Effectiveness of Structured Teaching Program on Knowledge regarding Road Safety Measures among Primary School Children at Ahilyabai Holkar PrathamikVidyalay, Loni (Bk).

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Abstract: A study to assess the effectiveness of structured teaching program on knowledge regarding road safety measures among primary school children at Ahilyabai Holkar Prathamik Vidyalay, Loni (Bk).was carried out for partial fulfilment of the requirement for the award of the degree of Bachelor of Nursing at Pravara Institute of Medical Sciences, Loni. The objectives of the study were to assess the level of knowledge on road safety measure among primary school children. To determine the effectiveness of structure teaching program on road safety measures among primary school children. The inclusion criteria were: a) Studying in primary school, b) Willing to participate in the study, c) Present at the time of data collection, d) Able to read and write Marathi. Exclusion criteria - Not Present at the time of data collection. A structured questionnaire is used for data collection. The analysis was done with the help of descriptive and inferential statistics. Comparison of the pre test and post test shows the effectiveness of STP by (18%) as the post test mean percentage (88%) shows that the primary school children had very good knowledge which in higher than pre test mean percentage (70%).

Keywords: Structured teaching, road safety measures, primary school children

1. Introduction

Shape the future of life, healthy environments for children. The children of today is the adults of tomorrow they deserve to inherit a safer, fairer and healthier world, there is no task more important than safe guarding their environment.

A road traffic accident refers to any accidents involving at least one road vehicle, occurring on road open to public circulation and in which at least one person is injured or killed.

Every year more than 1.17 million people die in road crashes around the world. The majority of these deaths, about 70 % occur in developing countries, 65 percent of death involves pedestrians and 35 % of pedestrian death in children.

Road traffic accidents are one of the main causes of death and injury to children of school age. Over 10 million are crippled or injured each year. It has been estimated that at least 6 million more will die and 60 million will be injured during the next 10 years in developing countries unless urgent action is taken. The World Health Day 2004 focused on this rapidly growing public health problem of accidents. The “Road Safety is no accident” is a message to the public that be solution to this grave problem lies in their own hands. Action can be taken on a number of fronts to prevent these needness deaths and disabilities, and the immense loss and suffering they cause.

As adults, we are responsible for young children’s safety around traffic whether they are pedestrians or passengers. The aim of road safety is convey information to road users so as to enhance their knowledge about road safety issues, influence their behavior on the road and / or prepare them for new safety measures

2. Literature Survey

A study was conducted on road traffic accidents among underage users of motorcycles in 2007. A study was conducted to evaluate those factors among 1760 subjects in 38 schools. Fifteen percent of subjects had an accident while riding motorcycle. Children as riders are exposed to higher risks of accident and longer life. Children as riders are exposed to higher risks of accident and longer life with disability.

A epidemiological study on road traffic accident was done in march 2004 in south India, among 726 road traffic victims reported in one year period at JIPMER, Pondicherry, discloses that, there were 83% male & 17% female accidents victims.

A study was conducted on death due to road traffic accidents in Hyderabad city in India. The result of the study was a total of 3,039 cases of road traffic crashes were recorded for 2002 including 400 cases (13.2%) were killed. Three hundred and sixteen cases of road traffic crashes resulting in deaths were reported in the newspaper. The majority died were males, 70% of those killed were between 16 and 49 years of age. Collision with a vehicle caused 86.4% of all crashes and 60% of the victims died before reaching hospitals.

A study was conducted in Australia in 2008 on the increasing problem of motorcycle injuries in children and adolescents. The study had shown that the average rise in 9.6% of motorcycle accidents among children below 16
years. About a quarter of motorcycle injuries occurred in children below 10 years. So they concluded that the motorcycle injuries were increasing in children and adolescents. Researchers suggested that there is an urgent need for coordinated legislative changes and education efforts to decrease motorcycle injuries in children.

**Problem Definition**

A study to assess the effectiveness of structured teaching program on knowledge regarding road safety measures among primary school children at Ahillyabai Holkar Prathamik Vidyalay, Loni (Bk).

**3. Objectives of study**

1) To assess the level of knowledge on road safety measure among primary school children.
2) To determine the effectiveness of structure teaching program on road safety measures among primary school children.

**4. Material and Methods**

The methodology of the research indicates the general pattern of organizing the procedure of gathering valid and reliable data for the problem under investigation.

The methodology of the study includes the description of research design and research approach, setting of the study, sample, sampling technique, developing and testing of tool, method of data collection and plan for data analysis based on the study objectives and hypothesis.

The methodology of the research indicates the general pattern of organizing the procedure of gathering valid and reliable data for the problem under investigation.

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Intervention</th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day-1</td>
<td>Day-1</td>
<td>Day-7</td>
<td></td>
</tr>
<tr>
<td>0₁</td>
<td>X</td>
<td>0₁</td>
<td></td>
</tr>
</tbody>
</table>

The research approach is the most essential part of any research. The entire study is based on it. The appropriate choice of research approach depends on the purpose of the research study that is under taken. “Approach to research is an umbrella which covers the basic procedure for conducting research”.

The researcher found that without control group is best suited, as it is scientific investigation in which the observation are made, data are collected according to a set of well defined criteria and studies observable changes that taken place under control conditions.

**5. Results**

A structured questionnaire is used for data collection. The analysis was done with the help of descriptive and inferential statistics.

