



## Research Article

# A Study to Assess the Effect of Video-Assisted Teaching on Knowledge and Attitude Regarding Prevention of Head Injury among Young Adults in Selected Colleges of Guwahati, Assam

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## Abstract

**Introduction:** The young adults need to be aware of head injury and its preventive aspects. They need to understand the causes of head injury, risk factors, and its application of preventive measures. It is utterly important and urgent to make aware and motivate young adults to practice preventive measures of head injury. **Aim:** This study aims to assess the effect of video-assisted teaching on knowledge and attitude regarding prevention of head injuries among young adults. **Materials and Methods:** The study sample consists of 50 young adults from different colleges of Guwahati, Assam. The methods and materials used were self-administered questionnaires and 4-point Likert Scale. **Results:** The study revealed, before the intervention, 58% had inadequate knowledge and none of them had adequate knowledge. After the intervention, 70% of them had adequate knowledge and none of them had inadequate knowledge. Before the intervention, 21% had inadequate attitude and none of them had adequate attitude. After the intervention, 32% had adequate attitude and 4% of them had inadequate attitude. The study revealed that there is a significant relationship between knowledge and attitude and found association between pre-test knowledge score of the young adults on prevention of head injury with their gender as well as between the pre-test attitude score on prevention of head injury with their age and educational qualification. **Conclusion:** The study revealed that the video-assisted teaching was effective and it improved knowledge and attitude of young adults on prevention of head injury.

**Key words:** Head injury, road traffic accidents, traumatic brain injury

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## Introduction

Approximately half of the nearly 4 million days of hospitalization per year from motor vehicle trauma pertain to head injuries. Furthermore, estimates of mortality

following head injury vary from 10 to 36/100,000 populations, accounting for up to 70,000 deaths/year in the United States. Head injuries are responsible for 2% of all deaths and 26% of injury deaths in this country.<sup>[1-4]</sup>

As many as, two-thirds of all motor vehicle accident victims sustain some head injury. Brain injury is the most common cause of death in trauma victims accounting for about half of deaths at the accident site. The injuries are generally blunt and motor vehicle accidents are most frequent. Of particular, significance is motorcycle accidents involving passengers without helmet, which produce severe injuries.<sup>[5-7]</sup>

Among traumatic brain injury (TBI), the most common form is mild TBI (mTBI). A head injury occurs every 15 s and a patient dies from head injury every 12 min, a day does not pass that an emergency physician is not confronted with a head-injured patient.<sup>[2,3,8]</sup>

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TBI is a leading cause of mortality in patients younger than 45 years accounting for more than a third of all injury-related deaths in the United States. Each year 52,000 people die and another 80,000 suffer morbidity due to TBI. Road traffic injury is increasingly becoming a major health problem in Asia.<sup>[7,9]</sup>

In patients who reach the hospital alive, complications from closed head injuries are the single largest cause of morbidity and mortality. Head trauma is usually the primary injury in patients who require long-term rehabilitation. The data are generally applicable to children as well, evident by head trauma's accountancy for an annual mortality rate of 1/1000 in this age group.<sup>[1,2,10]</sup>

The management of head injury has been revolutionized by round the clock monitoring, carotid angiography, isotope brain scan, computerized axial tomography, and monitoring of intracranial pressure. Intermittent positive pressure ventilation, dehydration therapy, and better techniques of operations have made a tremendous difference in the ultimate outcome of severe brain trauma. Recently introduced multimodality evoked potential technique has further improved its management.<sup>[8,9,11]</sup>

Despite all the advances, a lingering lacuna for further research for the betterment of outcomes following head injury still persists. In spite of the best management, 15–20% of head injuries prove fatal. Furthermore, any therapeutic inadequacies may result in further increase in morbidity and mortality. Consequently, the importance of protecting the head from injury is gaining wider recognition. Firm preventive efforts will clearly be effective in reducing the incidence of serious head injuries and their complication. Compulsory wearing of protective devices, for example, helmets and automatic shoulder belts, in cars, etc., has reduced the incidence and degree of serious research, and epidemiological data are required to initiate appropriate preventive measures and to plan necessary services.<sup>[1,5,7,9,11,12]</sup>

### Statement of the study

This study was to assess the effect of video-assisted teaching on knowledge and attitude regarding prevention of head injury among young adults in selected colleges of Guwahati, Assam.

