NUJHS Vol. 4, No.2, June 2014, ISSN 2249-7110
Nitte University Journal of Health Science

Original Article

EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING MANAGEMENT OF MINOR AILMENTS AMONG SCHOOL CHILDREN

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Abstract:

Background: Suffering from minor ailments is the most frequent episode in childhood experiences. A productive and energetic population cannot grow from unhealthy children who are chronically affected by repeated minor ailments.

Method: An evaluative study using one group pretest posttest design was conducted among 30 school children of 9th class in a selected school of Udupi taluk, Karnataka to assess the knowledge of school children regarding the management of minor ailments and to evaluate the effectiveness of structured teaching programme on knowledge regarding management of minor ailments.

Results: Majority of children 17 (56 .7 %) had average knowledge in the pretest and only 4(13.3%) children had poor knowledge. There was a significant difference between the mean pretest and posttest knowledge scores on management of minor ailments among school children which indicated that the structured teaching programme on management of minor ailments was found to be effective($t= 9.702, P<0.05$).

Conclusion: The study concluded that the teaching programme was effective in bringing the desired changes in the knowledge of the school children.

Keywords: structured teaching programme, knowledge of school children, management of minor ailments

Introduction :

Children are the future of a nation. It is absolutely essential to protect child's health if we are to build a sound foundation for the health of the nation.[1] School children are exposed to various epidemiological factors in the environment which influence their present and future state of health. Suffering from minor ailments is the most frequent episode in childhood experiences. A productive and energetic population cannot grow from unhealthy children who are chronically affected by repeated minor ailments. The common minor ailments among school children include fever, cough, common cold, dental caries, sore throat, conjunctivitis, diarrhea, vomiting, worm infestations etc. The so called minor ailments if untreated are often the beginning of serious disabling disease.[2]

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A study in 2001 indicated that parents still have a problem to care the fever in children[3]. Acute respiratory tract infection account for 67% of all morbidity in India. The incidence of respiratory ailments in Bangalore's children has risen sharply from 9 % in 1979 to 30 % in 1999[4]. About 30- 50% of rural children suffer from much morbidity like anemia, worm infestation, under nutrition, and dental caries. A survey was conducted in 2005 among 5 to13 year-old children from Mangalore city to identify the prevalence of dental caries. The sample includes 193, 160, and 171 children in the 5-7, 8-10 and 11-13 years of age group, respectively. The results showed that the prevalence of dental caries was highest in 5-7 year age group compared to 8-10 years and 11-13 years age groups. The increasing prevalence of dental caries needs dental health

programmes, which target the specific segments of the population[5]

Worms affect an estimated 400 million school-aged children in the developing world. Ahamed A K et al in 2003 conducted a cross sectional study on frequency of intestinal parasitic infestation in children of 5-12 years of age in Abbottabad. A total of 283 subjects were tested and screened for different intestinal parasites. The results showed that 230 were tested positive for various intestinal parasites. The frequency of helminthic infestations was found to be above 81%. By far the highest frequency of 48% of the specimens examined had mixed infestation.[6]

Health education to school children in their formative age is the most effective method for protection and promotion of their health. The goal of health education is to bring desirable changes in health knowledge, attitudes and practices. Children take back to their parents their knowledge regarding health and even more important they apply this knowledge to their own families. As minor ailments continues as a matter of concern among school children, knowledge regarding the same in school children will ensure self help which enables timely detection and management and thereby averting the unwanted complications.

Objectives of the study

The objectives of the study were:

- Assess the knowledge regarding the management of minor ailments among school children using a structured knowledge questionnaire.
- Find the effectiveness of the structured teaching programme in increasing the knowledge on management of minor ailments among selected school children.

Materials and methods :

An evaluative approach with one group pretest posttest design was used for the study. The students from the 9th standard of the selected school were included in the study. Simple random sampling, using lottery method was used to select the school in Udupi taluk. The total sample size was 30.

