

A STUDY TO ASSESS THE LEVEL OF KNOWLEDGE AND PRACTICE OF CHILDREN ABOUT WORM INFESTATION

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Abstract: Worm infestation is one of the common causes of suffering by human being. Small children are particularly prone because they play in the mud and dirt, suck their fingers, eat soil, run barefoot outdoors and sometimes have less than ideal toilet hygiene. The present study has been done to improve health and reduce infant mortality by engendering positive health practices among children. Based on activity-oriented learning methods, this approach is now used in programme in over 90 different countries. The sample for the present study included 100 students of age 9-10 years, studying in 4th standard in Primary Schools, Jaipur District, Rajasthan. The data was collected by conducting interview through a structured questionnaire. The findings of present study regarding introduction of worm infestation illustrated that the mean knowledge was about 37.59%.

Index Terms - Child-to-Child approach, Role play, Prevention, Worm infestation, Infection.

I. INTRODUCTION

Children are assets of our country. The children of school going age form a very high proportion of India's population both in rural and in urban areas. The number of school children is 5-14 years age group constitutes about 15% of the total population. It is a period of physical growth and development. Early detection of disease is made in a controlled group of population. A large number of defects can be timely corrected and many infections can be timely immunized. It is, therefore, important that the physical and mental health of this segment of the population should be the concern of all those responsible for ensuring the health of the people.

School age children (5-15 years) have not received as much attention from health providers as the under fives. In an international workshop at Kentucky, USA in 1994, it was agreed that there was a dearth of information on the health status of school age children from developing countries particularly at the community level. In India several studies have been carried out on the health status of school age children. These have largely been quantitative and reported morbidity included malnutrition (10.0-98.0%), worm infestation (2.0-30.0%) and anaemia (4.0-15.0%).

Worm infestation is one of the common cause of suffering by human being. Small children are particularly prone because they play in the mud and dirt, suck their fingers, eat soil, run barefoot outdoors and sometimes have less than ideal toilet hygiene. There are many types of worms, which infect us and give rise to different problems. The common worm infections found in human beings are: 1) Round worm, 2) Hook worm, 3) Thread worm and 4) Tape worm.

Out of many techniques of control and prevention of diseases, teaching has gained wide importance in reference to health. Today's children are tomorrow's adults. The way of life is changing; earning has increased tremendously and forces both parents to work, to meet with requirements of life. Sometimes even in the rural areas. Families may not have elders like grandmothers to give support for the care of younger children from 6-9 months to 5 years are left under the care of elder siblings between the age of 6-7 and 12-14 years, are termed as mother substitutes. Hence one of the important aspects of the care of children whether urban or rural was the simple training of these mother substitutes. So 'Child-to-Child' programme was developed.

The first Child-to-Child programme started at the University of London. Here teachers and doctors from the Institutes of Child Health and Education, working with colleagues from all over the world, developed many of the ideas and activities. The Child-to-Child approach has now spread all over the world, and wherever it is found, we will also find the same partnership of health and education workers developing the same central ideas.

Child to child programme, which is an original approach to education for health, applies to school age children. It makes children feel responsible for their own health. This approach uses active teaching methods in which learning takes place through the dynamics of investigations, group work and play. When they learn in class room is immediately applied to everyday life at school and home.

Approaching every individual in the rural area is herculean task with poor sustainability. Mass media have their limitation in such population. Under these circumstances child to child programme offers most cost effective strategy to approach every family. Through this method it is possible to improve the health and nutrition awareness of the people, change their attitudes and help them to implement health principles in practices. The Child-to-Child approach was developed for the international year of the child (1979) by a group of health and education professionals. The goal was to improve health and reduce infant mortality by engendering positive health practices among children. Based on activity-oriented learning methods, the approach is now used in programme in over 90 different countries. These range from structured programs in schools to the participation of children in community health programs in urban slums.

The present study was conducted to spread awareness about worm infestation among the children belonging to 9 to 10 years of age group for which various primary schools of Jaipur District, Rajasthan were chosen to collect data through survey.

II. REVIEW OF LITERATURE

Many researchers have conducted studies to encourage children and members of their community to improve education and health care among themselves. Some of the studies are summarized as below:

Kirby (2002) conducted an evaluation of a three-year Child-to-Child programme initiated by the Community Health South London (CHSL) Trust in Lewisham in 2001. The overall aim of the programme was to support 9-12 year olds to identify and take action on key health issues in their communities.

Rao UG, Yadav R., Bhondeley M.K., Dass, Agarwal M.C., Tiwary R.S., et.al. (2002) conducted study about the status of intestinal parasitosis and anaemia, among preschool children in Madhyapradesh.

Tomono N., Anantaphruti M.T., Jongsuk Suntigal P., Thongthien P., Leerapan P., et.al., (2003) conducted cross sectional study using kata-tatz method and a questionnaire on the relationship between helminthiasis and children's knowledge and practice in Bangkok, Thailand.

Nematian J., Nematian E., Gholamezanezhad A., Asgari A.A., (2004) conducted study on prevalence of intestinal parasitic infections and their relation with socio economic factors and hygienic habits in primary school students in Tehran.

Sharma B.K., Rai S.K., Rai D.R., Choudhury D.R., (2004) conducted study on prevalence of intestinal parasitic infestation in school children in the north eastern part of Kathmandu Valley, Nepal.

Morris F, 2005, conducted a study to examine the provision of corrective feedback and learner repair following feedback in the interactional context of Child-to-Child conversations, particularly computer mediated, in an elementary Spanish immersion class.

