	72 (36%)
11	Correct knowledge of safe position	50 (25%)
12	Applying pressure for severe bleeding	146 (73%)
13	Application of splint for fracture	153 (76.5%)
14	Indication of transportation to hospital:	
	Unconscious	31 (15.5%)
	Open wound	07 (3.5%)
	Fracture	10 (5%)
	All of the above	152 (76%)

## DISCUSSION

The study assessed the knowledge among commercial drivers in Chamba district of Himachal Pradesh. All the participants in the study were males as this profession is male dominated in Himachal Pradesh. The majority of drivers are males and also driving private vehicle. A notable 99% of participants have heard about first aid, indicating widespread general awareness. A study conducted by Awasthi S et al among commercial drivers in India<sup>5</sup> in which majority of participants 96% have heard about first aid. In our study only 30% have received formal training while study conducted by Pallavisarji U et al in southern India<sup>6</sup> in which 62% of drivers had received training.

The study highlights varied levels of specific first aid knowledge. For instance, 73% of participants know how to apply pressure to control severe bleeding, and 76.5% understand how to apply a splint for fractures. These skills are crucial for managing common injuries in road traffic accidents. However, only 36% can identify symptoms of airway problems, and a mere 25% know the correct safe position for patients. A study conducted by Olugbenga-Bello AI et al in Nijeria<sup>7</sup> in which majority (59.9%) correctly prioritized airway management first, while only 37.6% identified the correct order for all the three care areas. When it comes to prioritizing first aid measures, 56% of the drivers correctly identified chest compression as the most important, reflecting a reasonable understanding of cardiopulmonary resuscitation (CPR). However, only 20% emphasized maintaining breathing, which is equally critical. This highlights the need for

comprehensive training that equally addresses all life-saving priorities, ensuring a balanced approach to emergency care.

## CONCLUSION

The study conducted among commercial drivers in the Chamba district of Himachal Pradesh demonstrates a high level of general awareness regarding first aid, with 99% of participants acknowledging its importance. However, only 30% of these drivers have received formal training, exposing a critical gap that needs addressing. While a significant number of drivers are proficient in essential first aid skills such as applying pressure to control severe bleeding (73%) and using splints for fractures (76.5%), there is a marked deficiency in knowledge regarding airway management (36%) and correct patient positioning (25%). These findings underscore the necessity for comprehensive and mandatory first aid training programs specifically tailored for commercial drivers, who are often first responders to road traffic accidents.

The prioritization of first aid measures by the drivers, with 56% identifying chest compression as crucial yet only 20% emphasizing the importance of maintaining breathing, further highlights the need for balanced and thorough training that covers all vital aspects of emergency care. By implementing structured, recurrent training programs and practical, hands-on sessions, the readiness of these drivers to effectively manage roadside emergencies can be significantly enhanced. Such initiatives are



not only crucial for improving immediate emergency response but also for mitigating the long-term economic and social impacts of road traffic injuries, ultimately contributing to better public health and safety outcomes.

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