Original Research Paper

Nursing

# A PRE-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING ABOUT KNOWLEDGE REGARDING POST-TRAUMATIC STRESS AND COPING STRATEGIES AFTER A TRAFFIC ACCIDENT AMONG ADULT IN SELECTED HOSPITAL.

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**ABSTRACT** **AIMS:** The aim of present study was to assess the effectiveness of planned teaching about knowledge regarding post-traumatic stress and coping strategies after a traffic accident among adult in selected hospital, Objectives of the study is 1. To assess the pre-test level of knowledge regarding post-traumatic stress and coping strategies among adult after a traffic accident. 2.To assess the effectiveness of planned teaching about knowledge regarding post-traumatic stress after a traffic accident, 3. To determine the association between knowledge regarding post-traumatic stress and coping strategies after a traffic accident among adult with their selected demographic variable. **MATERIAL AND METHODS:** Non probability convenient sampling technique was used to select the sample. Quantitative research approach with pre-experimental one group pre-test post-test design was used. The data collected among adult in selected hospital, using socio demographic data and structured knowledge questionnaire. **RESULTS:** The major findings of the study include, in pretest, majority of the subjects 55.70% had poor knowledge, 30% had satisfactory knowledge, 8% had good knowledge and 2.80% was in excellent knowledge regarding post-traumatic stress. After conducted planned teaching post-test knowledge score is, out of 70 subjects 61.40% of the subjects had good knowledge and 7.10% had excellent knowledge about post-traumatic stress. The comparison between the mean of pretest (7.77) and posttest knowledge score (15.11)  It  showed that the mean of differences was 7.34; the calculated 't'value was 11.01. It shows that there was a significant improvement in the knowledge of adult regarding the post-traumatic stress after planned teaching.  **CONCLUSIONS:** The planned teaching is effective in improving the knowledge of adult regarding post traumatic stress and coping strategies after road traffic accident in selected hospital.

## INTRODUCTION

Accidents are more common in day-to-day life. Accidents are frequently occurring because of the newly adopted lifestyles, increased number of vehicles and careless driving. In the present era, the accidents cause a very big burden to the families and patients itself because of the cost of treatment and familial difficulties associated with accidents. Post accidents end in financial burden or behavioral changes in most of the cases for patients as well as the care givers.[1]

In India compared to other countries the traffic rules are weak so there is an increased risk of accidents in our country. Road traffic accidents means that accidents which occur in the areas where the people travelling through the roadways. It includes all the injuries related to the accidents, out of those head injuries are the most common cause of death in road traffic accidents. Trauma involving the central nervous system is a life threatening one. It results in major physical and physiological dysfunction and can alter the patient's lifestyle.[2]

There were about five Lake Road accidents in India, which killed about 1.5 Lake People and injured five Lake People. India, as a signatory to the Brasilia declaration, intends to reduce road accidents and traffic facilities by 50% by 2020.

The motor vehicles (Amendment) Bill, 2016 has been listed for Consideration and passage in the current Budget session of parliament. It seeks to address issues related to road accidents, third party insurance and road safety measure.  In this context, we present some data on road accidents, causes of accidents and motor vehicle accidents around 67% road accidents take place between 9AM and 9PM; 18-34 year olds most affected In 2015, 17.5% of all road accidents occurred between 15:00 hours and 18:00 hours, followed by 17.3% between 18:00 hours to 21:00 hours. This may be attributed to more vehicles present on roads during these hours (peak traffic hours). In 2015, the maximum number of fatalities were seen in the age group of 18 to 34 (50%), followed by the age group of 35-64 years (36%).[3]

The World Health Organization has noted that road accidents are a major public health problem as crashes kill more than 1.25 million people and injure about 50 million people a year, with 90% of such casualties occurring in developing countries. The number of road accidents per lakh population has been increasing since 1970s, with an 84% increase from 1980 to 1990. Across states, Goa had the maximum share in total road accidents/ lakh population in 2015 for accidents/ lakh persons), and Tamil Nadu (100 accidents/ lakh persons). In terms of accident fatalities, Tamil Nadu had the highest share in 2015 (23 fatalities/ lakh persons) followed by Haryana (18 fatalities/ lakh persons), and Karnataka (18 fatalities/ lakh persons). [4]

