

USE OF SAFETY BELT AMONG ARMY PERSONNEL

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ABSTRACT

Objective: To assess the knowledge, attitude and practice of safety belt use and the reasons for its non use among army personnel.

Study Design: A cross-sectional descriptive study.

Place and Duration of Study: The study was carried out at Rawalpindi Cantonment from Jan 2013 to June 2013.

Subjects and Methods: The study was carried out among two different categories of Army Personnel i.e. officers and soldiers through a structured questionnaire.

Results: Mean age of officers and soldiers was 38 and 29 years respectively. A total of 146 (97.3%) officers and 128 (85.3%) soldiers were in favor of using seat belt while driving whereas 4 (2.7%) officers and 22 (14.7%) soldiers were against it. The study depicted that 147 (98%) officers and 133 (88.7%) soldiers had sufficient knowledge about the significance of safety belt use but the results regarding its use were not encouraging as 56 (37.3%) officers and 40 (26.7%) soldiers did not use safety belt while driving, although 146 (97.3%) officers and 128 (85.3%) soldiers were in favor of using safety belt.

Conclusion: Army personnel had sufficient knowledge about the significance of safety belt; similarly attitude towards its use was also satisfactorily positive however, a significant percentage was indeed not putting their knowledge of significance into practice. Inattention and inconvenience along with inadequate law was the main reason for not using safety seat belt.

Keywords: Safety belt, Safety belt laws, Use of safety belt.

INTRODUCTION

Safety belt is a harness designed to protect the occupant of a vehicle against harmful movement which may result during a collision or a sudden halt. It reduces the severity of injury in a traffic accident by preventing the vehicle's occupant from hitting hard against interior elements of the vehicle or with other passengers by keeping them positioned correctly, for deriving maximum benefit from the air bag, if the vehicle is so equipped, and by averting the occupants being ejected from the vehicle¹.

Seat belt use is a highly effective strategy in preventing deaths and injuries in motor vehicle crashes. In 2007, seatbelts saved an estimated 15,000 lives in United States². Use of seat belt not only reduces injuries and deaths but also

cuts down the economic cost to society. Not only that drivers and co-drivers need to put on the safety belt but it also carries significance for the rear-seated passengers as on sudden halt they can be forced forward and crash inadvertently into the driver or front passenger harming each other in a serious way³.

Fastening seatbelt on National Highways and Motorways is a law which is made for people's protection and safety, if a vehicle moving at a speed of above 100 km per hour stops suddenly, the jolt received by the passenger as a result could be fatal⁴. However, most people remain oblivious to this fact. Undoubtedly wearing seatbelts improves a vehicle occupant's chances of surviving a crash⁵.

Statistics around the world prove the value of safety belt in preventing injuries and deaths, take for instance motor vehicle crashes are the leading cause of death in the first three decades of American's lives. Majority of people killed in crashes are drivers or passengers, most of those killed are found to be unrestrained⁶. Among

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drivers and first passengers, seat belts reduce the risk of death by 45% and cut the risk of serious injury by 50%⁷. People not wearing a seat belt are 30 times more likely to be ejected from a vehicle during a crash, 3 out of 4 which get ejected during a crash die from their injuries⁸.

Seat-belts are installed in vehicles for the safety of the driver and the passengers. Its use

of safety belt use. Educating the public should be a key step. It is a matter of utmost importance to focus attention and try to grasp the thought process behind the decisions of not using safety belt as this will give us clues to effectively and efficiently handle the situation of non-use of safety belts¹⁰. Seat belts save thousands of lives each year and increasing use would save thousands more⁸.

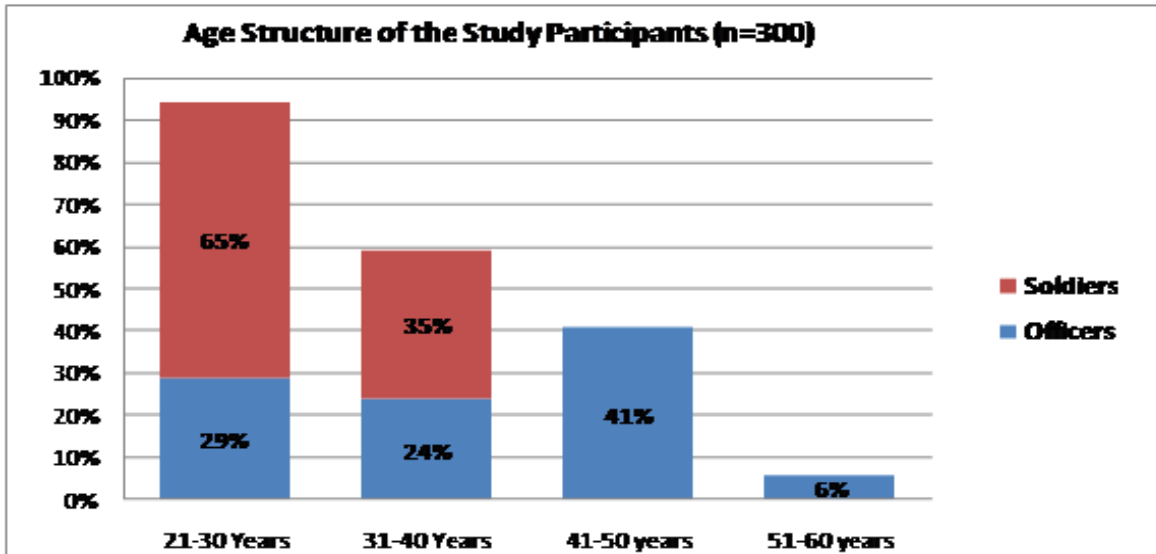


Figure-1: Age structure.