### Objectives

The objectives of the study were as follows:

1. To assess the knowledge regarding prevention of head injury among young adults before and after implementation of video-assisted teaching.
2. To assess the attitude regarding prevention of head injury among young adults before and after implementation of video-assisted teaching.
3. To assess the effectiveness of video-assisted teaching on knowledge and attitude regarding prevention of head injury among young adults.

4. To correlate the pre-test and post-test knowledge and attitude regarding prevention of head injury among young adults.
5. To find out the association between the pre-test knowledge and attitude with selected demographic variables.

### Assumptions

- The young adults may have some knowledge regarding the prevention of head injury.
- The video teaching program may help to improve knowledge and attitude regarding the prevention of head injury.

### Research design

An experimental pretest-posttest design was used for the study. The independent variable in this study was video-assisted teaching on prevention of head injury and the dependent variables were knowledge and attitude of young adults regarding the prevention of head injury. The study was conducted in selected colleges of Guwahati, Assam.

A total of 50 samples were included as study samples using convenient sampling technique. Sample selection was based on inclusive and exclusive criteria.

### Description of the tool

The tool used to prepare in this study was prepared in three sections.

Section I: This section attempted to seek information regarding sample characteristics.

This consists of age, gender, educational qualification, unhealthy habit, source of information, family history of head injury, common mode of travel, history of head injury in the past, and history of hospitalization due to head injury.

Section II: This section attempted to seek information regarding opinion about knowledge of the prevention of head injury. The structured questionnaire consisted of 22 questions and each question had only one correct response. For each correct response, a score of 1 mark was given and for every incorrect answer, a score of 0 was given.

The level of knowledge was categorized as follows:

- <50% inadequate knowledge
- 50–75% moderate knowledge
- >75% adequate knowledge.

Section III: List of statements expressing attitude regarding the prevention of head injury in accordance to responses in 4-point Likert scale was prepared.

Four-point Likert scale consisted of 14 statements. Statements were prepared based on the knowledge of parents regarding head injury. To interpret the attitude on prevention of head injury, the scores were converted percentage and were classified as follows:

- <50% unfavorable attitude
- 50–75% moderately favorable attitude
- >75% favorable attitude.

**Development of the video-assisted teaching**

The following steps were adopted in the development of the video-assisted teaching.

- Outlined the objectives
- Preparation of the video and final draft of the video
- Development of the 4-point Likert scale.
- Content validity of the teaching program. The content validity was obtained from two experts from the field of medicine and seven from the field of nursing.
- Preparation of the final draft: The final draft was prepared after being evaluated by all experts, whereby necessary corrections and modifications were incorporated.

**Data collection procedure**

The data collection was done from June 3<sup>rd</sup>, 2014 to July 5<sup>th</sup>, 2014 for a period of 5 weeks. A formal written permission from the principal of B Borooah College, Handique Girls’ College, and Arya Vidyapeeth College, Guwahati, Assam, was taken. The purpose of the study was explained in details. Then, the principal of each college has given one professor for guiding the investigator to the class. The investigator met the students and explained the purpose of the study. The participants were gathered in a space as provided by the college authority and consent was obtained from each one of them. Pre-test was done to assess the knowledge and attitude regarding the prevention of head injuries using self-administered questionnaire and 4-point Likert scale for assessing attitude. Following pre-test, the investigator delivered a video regarding the prevention of head injury for 30 min. Post-test was conducted after a period of 7 days using the same tool.

