

A Study to Assess the Effectiveness of Structured Teaching Programme (STP) Regarding Prevention and Control of Rabies among High Schools Children at Selected High School Bidar

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Abstract

Background: Rabies is endemic in most countries of the world including India. Rabies remains a problem in many parts of the world. In developing countries rabies is a major threat to public health and is responsible for numerous human deaths. Rabies occurs in all parts of India with the exception of Andaman and Nicobar Islands and Lakshadweep. Approximately 33,000-40,000 human deaths occur every year. **Objectives:** To assess the pretest knowledge among high school children at selected high schools regarding prevention & control of rabies. To administer structured teaching programme to the high school children of selected high school regarding prevention & control of rabies. To assess the posttest knowledge among the high school children at selected high schools regarding prevention and control of Rabies. To determine the effectiveness of structured teaching programme in terms of gain in knowledge course. To know the association with pretest & posttest knowledge scores with selected demographic variables. **Methodology:** The research design selected for the study was a Pre-experimental one group pre-test and post-test design. A formal written permission was obtained from the higher authorities of the high school. The convenient sampling technique was used to select 60 high school children. In view of nature of the problem and to accomplish the objectives of the study a self administered questionnaire was prepared to assess the knowledge of high school children regarding prevention and control of rabies. The Reliability and validity of the tool was ensured in consultation with guide and experts in the related field. The data was collected and analyzed by using descriptive and inferential statistics. **Results:** The findings of the study revealed that there was a marked increase in knowledge of high school children after exposing them to structured teaching programme on advanced prevention & control of rabies. The mean Pre-test knowledge score of subjects was 13.52 with mean percentage of 33.8 where as the mean Post-test knowledge score of subjects was 28.3 with mean percentage of 74. The mean Post-test knowledge score was found to be significantly higher than mean Pre-test knowledge score at 0.05 level of significance ($t_{59}=27.44$ $P<0.05$). Findings of the study revealed that the calculated chi-square value for all variables was less than table value. Hence it was concluded that Post-test knowledge score of High school children on Prevention and control of rabies had no association with the demographic variables. But there was no association found between pre-test knowledge score with other demographic variables. **Conclusion:** The findings of the study suggested that the structured teaching programs are beneficial in improving the knowledge of high school children regarding prevention & control of rabies.

Keywords: Structured Teaching Programme, Rabies, Knowledge, High school students

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Introduction

India is a developing country, where communicable diseases are one of the major health problems. Rabies is one of the communicable diseases and zoonotic diseases also known as Hydrophobia. Zoonotic diseases have been known since antiquity. Rabies

is known since biblical times. The discovery of causative agents during the “golden era” of microbiology called attention principally to diseases exclusively pathogenic to man. Zoonotic diseases were overshadowed by diseases peculiar to man alone. Only as human infections came under better control was attention drawn to zoonotic diseases [1].

Rabies is one of the oldest recognized diseases affecting humans and one of the most important zoonotic diseases in India. It has been recognized in India since the Vedic period (1500–500 BC) and is described in the ancient Indian scripture *Atharvaveda*, wherein Yama, the mythical God of Death, has been depicted as attended by 2 dogs as his constant companions, the emissaries of death. Rabies is endemic in most countries of the world including India [2].

Rabies remains a problem in many parts of the world. In developing countries rabies is a major threat to public health and is responsible for numerous human deaths. Rabies occurs in all parts of India with the exception of Andaman and Nicobar Islands and Lakshadweep. Approximately 33,000–40,000 human deaths occur every year [3].

Rabies is a zoonotic disease (a disease that is transmitted to humans from animals) that is caused by a virus. The disease infects domestic and wild animals, and is spread to people through close contact with infected saliva via bites or scratches. **Rabies** is present on all continents with the exception of Antarctica, but more than 95% of human deaths occur in Asia and Africa. Once symptoms of the disease develop, rabies is nearly always fatal [4].

Poor people are at a higher risk, as the average cost of rabies post-exposure prophylaxis after contact with a suspected rabid animal is US\$ 40 in Africa and US\$ 49 in Asia, where the average daily income is about US\$ 1–2 per person. In India, 20 000 rabies deaths (that is, about 2/100 000 population at risk) are estimated to occur annually; in Africa, the corresponding figure is 24 000 (about 4/100 000 population at risk).

Although all age groups are susceptible, rabies is most common in children aged under 15; on average 40% of post-exposure prophylaxis regimens are given to children aged 5–14 years, and the majority are male [5].

Rabies is a vaccine preventable disease, where the co-ordinated efforts of the public and the health care workers can surely prevent rabies. The Alliance for Rabies Control’s mission is to prevent human

rabies deaths and to alleviate the burden of rabies in animal species. Its vision is a world where all countries have eliminated rabies. It began in 2005 as an independent, non-profit organization and has built an international community of individuals and organizations with an interest in and concern for rabies control. The Alliance is achieving its mission by raising awareness, supporting rabies control programs and promoting educational initiatives in order to stop the unnecessary loss of human life [6].

Objectives

1. To assess the pretest knowledge among high school children at selected high schools regarding prevention & control of rabies.
2. To administer structured teaching programme to the high school children of selected high school regarding prevention & control of rabies.
3. To assess the posttest knowledge among the high school children at selected high schools regarding prevention and control of Rabies.
4. To determine the effectiveness of structured teaching programme in terms of gain in knowledge course.
5. To know the association with pretest & posttest knowledge scores with selected demographic variables.

Methodology

Research Approach

Evaluative Research Approach

Research Design

Pre-Experimental; one group pretest post test design

Sampling Technique

Non-Probability; Convenient Sampling Technique.

Sample Size: 60

Setting of Study

Selected High school of Bidar

Tool used

Structured Knowledge Questionnaire to assess knowledge regarding nicotine consumption and its prevention among high school students.

