

## A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING PREVENTION OF ROAD TRAFFIC ACCIDENTS AMONG ADOLESCENTS IN SELECTED SCHOOLS OF BANASKANTHA, GUJARAT

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### ABSTRACT

**Background:** Life is a precious gift by God and it should be handled with care. Nursing profession is one of the main professions responsible to care the life of people by providing preventive, curative, promotive, restorative, and rehabilitative care. Accidents are the largest single cause of mortality and disability in children's. In today's high-tech world, there are dangers for children's everywhere, on roads, at home, at school and on play grounds. Boys tend to have more accidents than girls because they are more daring. India has one of the highest road traffic accidents in the world. **Methods:** this study included the Quantitative research approach, pre-experimental one group pre-test post-test research design. 80 adolescents were selected by using Non-probability Convenient Sampling technique. On first day pre- test was done by using the Self-administered questionnaire, Explain about prevention of road traffic accidents. On 7th day post-test was done by using Self-administered questionnaire, to check the effect of Information Booklet on knowledge regarding prevention of road traffic accidents among adolescents. The data obtained were analyzed and interpreted by using both descriptive and inferential statistical in terms of frequency, percentage, and chi-square. **Results:** The knowledge regarding prevention of road traffic accidents among adolescents was assessed. the 'z' value 14.22 is significantly higher than the table value 1.96 at 0.05 level significance. This indicates that there was a difference in the pre-test and post-test knowledge score of respondents and the Information Booklet is effective in improving the knowledge score of adolescents, hence the H<sub>1</sub> hypothesis was proved and accepted. There is an association between pre- test knowledge score with selected Socio- demographic variables; hence the research hypothesis (H<sub>2</sub>) is accepted. **Conclusion:** This study concludes that there is improvement in the level of knowledge adolescents which indicate that the Information Booklet is effective. The demographic variables of adolescents significantly associated with the pre- test knowledge score. The development of Information Booklet will help the adolescents to enhance their knowledge.

**KEYWORDS:** Assess, Effectiveness, Information Booklet, Knowledge, prevention of road traffic accidents, adolescents.

### INTRODUCTION

India has one of the largest road networks in the world. However, Road safety is an issue of national concern. Surge in population and motorization in the country along with expansion of road network contributes to the number of road accidents, injuries and fatalities.<sup>[1]</sup>

Road traffic accident if it occurs on a road or in a place to which the public have access and it include footpaths and bridge ways. Children work, play & or live on the road and this exposure along with other risk factors inherent to childhood makes them particularly vulnerable

in traffic.<sup>[2]</sup> The result is millions of fatal or disabling injuries each year.<sup>[3]</sup> In most countries, road traffic injuries are one of the top two causes of death from unintentional injury, with the highest rates among 15-19 years old.<sup>[4]</sup> In WHO, May 2015 reported that every year, the lives of almost 1.24 million people are cut short their life as a result of road traffic cash. Between 20 to 50 million more people suffer non – fatal injuries, with many incurring a disability as a result of their injury (WHO-UNICEF).<sup>[5]</sup>

Overloading of vehicles, particularly trucks, makes them hard to control, especially when they need to brake. However, it is common practice on Indian highway, similarly driving with protruding loads for instance steel roads protruding out of trucks is also a common sight on Indian roads, these two causes accounted for 36,543 deaths in 2014 (Peden *et al.*).<sup>[6]</sup>

India alone accounts for 73% of RTA burden. Because of poor roads, ill-managed vehicles, improper rash driving, highway being the sites for the play of children and inadequate teaching of traffic rules as well as its inadequate incorporation in the school curriculum that leads to increased involvement of children in RTAs.<sup>[7]</sup>

### STATEMENT OF THE PROBLEM

“A study to assess the effectiveness of Information Booklet on knowledge regarding prevention of road traffic accidents among adolescents in selected schools of Banaskantha, Gujarat.”

### OBJECTIVES OF THE STUDY

- To assess the knowledge regarding prevention of road traffic accidents among adolescents.
- To assess the effectiveness of Information Booklet on knowledge regarding prevention of road traffic accidents among adolescents.
- To find out the association between the pre-test knowledge regarding prevention of road traffic accidents among adolescents with their selected-demographic variables.