- Pre-test: A pre-test was administration of self-administered questionnaire and 4-point Likert scale. The duration of 30 min was given for the samples to complete the tool at the same time.
- Video-assisted teaching program: On the same day after pre-test, the teaching was administered for 30 min using a video. The video-assisted teaching contained information regarding definition of head injury, diagnosis, causes, risk factors, management, complication, and the most important is the prevention of head injury.
- Post-test: Post-test was done after a period of 7 days for the same samples using the same structured questionnaire and 4-point Likert scale.

**Summary of the Findings**

**Data on demographic variables of young adults from selected colleges of Guwahati**

Table 1 shows that the majority of adults (60%) were under the age group of 21–24 years. About 20% belong

**Table 1:** Frequency and percentage distribution of demographic variables

Variables	Frequency	Percentage
Age group (years)		
18–21	10	20
21–24	30	60
>24	10	20
Gender		
Male	37	74
Female	13	26
Educational qualification		
Higher secondary	10	20
Graduate	30	60
Postgraduate	10	20
Others	10	20
Any family history of head injury		
Yes	31	62
No	19	38
History of head injury in the past		
Yes	27	54
No	23	46
History of hospitalization due to head injury		
Yes	24	48
No	26	52
If yes how many times		
Do you have any unhealthy habit of taking		
Alcohol	21	42
Drug	1	2
Any other, specify	1	2
None of above	27	54
Source of information on prevention of head injury		
Media	13	26
Friends	0	0
Health services (hospital, clinic)	3	6
Newspaper and magazines	3	6
Others	31	62
All of above	13	26
Common mode of travel		
Two wheeler	23	46
Four wheeler	27	54

to 18–21 years; 20% belong above 25 years. Majority of young adults (74%) was male and 26% were female. Most of them were graduate (60%) and 20% were postgraduate and 20% were higher secondary. About 62% of them were had a family history of head injury and other 38% did not have a history of head injury. Most of them 54% were had head injury and 46% did not have a history of head injury. Most of them 52% were not hospitalized and 48% were hospitalized due to head injury. About 46% were having unhealthy habit and other 54% did not have. About 26%

were from media (T.V), 6% were from health service, 6% were from newspaper and magazines, and others were from 62%. Majority 54% were travel through four-wheeler and 46% were two-wheeler.

**The first objective was to find out the knowledge regarding the prevention of head injury among young adults before and after implementation of video-assisted teaching**

In Table 2, the frequency and percentage distribution of pre-test and post-test knowledge score of young adults were presented. The table depicts that 58% of participants were having inadequate knowledge, 42% were moderately adequate, and none of them were having adequate knowledge in pre-test, whereas 70% of participants were having adequate knowledge, 30% were moderately adequate, and none of them were having inadequate knowledge in post-test.

**The second objective was to find out the attitude regarding the prevention of head injury among young adult after and before implementation of video-assisted teaching**

In Table 3, the frequency and percentage distribution of pre-test attitude score of young adults are presented. The table depicts that 21% of participants were having unfavorable attitude, 58% were moderately favorable, and none of them were having favorable attitude in pre-test, whereas 32% were having favorable attitude, 64% were moderately favorable, and 4% of them were having unfavorable attitude.

**The third objective was to assess the effectiveness of video-assisted teaching on knowledge and attitude regarding the prevention of head injury among young adults**

*Effect of video-assisted teaching on knowledge regarding the prevention of head injuries*

Before calculating z value, null hypothesis (Ho1) was stated as

Ho1: There is no significant difference between mean pre-test knowledge and post-test knowledge score.

Table 4 shows that the mean knowledge in pre-test was 11.12 and standard deviation of 2.35 in post-test, the mean score was 16.62 with standard deviation of 2.40. The improvement was statistically tested by Z test. The calculated value was greater than tabulated value at 0.01% level. Hence, the null hypothesis was rejected, and hence, research hypothesis was accepted. This indicated that video-assisted teaching on head injury on knowledge among young adult was effective.

*Effect of video-assisted teaching on attitude regarding the prevention of head injuries*

Before calculating z value, null hypothesis (Ho1) was stated as Ho1: There is no significant difference between mean pre-test attitude and post-test attitude score.