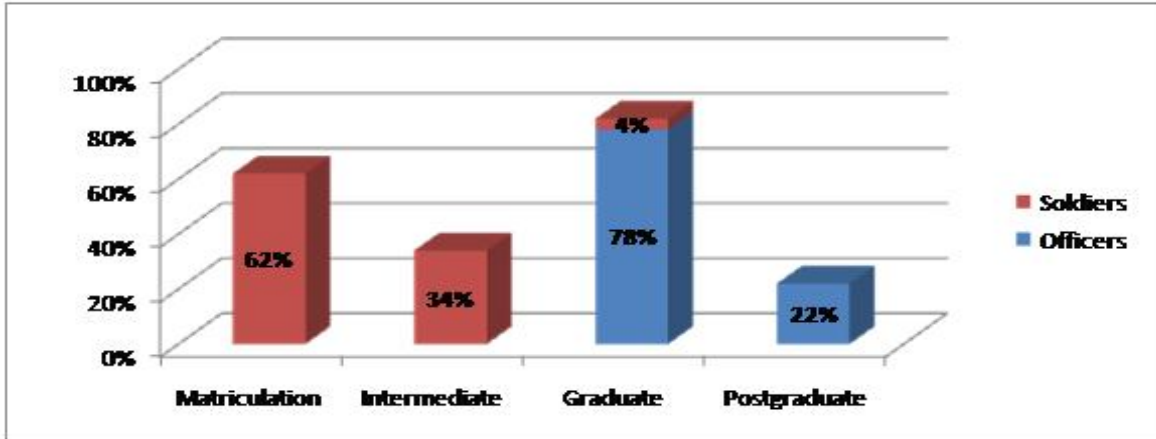


Figure-2: Education status of the participants.

varies in different parts of the world due to different reasons. The use of safety belts is the single most effective means of reducing fatal and nonfatal injuries in motor vehicle crashes⁹. There is a need to address the problem of social pressure in order to effectively tackle the issue

Keeping in view the above, a cross sectional descriptive study was carried out to assess the knowledge, attitude and practice of safety belt use among army personnel and evaluate the reasons for non use of safety belt among non users.

SUBJECTS AND METHODS

This descriptive study was carried out in Rawalpindi Cantonment from Jan 2013 to Jun 2013. The study was carried out among army personnel.

- a. Officers: 150
- b. Soldiers: 150

Those that hold driving license and drive on regular basis were included. An assessment of the existing practice of using safety belt was done and a structured questionnaire was used to determine the situation regarding

Regarding educational status of officers, 117 (78%) were graduates while 33 (22%) were postgraduates while 93(62%) soldiers were matriculate. Details are shown in fig-2.

Eighty eight (58.7%) officers and sixty eight (45.3%) soldiers (drivers) had the experience of driving a vehicle for more than 10 years. Twenty three (15.3%) officers and forty one (27.3%) soldiers had the experience of driving between 6-10 years where as 39 (26%) officers and 41 (27.4%) soldiers had the experience of driving between 1-5 years ($p < 0.05$).

Table-1: Knowledge of army personnel about use of safety belt.

		Officers n (%)	Soldiers N (%)	p value
What do you know about safety / seat belt and its significance?	1. It prevents from injuries	112 (74.6)	51 (34)	$p < 0.05$
	2. Seat belt is important because its saves driver from accident	35 (23.4)	82 (54.7)	
	3. Did not know	3 (2)	17 (11.3)	
In your opinion, is there any harm of wearing safety belt while driving?	Yes	22 (14.7)	52 (34.7)	$p < 0.05$
	No	128 (85.3)	98 (65.3)	
If Yes, what is that harm?	1. Feel uncomfortable	12 (8)	28 (18.7)	$p > 0.05$
	2. Difficulty in escaping from the vehicle in case of emergency / accident	10 (6.7)	24(16)	

knowledge, attitude and practice of safety belt use and evaluate the reasons for non use of safety belt among army personnel.

A disclosure statement was given for army personnel and informed consent was taken from army officers and soldiers. Confidentiality of the responders was also maintained.

The limitation of the study was that this study was confined to Rawalpindi Cantonment and thus the results cannot be generalized.

Data was analyzed using SPSS version 15. Descriptive statistics were used to analyze the data.