### MATERIALS AND METHODS

**RESEARCH APPROACH:** Quantitative Research Approach.

**DESIGN:** Pre-Experimental one group pre- test and post- test design.

**PARTICIPANTS:** 80 adolescents by using non-probability- Convenient sampling technique.

### Data Collection Tool and Technique

Demographic data Consist of selected socio-demographic variables such as Consist of selected socio-demographic variables such as Age in Years, Educational status, Gender, Area of residence, Occupational status of father, Do have any information about Prevention of road traffic accidents. This section consists of 06 items.

Structured knowledge questionnaire on Prevention of road traffic accidents among adolescents. This section consists of 25 items on selected aspects of Prevention of road traffic accidents. Each item had one or more correct answers all of which were scored. Each correct answer was given a score of ‘one’ and wrong answer ‘zero.’ The total score was 25.

### Procedure for Data Collection

**Phase-I (Pre-test):** Pre-test was conducted to assess the knowledge regarding prevention of road traffic accidents among Adolescents.

**Phase-II (Intervention):** Information booklet was given to Adolescents.

**Phase-III (Post-test):** Post-test was conducted to assess the effectiveness of Information booklet on knowledge regarding prevention of road traffic accidents among Adolescents in selected schools of Banaskantha, Gujarat.”

### Analysis and Interpretation

Organization and presentation of the data

The collected data was entered in a excel master sheet for tabulation and statistical processing. The data were analysed and interpreted using descriptive and inferential statistics based on the objectives and hypothesis formulated for the present study.

**The findings are presented under the following headings**

**Section A:** frequency and percentage distribution of socio-demographic variables.

**Section B:** Distribution of respondents by Pre-test and Post-test level of knowledge regarding the effectiveness of Information Booklet on knowledge regarding prevention of road traffic accidents among adolescents

**Section C:** Effectiveness of the Information Booklet.

**Section D:** Finding related to the association between pre-test knowledge with selected demographic variables of adolescents.

### Section A: Frequency and percentage distribution of Socio-demographic variables

**Age in Years:** As regard to Age in years most of the respondent i.e. 36.25% belonged to the age group of 17-19years, 35%% respondent belonged to age group of 13-14, 28.75% belonged to the 15-16 years of age.

**Educational Status:** As regard to educational status most of respondent i.e. 27.5% belonged to 10<sup>th</sup> Standard, 26.25% respondents belonged to 12<sup>th</sup> Standard, 23.75% respondents belonged to 11<sup>th</sup> Standard and rest of 22.5% respondents belonged to 9<sup>th</sup> Standard.

**Gender:** As regard to Gender most of respondent i.e., 53.75% belonged to male, where 46.25% respondent belonged to Female.

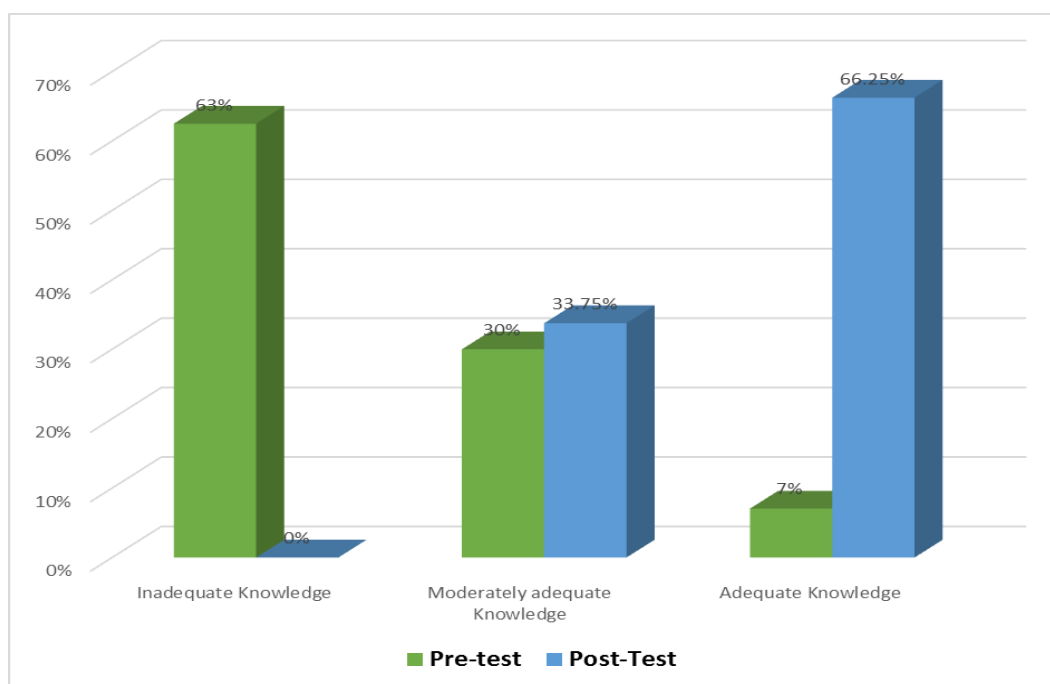
**Area of residence:** As regard to Area of residence, most of the respondent i.e. 71.25% belonged to the Rural, 28.75% respondent belonged to the Urban.