Table 5 shows that mean attitude in pre-test was 30.18 and standard deviation of 5.82. In post-test, the mean score was 38.36 with standard deviation of 6.10. The improvement was statistically tested by Z test. The calculated value was greater than tabulated value at 0.1% level. Hence, the null hypothesis was rejected, and hence, research hypothesis was accepted. This indicated that video-assisted teaching on head injury on attitude among young adult was effective.

**The fourth objective was to correlate the pre-test and post-test knowledge and attitude regarding the prevention of head injury among young adults**

In Table 6 the overall mean score of pre-test knowledge and pre-test attitude on prevention of road traffic accident among young adults was 11.12 and 2.35 with SD of 30.18 and 5.82, respectively. The “r” value (0.29) shows that there was a positive relationship between knowledge and attitude.

In Table 7 the overall mean score of post-test knowledge and post-test attitude on prevention of road traffic accident among young adults was 16.62 and 38.36 with SD of 2.40

**Table 2:** Frequency and percentage distribution of pre-test and post-test knowledge score of the young adults regarding the prevention of head injuries (n=50)

Variables	Inadequate knowledge (<50%)		Moderately adequate knowledge (50–75%)		Adequate knowledge (>75%)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Pre-test knowledge	29	58	21	42	0	0
Post-test knowledge	0	0	15	30	35	70

**Table 3:** Frequency distribution of pre-test and post-test attitude score of the young adults regarding the prevention of head injuries (n=50)

Variables	Unfavorable attitude (<50%)		Moderately favorable attitude (50–75%)		Favorable attitude (>75%)	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Pre-test attitude	21	42	29	58	0	0
Post-test attitude	2	4	32	64	16	32



and 6.10, respectively. The “r” value (0.13) shows that there was a positive relationship between knowledge and attitude.

**The fifth objective was to find the association between the pre-test knowledge and attitude with selected demographic variables**

Table 8 shows that the calculated Chi-square value at 0.01% level of significance was greater than the tabulated value. Therefore, the null hypothesis was rejected and concluded that there was an association between the pre-test knowledge score of the young adults on prevention of head injury with their gender.

Table 8 shows that the calculated Chi-square value at 0.01% level of significance was less than the tabulated value. Therefore, the null hypothesis was accepted and concluded that there was no association between the pre-test knowledge score of the young adults on prevention of head injury with their age, education qualification, family history of head injury, history of head injury, history of hospitalization, and mode of traveling.

Table 9 shows that the calculated Chi-square value at 0.01% level of significance was greater than the tabulated value.

**Table 4:** Effect of video assisted teaching on knowledge regarding prevention of head injuries (n=50)

Knowledge	Sample size	Mean	SD	Z	P
Pre-test	50	11.12	2.35	11.58	0.01
Post-test	50	16.62	2.40		

**Table 5:** Effect of video assisted teaching on attitude regarding prevention of head injuries (n=50)

Attitude	Sample size	Mean	SD	Z	P
Pre-test	50	30.18	5.82	6.86	0.01
Post-test	50	38.36	6.10		

**Table 6:** Correlation between pre-test knowledge and pre-test attitude of young adults (n=50)

Variables	Sample size	Mean	SD	Correlation (“r” value)
Pre-test knowledge	50	11.12	30.18	0.29
Pre-test attitude	50	2.35	5.82	

**Table 7:** Correlation between post-test knowledge and post-test attitude of young adults (n=50)

Variables	Sample size	Mean	SD	Correlation (“r” value)
Post-test knowledge	50	16.62	2.40	0.13
Post-test attitude	50	38.36	6.10	

Therefore, the null hypothesis was rejected and concluded that there was an association between the pre-test attitude score of the young adults on prevention of head injury with their age and educational qualification.

Table 9 shows that the calculated Chi-square value at 0.01% level of significance was less than the tabulated value. Therefore, the null hypothesis was accepted and concluded that there was no association between the pre-test attitude score of the young adults on prevention of head injury with their gender, family history of head injury, history of head injury, history of hospitalization, and mode of traveling.