<table>
<thead>
<tr>
<th>S.no</th>
<th>Data analysis</th>
<th>Method</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Descriptive statistics</td>
<td>Mean standard deviation, percentage</td>
<td>Knowledge regarding road safety measures</td>
</tr>
<tr>
<td>2</td>
<td>Inferential statistics</td>
<td>Paired t test</td>
<td>Effectiveness of structure teaching programme</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unpaired t test and one way ANOVA2</td>
<td>Associate demographic variables with level of knowledge</td>
</tr>
</tbody>
</table>

The data was analyzed and is presented in the following sections:

**Section A**: This section deals with Description of socio demographic characteristics of primary school children.

**Section B**: This section deals with Effectiveness of structure teaching program

a) Area wise comparison of mean, SD, mean % of pre test and post test knowledge score of road safety measures among primary school children.

b) Item wise comparison of pre test and post test correct knowledge response percentage of road safety measures among primary school children.

**Section C**: This section deals with Hypotheses testing.

**Score of primary school children regarding road safety measures**

<table>
<thead>
<tr>
<th>SN</th>
<th>Area</th>
<th>Max Score</th>
<th>Pre test</th>
<th>Mean</th>
<th>SD</th>
<th>Mean %</th>
<th>Post test</th>
<th>Mean</th>
<th>SD</th>
<th>Mean %</th>
<th>Difference in mean %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Walking on road</td>
<td>6</td>
<td>4.53</td>
<td>1.11</td>
<td>75%</td>
<td>5.2</td>
<td>0.80</td>
<td>88%</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Travelling on road</td>
<td>4</td>
<td>2.95</td>
<td>0.81</td>
<td>73%</td>
<td>3.4</td>
<td>0.78</td>
<td>85%</td>
<td>12%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Rules and symbols</td>
<td>10</td>
<td>6.5</td>
<td>1.26</td>
<td>65%</td>
<td>8.8</td>
<td>1.14</td>
<td>88%</td>
<td>23%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall</td>
<td>10</td>
<td>6.5</td>
<td>1.26</td>
<td>65%</td>
<td>8.8</td>
<td>1.14</td>
<td>88%</td>
<td>23%</td>
<td></td>
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</tr>
</tbody>
</table>

Comparison of the pre test and post test shows the effectiveness of STP by (18%) as the post test mean percentage (88%) shows that the primary school children had very good knowledge which in higher than pre test mean percentage (70%). Sub area wise comparison of mean, SD, mean % of pre test and post test knowledge score of primary school children regarding road safety measures shows that in post test highest mean score of (8.8± 1.14) which is 88 % of total score obtained in areas of “rules and symbols for road safety measures ”and lowest post test mean score (3.4± 78) which is (85%) was obtained in the area of “travelling on road and had lowest effectiveness (12%) which might be due to highest pre test score, however the other areas like walking on road had (88%). Hence it can be interpreted that STP was effective on various areas, to improve the knowledge on road safety measures.
6. Discussion

A quasi experimental study was carried to assess the effectiveness of STP regarding road safety measures on knowledge of primary school children in Ahillyabai Holkar Prathamik Vidyalay, Loni (Bk). Data was collected from 60 primary school children by systematic random sampling techniques by using structure questionnaire. The descriptive and inferential statistics was used for data analysis and the result was presented in the form of tables and diagram.

This chapter attempt to discuss the findings of the study as per objectives. These findings are discussed under the following headings

- Description of demographic data of primary school children.
- Assessment of effectiveness of STP on knowledge on road safety measures.

Description of demographic data of primary school children –

Highest (36 %) of primary school children where in age group of 10 and above and 33 % of them were in the age group of 8-9 years.

Majority (53%) of primary school children was male and remaining (47%) were female, it was consistent with the study conducted by Sreenivasan and Gautam (2004) who also observed that 83% male and 17% female were accidental victims.

Majority (28%) of primary school children were studying in 1st standard, it was consistent with the literacy rate of India in which primary education rate grown to 74.04% (2011 census) from 12% at the end of 1947.

Highest percentage (37%) of student’s father was working as farmers and (22%) were government and others workers, this findings are supported by the survey of Hindustan times, 2015 in which they found that 60.4% of population in India involved in farming.

In post test the overall mean knowledge score of primary school children regarding road safety measure was (17 ± 1.49) which is 88% of the total score indicates primary school children had very good knowledge and in pretest it was (14±2.19) which is 70% and the effectiveness was 18% it was evident that there was significant gain in mean knowledge score. This finding was consistent with the study done at Bharati Matric higher secondary school, Maduravoyal.

7. Conclusion

The major conclusion drawn from this study is that STP was found to be effective in improving the knowledge of primary school children on road safety measures. So it should be emphasis that having educational sessions with the students along with family members regarding road safety measures of primary school children improves their knowledge. This led to a regular awareness, preventive measures and cares and thus reduces the lack of awareness, and less chance of accidents and complications thereby leading a complete cure and longer survival.

8. Future Scope

The findings of the study have implication for nursing practices, nursing education, nursing administration and nursing research.

Nursing Administration

- As emphasized through the study findings providing sample with adequate knowledge will improve the students compliance towards safety and taking preventive measures.
- Content of STP will help the nursing professionals working in the hospital and community for reinforcing their knowledge and skill.

The STP can be used in community areas to provide education to students and family members of primary school children

Nursing Education

The practical knowledge of nurses depends on the education they receive so the nursing education should prepare the nurses to realize their responsibility as nurse’s educators

In service education and continuing education should be established in such a way to update the nurse’s knowledge in various aspects of road safety measures of primary school children.

Nursing Research

There is need for more studies in developing countries like India as incidence of road accidents is more common in such countries. Such research studies should be done on various aspects of road safety measures including walking on road and prevention of complication.

Nursing Practices

Community outreach services including health education related to safety measures of road traffic accident can be planned and implemented and improved.

References

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Author Profile

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