



A Study to Assess the Effectiveness of Health Educational Package on Knowledge Regarding Prevention of Worm Infestation Among School Going Children Studying at Selected Schools of Punjab

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ABSTRACT

Worm infestation is one of the silent diseases which is prevalent in developing countries especially India. Worm infestation is more prevalent among school children. It can result in impaired nutrition and poor development of children. Knowledge of the worm infestation can assist in early detection of the diseases and reduce the incidence of complications. The present study was carried out to assess the effectiveness of health educational package on knowledge regarding prevention of worm infestation among school going children studying at selected schools of Punjab. A pre-experimental study with one group-pretest and posttest design by using simple random sampling. 250 school going children were selected. Health educational program was used to establish the pre-test knowledge score and health educational program was administered for selected school going children and post-test was conducted to establish the effectiveness of health educational package on knowledge regarding prevention of worm infestation. It is evident from the result that pre-test knowledge mean score was found to be 11.54 as compared to the post test mean score of 16.41. Further, the enhancement of mean score was found to be 4.87. However, the statistical paired t-test indicate the enhancement of knowledge was found to be highly significant ($t= 12.88, p < 0.05$) revealing the effectiveness of health educational package on knowledge regarding prevention of worm infestation. It is concluded that health educational program showed the highly significant effect on knowledge regarding prevention of worm infestation.

Keywords: School Going Children, Prevention of Worm Infestation.

1. INTRODUCTION AND BACKGROUND OF THE STUDY

Worm infestation is a major public health problem. It has been estimated that more than 25% of the world's population is infected with worms, with the major incidence occurring in developing countries. It is one of the main health concerns especially among school going children.¹⁻³

Development and wellbeing of children is influenced by a variety of factors including the economic condition of the family, education status of parents especially the mother, availability of safe drinking water and sanitary facilities and accessibility to health care services and availability of education.⁴

2. OBJECTIVES

- To assess the pre-test knowledge regarding prevention of worm infestation among school going children.
- To assess the effectiveness of health educational package regarding prevention of worm infestation among school going children.
- To assess the post-test knowledge regarding prevention of worm infestation among school going, children
- To find out the association between pretest knowledge with their selected demographic variables

3. MATERIALS AND METHODS

This pre-experimental research study was conducted on school going children 8-12 years studying at selected schools of Punjab. Total 250 students were recruited for the study by using simple random sampling techniques. One group pre-test post-test research

design is used to achieve the stated objectives. Data was collected using structured knowledge questionnaire regarding worm infestation which consisted of two sections

Section 1 Comprised of demographic variables that included with age, gender, class, religion, type of family, member or children in the family, residence, dietary pattern, source of drinking water, did you filter water before drinking, method of filtration, mode of defecation, previous history of worm infestation, and source of information.

Section 2 Comprised of 30 questions regarding prevention of worm infestation, its causes, sign and symptoms prevention. Each correct marks was given one mark and the incorrect response was given zero marks. Maximum scores of the questionnaire were 30. Subjects with score 21-30 fall into the good category, 11-20 into average category and below 10 into poor category.

A health educational program for imparting knowledge on various aspects of worm infestation especially prevention was developed after consulting books, journal, and expert opinions. The program consisted of introduction about worm infestation, its causes, sign, and symptom, preventions.

Content validity of tool was determined by taking by taking opinion of nursing experts. A pilot study was conducted on 8-12 years students of another school of the same area to assess the feasibility of study and relevant modifications were made thereafter. The reliability of tool was established by ‘split half method’ using Karl Pearson coefficient of co-relation’. The tool was found to be reliable with the reliability of 0.9. Written permission to conduct the study was taken from the principal of the selected school of Punjab. Study subjects were also informed and explained the purpose of the study.

Data Collection

Pretest: On the first-day pretest was conducted. Knowledge questionnaire was administered to each subject. On an average 40 minutes were given to fill the questionnaire.

Intervention: After the pretest single day teaching session was carried out. Health educational package was administered to subjects through flash cards in Hindi Languages. The health program consisted of introduction about worm infestation, its causes, sign, and symptom, preventions. The total time taken for delivering health educational program was 40 minutes.

Posttest: After seven days of teaching session again knowledge questionnaire was administered to students to assess the posttest knowledge.

Data analysis: The data collected by the researcher was transferred to a master sheet prepared for each section of the tool. The descriptive as (frequency and percentage) well as inferential statistics (chi square, t-test) was to fulfill the objectives of the study.