**Discussion**

Majority of adults (60%) were under the age group of 21–24 years. About 20% belong to 18–21 years; 20% belong above 25 years. Majority of young adults (74%) was male and 26% were female. Most of them were graduate (60%) and 20% were postgraduate and 20% were higher secondary. About 62% of them were had a family history of head injury and other 38% did not have a history of head injury. Most of them 54% were had head injury and 46% did not have a history of head injury. Most of them 52% were not hospitalized and 48% were hospitalized due to head injury. About 46% were having unhealthy habit and other 54% did not have. About 26% were from media (TV), 6% were from health service, 6% were from newspaper and magazines, and others were from 62%. Majority 54% were travel through four-wheeler and 46% were two-wheeler.

The present study is supported by Boniface, Respicious, Museru, Lawrence, Kiloloma, Othman Munthali, and Victoria (2016). “Factors associated with road traffic injuries in Tanzania” injuries represent a significant cause of morbidity and mortality worldwide and road traffic crashes account for a significant proportion of these injuries. The aim of this study was to determine the pattern, associated factors, and management of road traffic injury patients in Tanzania. Methods - A cross-sectional study of patients involved in motor traffic crashes and attended in six public hospitals of Tanzania mainland between April 2014 and September 2014. Results - A total of 4675 road traffic injury patients were seen in studied hospitals, 76.6% were male. Majority (70.2%) were between 18 and 45 years age group. Motorcycles were the leading cause of road traffic crashes (53.4%) and drivers (38.3%) accounted for majority of victims. Fractures accounted for 34.1% and injuries were severe in 2.2% as determined by the Kampala Trauma Score II (KTS II). Majorities 57.4% were admitted and 2.2% died at the casualty.<sup>[13]</sup>

**The first objective was to find out the knowledge regarding the prevention of head injury among young adults before and after implementation of video-assisted teaching**

The pre-test knowledge score before the intervention showed as 58% were inadequate knowledge, 42% were

**Table 8:** Association of pre-test knowledge with demographic variables (n=50)

Variables	Inadequate	Moderately adequate	Frequency	Calculated value	Tabulated value	df	Remark
Age group (years)							
18–21	8	2	10				
21–24	15	15	30				
>24	6	4	10	2.79	9.21	2	NS
	29	21	50				
Gender							
Male	18	19	37				
Female	11	2	13	7.11	6.64	1	S
	29	21	50				
Educational qualification							
Higher secondary	8	2	10				
Graduate	15	15	30				
Postgraduate	6	4	10	2.79	9.21	2	NS
	29	21	50				
Any family history of head injury							
Yes	19	12	31				
No	10	9	19	0.36	6.64	1	NS
	29	21	50				
History of head injury in the past							
Yes	14	13	27				
No	15	8	23	0.91	6.64	1	NS
	29	21	50				
History of hospitalization due to head injury							
Yes	16	8	24				
No	13	13	26	1.42	6.64	1	NS
	29	21	50				
Common mode of travel							
Two-wheeler	14	9	23				
Four-wheeler	15	12	27	0.14	6.64	1	NS
	29	21	50				

S: Significant, NS: Non-significant

**Table 9:** Association of pre-test attitude with demographic variables (n=50)

Variables	Inadequate	Moderately adequate	Frequency	Cal	Tab	df	Remark
Age group (years)							
18–21	6	4	10				
21–24	6	24	30				
>24	9	1	10	16.75	9.21	2	S
	21	29	50				
Gender							
Male	14	23	37				
Female	7	6	13	1.01	6.64	1	NS
	21	29	50				

(Contd...)