RESULTS

Mean age of officers and soldiers was 38.3 ± 3.3 and 29.1 ± 2.1 years respectively. Age group details are shown in figure 1. Among the officers category 105 (70%) were males while 45 (30%) were females. All the soldiers were males.

Knowledge of army personnel regarding use of safety belt is given in table-1.

A total of 146 (97.3%) officers and 128 (85.3%) soldiers were in favor of using seat belt while driving whereas 4 (2.7%) officers and 22 (14.7%) soldiers were against it ($p < 0.05$). One hundred forty seven (98%) officers and 134 (89.3%) soldiers were of the opinion that co-sitter should also fasten seat belt while travelling in a vehicle where as 3 (2%) officers and 16 (10.7%) soldiers were not in favor of it ($p < 0.05$).

A total of 140 (93.3%) officers and 130 (86.7%) soldiers were of the opinion that there should be legislation for use of safety belt. Ten (6.7%) officers and twenty (13.4%) soldiers were not in favor of legislation and the results were found to be statistically not significant ($p > 0.05$). One hundred forty

(93.3%) officers and one hundred and eighteen (78.7%) soldiers were of the opinion that those who do not use safety belt should be penalized whereas 10 (6.7%) officers and 32 (21.3%) soldiers were against any penalty ($p < 0.05$).

DISCUSSION

The results of the study did not depict an encouraging picture. The army personnel do not have the true concept of safety belt use and its significance. The general perception is that vehicle crashes cannot be prevented completely but some of the injuries and severity can be prevented or minimized by simple protective measures such as using seat belts.

In this study the majority of the participants had the experience of driving for more than 6 years. Most of them considered themselves knowledgeable about safety belt and its significance. One hundred and forty seven (98%) officers and one hundred and thirty three (88.7%) soldiers expressed that they knew the significance of safety belt. However, this response has to be reviewed with caution because of the absence of a comprehensive test of this aspect in the study. A total of 22 (14.7%) officers and 52 (34.7%) soldiers had the view that wearing safety belt is harmful while driving, e.g. difficulty in escaping from the vehicle in case of emergency/accident and feeling uncomfortable. This shows that they definitely lack the knowledge of advantages of using safety belt.

A study carried out by Al-Khalidi among students of Health Sciences College in Aseer Region, Saudi Arabia revealed that 76.3% of students had difficulties like restriction of movement, anxiety and forgetfulness while using seat belt and 89% of participants were convinced of the importance of using seat belt¹¹.

In this study the participants showed positive attitude towards using seat belt which is an encouraging aspect of the study. One hundred and forty six (97.3%) officers and one hundred and twenty eight (85.3%) soldiers agreed that safety belt should be used while driving a vehicle and majority of the

participants also stressed on the use of safety belt by co-sitter, whereas in a study by Al-Khalidi revealed that 46% of the participants were in favor of using safety belt and majority of them did not support this important aspect¹¹.

The measures are not taken until and unless law is enforced upon them. In this study the majority of participants supported the existence of legislation for use of safety belt and not only this but also recommended penalty for non adherence to use of safety belt. Ninety four (62.7%) officers and 110 (73.3%) soldiers used safety belt whereas 56 (37.3%) officers and 40 (26.7%) soldiers admitted that they do not use safety belt. It is astonishing that while knowing the importance of safety belt, the officers do not use it and on the other side, the soldiers have unrealistic ideas concerning use of seat belts which may be because of the fear of punishment or legislative action against them.

The study also depicted that 50% of the participants had an alarm system in their vehicles which reminded them of using safety belt but others did not have the alarm system which also plays an important role in reminding the driver and co-sitter of using seat belt.

In this study the reasons for not using safety belt were discomfort, carelessness, takes time to wear it and non compulsion of wearing safety belt whereas a study carried out by Ali et al among medical students in Peshawar revealed that the main reasons for not using safety belt were feeling awkward wearing seat belt, discomfort, lack of awareness and unavailability of seat belts¹⁰.

Different nations and cities have their own reasons for the usage of safety belts. Various governments worked hard to implement laws and make various efforts to increase its use by drivers and passengers. These efforts seem to be fruitful in most of the countries like United States, United Kingdom and Europe but in Pakistan, the situation is apparently quite different. It is not a secret that our law and order system is heavily lacking in terms of implementation, but the use of seat belt is an

issue that is directly concerned with an individual's life. There are no laws in the country which necessitate the use of seat belt by drivers or co-sitters. Educating the population and spreading awareness is a more efficient and rewarding step but the importance of law implementation cannot be over looked. In fact, implementation of relevant laws and educating the people, both go hand in hand¹⁰.

CONCLUSION

The knowledge and attitude of army personnel about use of safety belt and its significance was satisfactory but they did not show compliance with its practice. The main reasons for non use of safety belt were carelessness and discomfort which were mainly because of non existence of safety belt laws in Pakistan Army

CONFLICT OF INTEREST

This study has no conflict of interest to declare by any author.

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