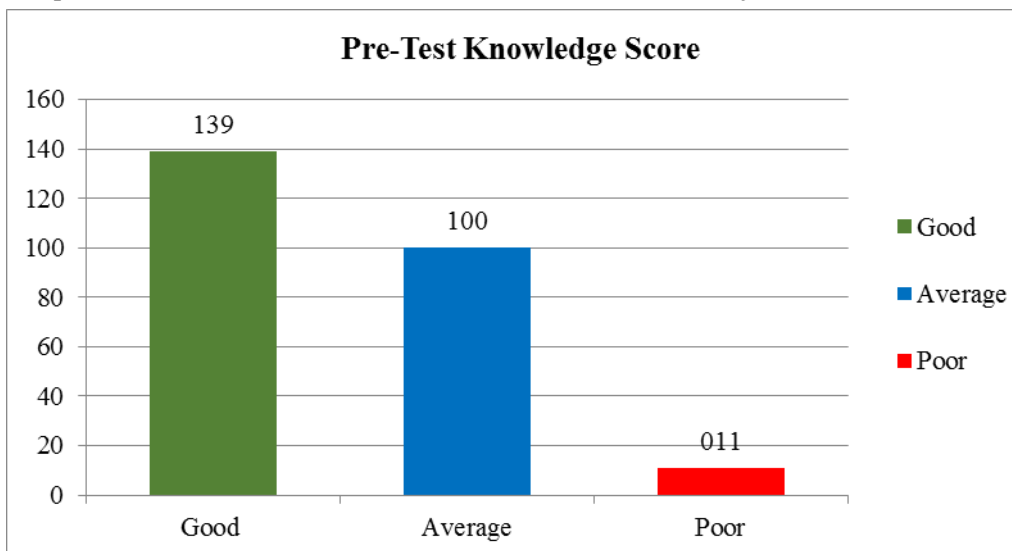
4. RESULTS

Out of 250 school going children majority of 129 (51.6%) subjects were from the age group of 11- 12 years, 121(48.4%) were in the age group of 8-10 years. 131(52.4) subjects were male and 119(47.6%) were female. Educational status shows that majority of subjects 97 (38.8%) were in 5th standard. As per religion, 133 (53.2%) subjects belonged to Hindu. Type of family shows that 126 (50.4%) subjects were living in joint family, the number of children in the family were 106 (42.4%), three children. Place of residence shows that 183 (73.2%) subjects were living in urban area. According to dietary pattern, 163 (65.2%) subjects were vegetarian. Majority of subjects, 157 (62.8%) were drinking tap water, Majority of 207 (82.8%) subjects were drinking filtered water. Based on method of purification of water, majority of the 154 (61.6%) subject families used boiling as a method of purification of water. Majority 227 (90.8%) subjects were using sanitary latrines. Most of the subjects 198 (79.2%) were not having any previous history of worm infestation. Source of information shows that 143 (57.2%) subjects got information regarding worm infestation through mass media.

Frequency and percentage distribution of the subjects as per pretest knowledge score

N=250

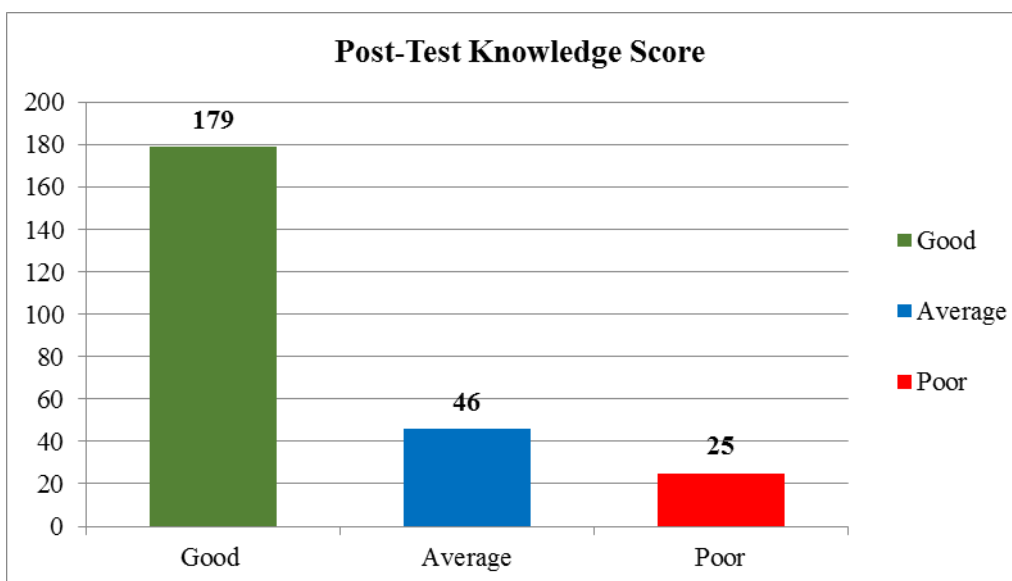
KNOWLEDGE LEVEL	RANGING SCORE	SCHOOL GOING CHILDREN	
		f	%
GOOD	< 50% SCORE	139	55.6%
AVERAGE	51-75% Score	100	40.0%
POOR	>75% Score	011	04.4%