**Table 9:** (Continued)

Variables	Inadequate	Moderately adequate	Frequency	Cal	Tab	df	Remark
Age group (years)							
Educational qualification	6	4	10				
Higher secondary	6	24	30				
Graduate	9	1	10	16.75	9.21	2	S
Postgraduate	21	29	50				
Any family history of head injury							
Yes	16	15	31				
No	5	14	19	3.09	6.64	1	NS
	21	29	50				
History of head injury in the past							
Yes	11	16	27				
No	10	13	23	0.04	6.64	1	NS
	21	29	50				
History of hospitalization due to head injury							
Yes	11	13	24				
No	10	16	26	0.28	6.64	1	NS
	21	29	50				
Common mode of travel							
Two-wheeler	9	14	23				
Four-wheeler	12	15	27	0.14	6.64	1	NS
	21	29	50				

S: Significant, NS: Non-significant

moderately adequate, and none of them were having adequate knowledge. After the intervention, the post-test scoring of performance, it was found that out of total 50 samples, 70% were adequate knowledge, 30% were moderately adequate, and none of them were having inadequate knowledge.

**The second objective was to find out the attitude regarding the prevention of head injury among young adult after and before implementation of video-assisted teaching**

The pre-test knowledge score before the intervention showed as 42% were unfavorable attitude, 58% were moderately favorable, and none of them were having favorable attitude. After the intervention, the post-test scoring of performance, it was found that out of total 50 samples, 32% were favorable attitude, 64% were moderately favorable, and 4% of them were having unfavorable attitude.

The present study is supported by Titchener *et al.* study on “Knowledge, attitudes, and beliefs toward injury prevention: A population-based telephone survey” in Australia. A total of 1030 residents, the youngest members of society were identified as being the most vulnerable to deliberate injury with young adults accounting for 59% of responses aligning with reported data. However,

younger adults failed to indicate an awareness of their own vulnerability to deliberate injury in alcohol environments even though 61% of older respondents were aware of this trend. Older respondents were the least inclined to agree that they could make a difference to their own safety in or around the home, but were more inclined to agree that they could make a difference to their own safety at work.<sup>[14]</sup>

**The third objective was to assess the effectiveness of video-assisted teaching on knowledge and attitude regarding the prevention of head injury among young adults**

Table 4 shows that the mean knowledge in pre-test was 11.12 and standard deviation of 2.35. In post-test, the mean score was 16.62 with standard deviation of 2.40. The improvement was statistically tested by Z test. The calculated value was greater than tabulated value. Hence, the null hypothesis was rejected, and hence, research hypothesis was accepted. This indicated that video-assisted teaching on road traffic accident on knowledge among young adult was effective.

Table 5 shows that the mean attitude in pre-test was 30.18 and standard deviation of 5.82. In post-test, the mean score was 38.36 with standard deviation of 6.10. The improvement was statistically tested by Z test. The calculated value was greater than tabulated value. Hence, the null hypothesis

was rejected, and hence, research hypothesis was accepted. This indicated that video-assisted teaching on head injury on attitude among young adult was effective.

The present study was supported by Jane Mertz Garcia *et al.* on "Evaluation of a health education program about traumatic brain injury" in the UK. The aim was to evaluate a health education program designed to increase public awareness and understanding about TBI through in person (classroom) and computer-based (electronic) learning environments. In the study, they found that participants had significantly higher ratings of knowledge after the program experience.<sup>[15]</sup>

#### **The fourth objective was to correlate the pre-test and post-test knowledge and attitude regarding the prevention of head injury among young adults**

Table 7 shows that the mean score of pre-test knowledge and pre-test attitude on prevention of road traffic accident among young adults was 11.12 and 30.18 with SD of 2.35 and 5.82. "r" value (0.29) showed that there was a positive relationship between knowledge and attitude.

Table 7 shows that the mean score of post-test knowledge and post-test attitude on prevention of road traffic accident among young adults was 16.62 and 38.36 with SD of 2.40 and 6.10. "r" value (0.13) showed that there was a positive relationship between knowledge and attitude.

#### **The fifth objective was to find the association between the pre-test knowledge and attitude with selected demographic variables**

Table 8 shows that the calculated Chi-square value at 0.01% level of significance was greater than the tabulated value. Therefore, the null hypothesis was rejected and concluded that there was an association between the pre-test knowledge score of the young adults on prevention of head injury with their gender.