**Occupational status of father:** As regard to Occupational status of father, most of respondent are i.e., 43.75% of the respondent Self - employee, 37.5% respondent Farmer, 12.5% Private employee, 6.25% Government employee.

**Do you have any information about road traffic accidents:** As regard to any information about road traffic accidents most of the respondent i.e., 90% belonged to No, and 10% respondent belonged to Yes.

**Section B: Distribution of respondents by Pre-test and Post-test level of knowledge regarding the effectiveness of Information Booklet on knowledge regarding prevention of road traffic accidents among adolescents**

Level of knowledge	Score	Frequency		Percentage	
		Pre-test	Post- test	Pre-test	Post-test
Inadequate knowledge (0-33%)	0-8	50	00	62.5%	00
Moderately knowledge (34-67%)	9-17	24	27	30%	33.75%
Adequate knowledge (68-100%)	18-25	06	53	7.50%	66.25%
<b>Total</b>	<b>25</b>	<b>80</b>	<b>80</b>	<b>100%</b>	<b>100%</b>



**Figure 09: Level Of Knowledge.**

**Table 9 and figure 9:** Depicts the Pre-test and Post-test knowledge level of adolescents. The result shows that in pre-test 7.50% of the respondents had adequate knowledge, 30% % had moderate knowledge, and 62.5 % had inadequate knowledge and in post-test 66.25%

had adequate knowledge, 33.75% had moderate knowledge and 0% of the respondent had inadequate knowledge prevention of road traffic accidents among adolescents.

**Section C: Effectiveness of the Information Booklet.**

**N-80**

Knowledge	Mean	Mean %	SD	Enhancement	Enhancement %	Df	Z- Value	Inference
PRE-TEST	8.07	33.24	4.58	6.45	33.52%	79	14.22	Significant
POST-TEST	14.52	66.76	3.05					

**Table 10:** The result showed that the mean post-test knowledge score is 14.52 (66.76%) is greater than the mean pre-test knowledge score 8.07 (33.24%). The above table also depicts that the enhancement in the knowledge of respondents is 6.45 (34.52%) supporting the post-test knowledge score are higher than the pretest knowledge score. The data further represent that the 'z' value 14.22 is significantly higher than the table value 1.96 at 0.05 level significance. This indicates that there

was a difference in the pre-test and post-test knowledge score of respondents and the Information Booklet is effective in improving the knowledge score of adolescents.

**H<sub>1</sub>:** There is a significant difference between the pre and post-test knowledge score of adolescents. A hypothesis was tested at 0.05 levels. The calculated 'z' value 14.22 is significantly higher than the table value 1.96 at 0.05

level of significance. This indicates that there is a significant difference between pre-test and post-test knowledge score, hence the  $H_1$  hypothesis was proved and accepted

**Section D:** Finding related to the association between pre-test knowledge with selected demographic variables of adolescents.

The chi-square test was carried out to determine the association between the pre-test knowledge and socio-demographic variables such as Age in Years, Educational status, Gender, Area of residence, Occupational status of father, Do have any information about Prevention of road traffic accidents. Out of which Age in Years  $\chi^2=13.42$ , Educational status  $\chi^2=12.30$ , Gender  $\chi^2=11.35$ , Area of residence  $\chi^2=15.87$ , Occupational status of father  $\chi^2=12.58$ , Do have any information about Prevention of road traffic accidents  $\chi^2=7.42$ . were found to be significant associated with pre-test knowledge score at 0.05 level, hence research hypothesis  $H_2$  was accepted.

## CONCLUSION

The main conclusion from this present study is that most of the adolescents had poor knowledge regarding prevention of road traffic accidents in pre-test and had improved to get extent after intervention which was revealed in post-test. This shows the imperative need to understand the effectiveness of Information Booklet in improvement of knowledge regarding prevention of road traffic accidents among adolescents.

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