Post-traumatic stress disorder (PTSD) is one of the most common psychological consequences in adult motor vehicle accident survivors; thirty-five studies have reported the prevalence rate of PTSD between 6%-45%3 which, if left untreated, can bring about significant and permanent outcomes. Many sufferers do not usually seek psychological assistance (psychotherapy and pharmacotherapy) because of avoidance symptoms or stigma. Therefore, many psychological problems of PTSD victims have remained unsolved.[5]

The investigator personally felt from the experience that when they were working in clinical setup, most of the individual suffering from the stress, anxiety, depression or others problems as we care medical and surgical problems of the individual as well as there is need to care mental problems also and it was neglect by the health team members. So the investigators became interested to explore the feeling of individual and wanted to help them for a better and healthy life.

## OBJECTIVE OF THE STUDY

• To assess the pre-test level of knowledge regarding post traumatic stress and coping strategies among adult after a traffic accident.

- To assess the effectiveness of planned teaching about knowledge regarding post traumatic stress after a traffic accident.
- To determine the association between knowledge regarding post-traumatic stress and coping strategies after a traffic accident among adult with their selected demographic variables

### Hypothesis
**H₁:** There is significant difference between pre-test and post-test knowledge score regarding post-traumatic stress and coping strategies after traffic accident among adult which is measure by $p < 0.05$ level of significance.

### Sampling Criteria
### Inclusion Criteria
- Adult with age group 20-40 yrs. after met a traffic accident.
- Adult who are willing to participate in the study?
- Adult who understands language English or Marathi.
- The study was conducted in private- aided hospital.

### Exclusion Criteria
- Adult those who are not willing to participate.
- Multiple traumas with unconscious state.
- Trauma with hands who unable to write.
- History of Pre-existing mental or psychological illness.

### Withdrawal criteria
- Subject can withdraw from this study whenever to do so.

### METHODOLOGY:
Non probability convenient sampling technique was used to select the sample. Quantitative research approach with pre-experimental one group pre-test post-test research design. The data collected among adult in selected hospital. Total 70 samples were selected by using sample calculation formula with the help of prevalence rate. After obtaining consent from the subjects, socio demographic and structured knowledge questionnaire were administered and data were collected.

### TOOLS:
### Socio demographic data sheet:
It contains data regarding age, gender, education, socio economic status, occupation, family.

### Knowledge questions:
This section contains 30 questions to assess the knowledge regarding post-traumatic stress and coping strategies

### Statistical Analysis:
The data was analyzed, by using descriptive and inferential statistics on the basis of objectives and hypothesis of the study. Analysis of effectiveness of planned teaching done with the help of adults paired t' test. Association between post-test knowledge scores and demographic variables were analyzed by chi-square test.

### RESULTS:

| Sr no | Test | Mean | Standard deviation (S.D) | Mean of differences in score (M.D) | _t' value |
|---|---|---|---|---|---|
| 1 | Pre test | 7.77 | 6.39 | 7.34 | 11.01* |
| 2 | Post test | 15.11 | 6.33 | | |
| P < 0.05 level | | | | *significan t | |

The data presented in the table shows that the mean pre-test score was 7.77 with the standard deviation of 6.39, whereas in post test it was 15.11 with the standard deviation of 6.33. The mean difference in pre-test and post test scores was 7.34.The tabulated value for $(n-1) = 70-1$ i.e 69 degree of freedom was 2.20.The calculated _t' value was 11.01 It shows that the calculated _t' value was much higher than the tabulated _t' value. It shows that there was a significant improvement in the knowledge of adult after planned teaching

### CONCLUSION:
After the detailed analysis, this study leads to the following conclusion Planned teaching on post traumatic stress was found to be effective in improving the knowledge of adult. Adult patients had a significant gain in knowledge regarding the post traumatic stress and coping strategies. An association was found between Age, education and socio-economic status of adult knowledge about post traumatic stress and coping strategies.  Hence, based on the above findings, it was concluded undoubtedly that the written prepared material by the investigator in the form of planned teaching helped the adult to improve their knowledge regarding the post traumatic stress and coping strategies.

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