Section I:

Socio-demographic variables of subjects.

Section II:

Knowledge items on nicotine consumption and its prevention.

Procedure of Data Collection

The formal permission was obtained from the Head Master of selected high school of Bidar. The written consent was obtained by the subjects. The pre-test includes structured knowledge questionnaire to assess knowledge of subjects regarding rabies control and its prevention. Structured Teaching Programme (STP) was administered at the end of the pre-test. The post-test of the study was carried out 7 days later, using the same tool as the pre-test. Data collected was then tabulated and analyzed.

Results

The findings related to socio-demographic variables of subjects:

- Majority 30 (50%) of the respondents were in the age group of 15 years.
- 35 (58.30%) of the respondents were males.
- Majority 38 (63.30%) of respondents were from Hindu religion.
- Majority 40 (66.70%) of the respondents were belongs to nuclear family.
- Majority 38 (63.30%) of the respondents had existing source of knowledge from Newspaper/ magazine/books.

Table 1: Mean, SD and Mean percentage of Pre-test knowledge

N=60

Sl. No	Knowledge	Max Score	Range	Mean	SD	Mean Percentage
1	Knowledge regarding prevention & control of rabies	40	5-21	13.52	3.143	33.8

Table 2: Mean, SD And Mean Percentage of Post-Test Knowledge

Sl. No	knowledge regarding prevention & control of rabies	Max Score	Range	Mean	SD	Mean Percentage
1	knowledge regarding prevention & control of rabies	40	22 - 34	28.13	2.966	74

Table 3: Comparison of pre-test and post-test knowledge

N =60

	knowledge regarding prevention & control of rabies	Pre-test Percentage	Post-test percentage
01	Poor (≤ 13)	51.7	00
02	Average (14-26)	48.3	30
03	Adequate (27-40)	00	70

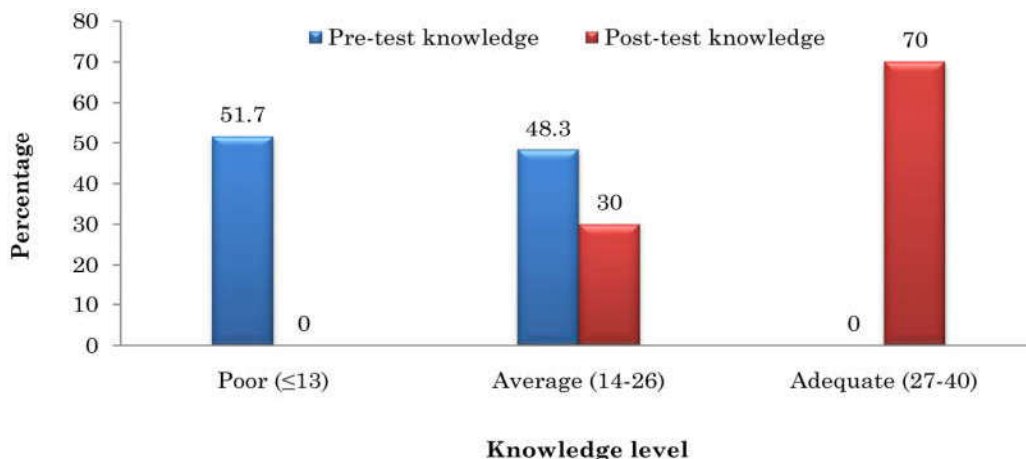


Fig. 1: Bar diagram shows the comparison of Pre-test and Post-test Level of knowledge

Table 4: Association between Pre-test and Post-test knowledge scores N=60

Aspects	Max. Score	Respondents Knowledge Scores Mean difference	SE of mean	't' value	DF	P value	Inference
Difference in pre-test and post-test knowledge	40	14.617	0.533	27.444	59	<0.001	HS

Findings related to Pre-test knowledge score of High school children regarding Prevention and control of rabies:

The data in the table 1 shows the Pre-test knowledge score of the subjects. The mean Pre-test knowledge score of subjects was 13.52 with mean percentage of 33.8.

Findings related to Post-test knowledge score of High school children regarding Prevention and control of rabies.

The data in the Table 2 shows the Post-test knowledge score of the subjects. The mean Post-test knowledge score of subjects was 28.13 with mean percentage of 74.

The Bar diagram shows the comparison of Pre-test and Post-test level of knowledge. It is clear from the diagram that Most of the subjects had (70%) adequate Post-test knowledge whereas (51.7%) subjects had poor Pre-test knowledge regarding Prevention and control of rabies.

Findings related to effectiveness Self instruction module on knowledge regarding Prevention and control of rabies

It is evident from the data presented in the table 4 that the calculated 't' value (27.44) was greater than the table value. Hence the research hypothesis was rejected at 0.05 level of significance. The mean difference between pre-test and post-test knowledge score was a true difference and not a chance difference. This indicates that the Self instruction module was significantly effective in increasing the knowledge of High school children regarding Prevention and control of rabies.

Association between knowledge score and selected variable

Association between pre-test knowledge score and selected demographic variable:

The calculated chi-square value for all variables was less than table value. Hence it was concluded that Pre-test knowledge score of High school children on Prevention and control of rabies had no association with the demographic variables.

Association between post-test knowledge score and selected demographic variable:

The calculated chi-square value for all variables was less than table value. Hence it was concluded that post-test knowledge score of High school children on Prevention and control of rabies had no association with the demographic variable

Overall experience of conducting this study was satisfying and enriching. For the investigator the study was a new learning experience.

Conclusion

Knowledge of high school students regarding the rabies control and prevention was inadequate before the administration of STP. The STP was effective in increasing the knowledge of high school students about rabies control and prevention i.e, overall and in all aspects in the post-test.

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