Data were collected after obtaining permission from concerned school authorities and participant's informed consent. Ethical clearance was taken from the institutional ethical committee. Pretested, valid and reliable tools (r=0.89) developed by the investigator were used. The tools were: Tool 1- Demographic proforma, Tool 2- Structured knowledge questionnaire on management of minor ailments. The demographic proforma consisted of the background information of the samples. The knowledge questionnaire had 36 multiple choice items with one correct answer for each. The items covered various aspects of minor ailments like meaning, causes, signs and symptoms, management and prevention. Minor ailments discussed include: fever, common cold, cough, dental caries, conjunctivitis, diarrhea, worm infestation and fainting. Each item was carrying a score of one for correct answer and a score of zero for the wrong answer. The knowledge score was arbitrarily classified as: Poor knowledge:0-12, Average knowledge:13-24, Good knowledge:25-36

Pretest was administered to the participants on day 1, using demographic proforma and structured knowledge questionnaire. After the pretest a structured teaching programme on minor ailments was given for two days (one hour session on each day) using PPT slides. On day 8, a posttest was conducted using the same knowledge questionnaire and handouts on minor ailments were given to the students. The data collected were analysed using descriptive and inferential statistics.

Results :

The findings of the study were discussed under the following headings:

1. Description of sample characteristics

The analysis of the baseline characteristics presented in table 1 revealed that most of the children 17 (56.7%) were in the age of 14 years and 10(33%) children were of 15 years. Considering the gender, the children comprised of equal number of males and females (15

each). Out of the 30 children, most of the children, 14(46.7%) belonged to Hindu religion, whereas 10 (33.3%) were Christians and 6(20%) children were Muslims. Majority of the children 24(80%) belonged to nuclear family. Fifty percentage of the children had previous knowledge regarding minor ailments and the teachers were the major source of information for them.

2. Description of level of knowledge regarding management of minor ailments among school children.

   In the pretest, majority of children 17 (56 .7 %) had average knowledge and only 4(13.3%) children had poor knowledge. The children belonged to the good category was 9 (30%).

3. Effectiveness of structured teaching programme in improving the knowledge regarding management of minor ailments among school children.

3.1Comparison of pretest and posttest knowledge scores of school children

The pretest knowledge and the posttest knowledge of 30 school children were assessed using a structured knowledge questionnaire and was categorized as poor (0-12), average (13-24) and good (25-36) based on the knowledge scores. The frequency and percentage distribution of pretest and posttest knowledge scores of school children are depicted in table 2. Majority of children 17 (56 .7 %) had average knowledge in the pretest and only 4(13.3%) of children had poor knowledge, whereas in the posttest majority of the children 25(83.3%) had good knowledge and only 5(16.6%) had average knowledge. None of the children scored poor knowledge in the posttest. This shows that after the structured teaching programme the knowledge scores have improved.

3.2 Area wise comparison of pretest and posttest knowledge scores on management of minor ailments among school children

The data depicted in the table 3 shows that in the area of common cold and cough, the pretest mean and standard deviation was 4.87 and 1.592 whereas in the post test it was 6.37 and 1.564. There was an increase in both the mean and standard deviation from the pretest (mean=2.00, SD=0.587) to the post test (mean=2.57, SD=0.626) in the area of conjunctivitis. In all the areas, there was an increase in the mean posttest knowledge scores which shows that structured teaching programme was effective in improving the knowledge of the children on management of minor ailments.

3.3Significance of difference between mean pre test and post test knowledge scores of school children.

In order to evaluate the effectiveness of structured teaching programme on knowledge regarding management of minor ailments among school children, the following null hypothesis was formulated.

$H0_1$-There will be significant difference between the mean pretest and post test knowledge scores of school children on management of minor ailments.

The data presented in the table 4 shows the effectiveness of teaching programme in terms of gain in post test knowledge scores of school children. The t-value was computed to find the significant difference in the mean pre test and post test knowledge scores of the older children and was found to be significant (t= 9.702, P<0.05). Hence the null hypothesis was rejected and the research hypothesis was accepted. The findings showed that the school children had significantly gained the knowledge in the post test which implies that the structured teaching programme was effective in improving the knowledge of the school children.