Table 8 shows that the calculated Chi-square value at 0.01% level of significance was less than the tabulated value. Therefore, the null hypothesis was accepted and concluded that there was no association between the pre-test knowledge score of the young adults on prevention of head injury with their age, education qualification, family history of head injury, history of head injury, history of hospitalization, and mode of traveling.

Table 9 shows that the calculated Chi-square value at 0.01% level of significance was greater than the tabulated value. Therefore, the null hypothesis was rejected and concluded that there was an association between the pre-test attitude score of the young adults on prevention of head injury with their age and educational qualification.

Table 9 shows that the calculated Chi-square value at 0.01% level of significance was less than the tabulated value. Therefore, the null hypothesis was accepted and concluded that there was no association between the pre-test attitude

score of the young adults on prevention of head injury with their gender, family history of head injury, history of head injury, history of hospitalization, and mode of traveling.

## **Conclusion**

The knowledge and attitude of the young adults on prevention of head injury were assessed using structured questionnaires and 4-point Likert scale. The study revealed that the video-assisted teaching was effective and it improved their knowledge and attitude on prevention of head injury.

The investigator drew the following implications from the study which is necessary concern to the field of nursing service, nursing education, nursing administration, and nursing research.

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## **References**

1. Kelkar A. Epidemiology of Road Traffic Accidents in India: A Review of Literature; 2011. p. 1-89. Available from: [http://www.youthforroadsafety.org/uploads/nieuws\\_bijlagen/rta\\_report.pdf](http://www.youthforroadsafety.org/uploads/nieuws_bijlagen/rta_report.pdf).
2. Gururaj G. Road traffic deaths, injuries and disabilities in India: Current scenario. *Natl Med J India* 2008;21:14-20.
3. Nantulya VM, Reich MR. The neglected epidemic: Road traffic injuries in developing countries. *BMJ* 2002;324:1139-41.
4. Ruikar M. National statistics of road traffic accidents in India. *J Orthop Traumatol Rehabil* 2013;6:1-6.
5. National Crime records Beureau. Accidental Deaths and Suicides in India 2015. New Delhi: National Crime records Beureau; 2015.
6. World Health Organization. World Report on Road Traffic Injury Prevention Summary. WHO Library Cataloguing-in-Publication Data. Geneva: World Health Organization; 2004.
7. Gururaj G. Epidemiology of traumatic brain injuries: Indian scenario. *Neurol Res* 2002;24:24-8.
8. Kondala RG. Road traffic safety management in India analysis-exploring solutions. *Int J Appl Innov Eng Manag* 2013;2:54-67.
9. Peden M, Scurfield R, Sleet D, Mohan D, Hyder AA, Eva J, *et al.* World Report on Road Traffic Injury Prevention. Geneva: World Health Organization; 2004.
10. Gururaj G. Head Injuries and Helmets in Karnataka : Towards Helmet Legislation and Enforcement in Karnataka. Bethesda, Maryland: National Institute of Mental Health and Neuro Sciences; 2005. p. 18.
11. Nama M, Lata NM, Nagar B. A statistical data analysis of road traffic accidents in Jaipur city. *Int Res J Eng Technol*



- 2008;4:853-60.
12. OMS. Preventing Injuries and Violence: A Guide for Ministries of Health. Geneva: World Health Organization; 2007. p. 1-36. Available from: [http://www.who.int/publications/2007/9789241595254\\_eng.pdf](http://www.who.int/publications/2007/9789241595254_eng.pdf).
  13. Boniface R, Museru L, Kiloloma O, Munthali V. Factors associated with road traffic injuries in Tanzania. Pan Afr Med J 2016;23:46.
  14. Titchener K, Haworth N, Lennon A. Knowledge, attitudes and beliefs towards injury prevention: A population-based telephone survey. Int J Inj Contr Saf Promot 2011;18:227-34.
  15. Garcia JM, Sellers DM, Hilgendorf AE, Burnett DL. Evaluation of a health education programme about traumatic brain injury. Health Educ J 2014;73:588-99.