Frequency and percentage distribution of the subjects as per posttest knowledge score

N=250

KNOWLEDGE LEVEL	RANGING SCORE	School going children	
		f	%
GOOD	< 50% SCORE	179	71.6%
AVERAGE	51-75% Score	046	18.4%
POOR	>75% Score	025	10.0%



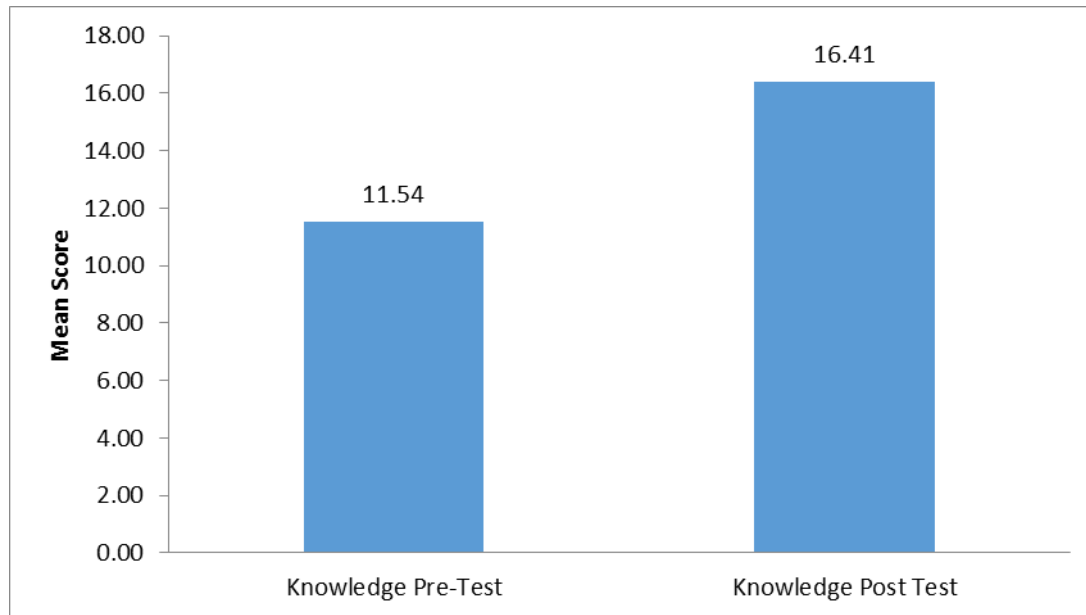
COMPARISION BETWEEN PRE AND POST TEST KNOWLEDGE SCORES ON PREVENTION OF WORM INFESTATION AMONG SCHOOL GOING CHILDREN

N=250

Test	Items	Mean	Std. Deviation	Std. Error Mean	Mean difference	Paired t-test	p-value
Knowledge Pre-Test	250	11.54	3.82	0.24	4.87	12.88	.0001**
Knowledge Post Test	250	16.41	4.65	0.29			

This table represents the pretest mean knowledge score was 11.54 and test mean knowledge score was 16.41. Further, the difference means knowledge score on prevention of worm infestation among school going children found to be 4.87 percent.

The paired t test value 12.88 shows that there was a statistically significant improvement between pre and posttest knowledge score on prevention of worm infestation of the subjects at 0.05 level degree of freedom.



5. CONCLUSION

Worm infestation is one of an easily preventable disease. Simply educating the children at grass root level can help to develop awareness among school children and subsequently and they become more conscious about their health. More and more educational programme should be carried out and the health workers and nursing students should be involved in these programmes. Teaching programme focus should also be placed on providing basic services to children so that a healthy nation can be developed. Hence the study concluded that knowledge level among school going children regarding prevention of worm infestation was inadequate before the administration of health educational package. The health educational package was effective in increasing the knowledge of school going children, that is overall and in all knowledge aspects in the post test score were high compared to the pretest score. There was no significant association between pretest knowledge score with their selected demographic variables at 0.05 level of significance. Therefore the hypothesis was rejected.

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