Table 1: Frequency and Percentage distribution of sample characteristics n=30

Sample characteristics	Frequency (f)	Percentage(%)
Age		
14	17	56.7
15	10	33.3
16	3	10.0
Gender		
Female	15	50.0
Male	15	50.0

Sample characteristics	Frequency (f)	Percentage(%)
Religion		
Hindu	14	46.7
Muslim	6	20.0
Christian	10	33.3
Type of family		
Joint	6	20.0
Nuclear	24	80.0
Educational status of father		
Upper primary	1	3.3
High school	17	56.7
PUC	8	26.7
Diploma	1	3.3
Graduate	1	3.3
Post Graduate	2	6.7
Educational status of mother		
Upper primary	3	10.0
High school	15	50.0
PUC	9	30.0
Graduate	1	3.3
Post graduate	2	6.7
Previous source of information on minor ailments		
No	15	50.0
Yes	15	50.0
Specify the source		
No	15	50.0
Mass media	3	10.0
Teachers	9	30.0
Family members	2	6.7
Friends	1	3.3

Table 2 : Comparison of pretest and post test knowledge scores of children in frequency and percentage n=30

Level of knowledge	Pretest		Posttest	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Poor	4	13.3	0	0
Average	17	56.7	5	16.6
Good	9	30.0	25	83.3

Table 3: Area wise comparison of mean and standard deviation of pre test and posttest knowledge scores on management of minor ailments among children n= 30

Areas of knowledge	Maximum possible scores	Pretest		Post test	
		Mean	SD	Mean	SD
Introduction on minor ailments	2	1.47	0.507	1.80	0.407
Fever	3	2.00	0.743	2.37	0.765
Common cold & cough	8	4.87	1.592	6.37	1.564
Dental caries	5	3.27	1.363	4.50	0.777
Conjunctivitis	3	2.00	0.587	2.57	0.626
Worm infestation	4	2.33	1.155	3.10	0.995
Diarrhea	7	3.17	1.341	5.03	1.586
Fainting	4	2.30	1.393	3.23	1.073

Table 4: Mean, Standard deviation, Mean difference, t-value and p-value of pretest and posttest knowledge scores of children.

n= 30

Knowledge	Mean	Mean difference	SD	t value	df	P value
Pretest	20.87	8.43	5.355	9.702	29	.001*
Posttest	29.30		5.802			

*Significant at p<0.05 level of significance

Discussion :

Knowledge regarding management on minor ailments

The findings of the present study showed that majority of the children had average knowledge in the pretest on management of minor ailments among school children

The findings of the present study are supported by another descriptive study conducted by Harikiran A G et al to assess the knowledge, attitude, and practice (KAP) towards oral health among 11-12 year old school children in a government-aided missionary school of Bangalore city. The study findings revealed that 58.4%, received information regarding oral health mainly from television. Only 20.9% considered keeping natural teeth was important. It was found that 75.1% thought that brushing teeth prevents tooth decay and gum disease and 48.9% (46%: Male; 52.6% Female) knew the reason that eating sweets causes tooth decay. Only 36.3% knew that fluoride prevents tooth decay.[7]

Effectiveness of teaching programme

The results revealed that there was a significant difference between the mean pre test and post test knowledge scores of the school children which indicated that the teaching programme was effective,(t=9.449, p<0.05)

This study is supported by the following studies. Panwanda G conducted a study to evaluate the effectiveness of planned health education programme regarding worm infestation using film show among school children at Alur Taluk, Karnataka, which revealed that the mean knowledge had drastically increased to about three-fold i.e., from the mean score of 8.2 ± 1 (23.4%) to about 25.1 ± 19 (71.7%).[8]

An evaluative study conducted by Dandgi S to assess the effectiveness of planned teaching programme on

Keywords : structured teaching programme, knowledge of school children, management of minor ailments - E. Binu Margaret

knowledge regarding prevention of worm infestations among school children in selected government primary schools of Belgaum, Karnataka, showed that after the administration of structured teaching programme, the pre-test and post-test data analysis revealed that the mean post-test score (30.85±4.08) was higher than the mean pretest score (8.78±3.8).[9]

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Conclusion :

The study concluded that the structured teaching programme was effective in bringing the desired changes in the knowledge of school children on management of minor ailments. Hence it can be used as an effective teaching strategy among the school children to spread health messages.