



# A study to assess the effectiveness of leaflet on knowledge regarding prevention of road traffic accidents among college students at selected universities of Udaipur, Rajasthan

Vipin Tanwar, Divya Choudhary

Lecturer

geetanjali college of nursing

## ABSTRACT

A study to assess the effectiveness of leaflet on knowledge regarding prevention of road traffic accidents among college students at selected universities of Udaipur, Rajasthan objectives of the study- to assess the knowledge regarding prevention of road traffic accidents among college students. To evaluate the effectiveness of leaflet on knowledge regarding prevention of road traffic accidents among college students. To find out the association between pre test knowledge scores regarding prevention of RTA the selected sociodemographic variable at selected universities in Udaipur used a quantitative experimental approach to assess college students' knowledge of road traffic accident (RTA) prevention through a leaflet intervention. It employed a Pre experimental design to evaluate the effectiveness of a leaflet. Variables included the leaflet as an independent variable, students' RTA prevention knowledge as a dependent variable, and demographic factors. The research, conducted with 200 students, aimed to select a representative sample through non probability convenient technique, based on proximity and feasibility, with criteria for participation and exclusion during data collection. The study analyzes demographic variables and evaluates pre- and post-test knowledge of road traffic accident (RTA) prevention among college students. In section i, demographics are compared with previous studies. Section ii notes 11.93% had inadequate pre-test knowledge, while section iii highlights a full improvement to adequate post-test knowledge. Section iv discusses the leaflet intervention's effectiveness, revealing a significant knowledge score increase (from 11.93 to 23.52), supported by statistical analysis. This underscores the efficacy of interventions like leaflets in enhancing RTA prevention knowledge among college students.

## INTRODUCTION

College students, a segment representing approximately 25% of the total population, hold a pivotal position in society. Their sheer numbers underscore their significance, not just in academic realms but also in broader societal contexts, including healthcare. Indeed, the health and well-being of college students have emerged as a prominent concern, drawing attention from governments and policymakers alike. As tomorrow's citizens,

safeguarding their lives assumes paramount importance, especially amidst the burgeoning issue of traffic-related fatalities. In urban centers teeming with populations ranging from 5.5 to 6 million, the specter of fatal road accidents looms large, prompting interventions such as elevated thoroughfares to alleviate congestion. The surge in vehicular density on inadequately designed roads exacerbates accident risks, compounded by factors like inadequate pedestrian infra-structure and reckless driving practices.

Amidst these challenges, the vulnerability of college students to road traffic accidents looms large. The repercussions of such incidents extend far beyond physical injuries, encompassing psychological trauma and disruptions to academic pursuits. In India, a nation grappling with a staggering toll of 76,000 to 120,000 road traffic deaths annually, the urgency of addressing this crisis cannot be overstated. Alarming projections indicate a further escalation in fatalities by 2020, underscoring the imperative of proactive measures.

Young adults, particularly males, bear the brunt of road traffic fatalities globally, with factors like alcohol consumption and overconfidence exacerbating risks. Disturbingly, a majority of accidents stem from preventable human errors, emphasizing the pivotal role of education and adherence to safety norms. First aid assumes critical significance in mitigating the severity of injuries, underscoring the need for widespread training initiatives.

India, with its vast road network, stands at the epicentre of this crisis, witnessing over 3 million kilometres of roadways traversed by a diverse array of vehicles. Despite strides in awareness and enforcement, the toll of road traffic accidents remains unacceptably high, necessitating concerted efforts across governmental, civic, and community spheres. The onus of road safety transcends individual responsibility, demanding collaborative endeavours encompassing legislative reforms, infrastructure enhancements, and public awareness campaigns.

As the World Health Organization underscores, road traffic injuries exact a staggering toll, claiming over 1.3 million lives annually and leaving millions more maimed or disabled. Such tragedies are not inevitable but rather a consequence of systemic shortcomings and human fallibility. Embracing a preventive paradigm, rooted in education, enforcement, and collective action, offers a pathway to curbing this epidemic. In this endeavour, the well-being of college students assumes heightened significance, reflecting broader imperatives of societal health and resilience.

## **MATERIAL AND METHOD**

The research employed a quantitative approach to develop an intervention for assessing college students' knowledge of road traffic accident (RTA) prevention at selected universities in Udaipur. This method aimed to evaluate the impact of a specific intervention, namely a leaflet on RTA prevention, on students' knowledge. The research design chosen was a pre-experimental, one-group pretest-posttest design, aimed at assessing the effectiveness of a leaflet. The variables of the study included an independent variable (leaflet on RTA prevention), a dependent variable (college students' knowledge of RTA prevention), and demographic variables such as age, gender, and area of residence. The research was conducted at selected universities in Udaipur, selection based on geographical proximity, feasibility, and sample availability. The population under study consist of college students of selected universities, with a sample size of 200 students selected using non

probability convenient technique. Criteria for sample selection included willingness to participate and availability during data collection, with exclusion criteria for non-participation or unavailability during the study period.

## RESULT

The study's findings are organized into several sections. Section i describes demographic variables, such as age, gender, stream of study, area of residence, ownership of vehicles, possession of a license, and sources of information. These variables are compared with similar studies conducted previously.

In section ii, the pre-test knowledge of respondents regarding road traffic accident (RTA) prevention is assessed. Out of 200 respondents, 11.93% had inadequate knowledge, indicating a need for improvement.

Section iii evaluates the post-test knowledge of respondents regarding RTA prevention. Remarkably, 100% of respondents demonstrated adequate knowledge in the post-test.

Section iv discusses the effectiveness of a leaflet intervention on RTA prevention knowledge among college students. The mean post-test knowledge score (23.52) significantly surpassed the mean pre-test score (11.93), with a z-value of 18.88 and p-value of 0.0001, indicating a substantial improvement.

## SUMMARY

The study examines demographic variables and assesses pre- and post-test knowledge of road traffic accident (RTA) prevention among college students. In section i, demographics are detailed and compared with previous studies. Section ii reveals that 11.93% of respondents had inadequate pre-test knowledge. Section iii shows a notable improvement, with 100% demonstrating adequate post-test knowledge. Section iv discusses the effectiveness of a leaflet intervention, indicating a significant increase in knowledge scores (from a mean pre-test score of 11.93 to a mean post-test score of 23.52), supported by a z-value of 18.88 and p-value of 0.0001. The study underscores the value of interventions like leaflets in enhancing RTA prevention knowledge among college students.

## CONCLUSION

The study underscores the critical importance of addressing road traffic accidents (RTA), particularly among college students, who represent a significant portion of the population. Amidst the backdrop of escalating RTA fatalities, interventions like educational leaflets have proven effective in improving students' knowledge of prevention measures. The research, conducted at selected universities in udaipur, employed a robust quantitative approach to evaluate the impact of such interventions. Results revealed a substantial increase in post-test knowledge scores compared to pre-test scores, indicating the effectiveness of the leaflet intervention. This study emphasizes the value of proactive measures in RTA prevention, advocating for widespread educational initiatives and collaborative efforts across various sectors. By enhancing awareness and promoting adherence to safety norms, such initiatives can play a pivotal role in mitigating the devastating toll of RTA, ensuring the well-being and resilience of communities, including college students.

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