Muzaffar Bhutta, 2006 conducted study exploring the impact of Child-to-Child approaches in the classroom using quantitative and qualitative research tools.

Babul F 2007, The Ministry of Education in collaboration with Aga Khan Foundation, Tanzania has developed the Child-to-Child project on health education in Zanzibar.

UNICEF Evaluation Office, June 2010, The purpose of UNICEF's Getting Ready for School programme is to facilitate the successful transition of young children into primary school through the use of older school children (Young Facilitators) as providers of early childhood education support to younger children in their communities.

III. METHODOLOGY

Primary schools in Jaipur District, Rajasthan were selected for the present study because of availability of samples, feasibility of conducting study, and ethical clearance. The sample for the present study were 100 students of age 9-10 years, studying in 4th standard in Primary Schools, Jaipur District, Rajasthan, who meets inclusion criteria for the study. The following criteria are used in the present study to select samples.

Inclusion criteria:

- Children of selected elementary schools in Jaipur District, Rajasthan.
- Children of 4th standard.
- Children who are willing to participate and present on the day of intervention.
- Children who knows to read and write Hindi and English.

Exclusion criteria:

- Children of 4th standard suffering from any of the diagnosable physical and psychiatric disorders.
- Children who do not know Hindi and English.
- Children who have not given consent.

The blue print was prepared to construct the tool. There were 45 questions in total based on knowledge and practice aspect. Questions were divided into 3 aspects.

- Comprehension – 9 questions – 20%
- Understanding – 17 questions – 37.8%
- Application – 19 questions – 42.2%

The interview schedule was constructed in three parts

Part I – Includes 21 items related to the demographic variables of the respondents about age, sex, height, weight, mid-arm circumference, education, occupation, and income of parents, place of living, water source, place of defecation, know about worm infestation etc.

Part II – Includes 26 items to assess the knowledge about worm infestation and different types of worms.

Part III – includes 19 items to assess the practice about prevention of worm infestation.

Formal permission was obtained for conducting the study from the Block Health Educator.

Prior to the interview the investigator explained the purpose of the study to the children at their level of understanding. Consent was obtained from their parents.

IV. RESULT AND OBSERVATION

Table 1 shows that majority of students 87% were having prior knowledge, 13% students were not having prior knowledge about worm infestation.

Table 1: - Frequency distribution of Respondents by prior knowledge about worm infestation

N=100

Knowledge about Worm Infestation	N	%
Yes	87	87
No	13	13
Total	100	100

Table 2 shows that majority of children 77% have suffered, 13% were not suffered and also 10.0% children were unaware of worm infestation.

Table 2: - Frequency distribution of Respondents by suffered from worm infestation

N=100

Suffered from Worm Infestation	N	%
Yes	77	77
No	13	13
Don't know	10	10
Total	100	100

Table 3 shows that majority of students 70% suffered from stomach ache, 17% students had diarrhoea, 9% were had white patches on the skin, 4% had weight loss.

Table 3: - Frequency distribution of Respondents by symptoms present among those suffered from worm infestation

N=100

Symptoms present	N	%
Diarrhea	17	17
Weight loss	4	4
White patches on skin	9	9
Stomach-ache	70	70
Total	100	100

Table 4 reveals that majority of students 67% were know about passage of worms in stool, 10.0%) were not knowing, 23% students were not suffered from worm infestation.

Table 4: - Frequency distribution of Respondents by know about passage of worms in stool

N=100

Passage of worms	N	%
Yes	67	67
Don't know	10	10
Missing	23	23
Total	100	100

Table 5 shows that the majority of students 56% were suffered from round worm, 31% were suffered from thread worm, 13% students were unaware.

Table 5: - Frequency distribution of Respondents by Type of worm noticed

N=100

Type of Worm	N	%
Round Worm	56	56
Thread worm	31	31
Don't Know	13	13
Total	100	100

Table 6 reveals that majority of students 43% fall into medium grade in class, 37% were satisfactory and 20% were good in studies.

Table 6:- Frequency distribution of Respondents by Grade in class

N=100

Grade in class	N	%
Good	20	20
Medium	43	43
Satisfactory	37	37
Total	100	100

V. DISCUSSION

The study was based on Imogene King's "Goal attainment Model".

The study was conducted in primary schools, Jaipur District, Rajasthan. A structured interview schedule selected for the study on the basis of the objectives. It was considered to be most appropriate instruments for assessing the level of knowledge regarding prevention of worm infestation.

Purposive sampling technique was used to select 100 primary school children.

The obtained data were entered into the master sheet for tabulation and statistical processing. The findings of the study are discussed in terms of objectives and hypothesis. The findings of the study are compared and contrasted with those of other similar studies conducted in different settings. The analysis of data was organized and presented under the following aspects

Section A: Distribution of demographic variables of primary school children.

Section B: Assessment of knowledge of primary school children on prevention of worm infestation.

The major findings of the study were discussed under the objectives and hypothesis.

Demographic variables (Sample characteristics):

- Related to gender distribution of the samples reveals that majority were males (53%).
- All the samples belong to normal height (121.5 cm – 136.5 cm) and normal weight (22-32 kgs).
- Majority of children's mid arm circumference is 16.5cms (97 %).
- Most of the fathers (53%) were literate.
- Majority of mothers (60%) were literate.
- 40% of fathers were doing business, 40% of them were working as coolie and only 20% were professionals.
- 37% of mothers were house wives.
- 70% of samples belonged to family income of less than Rs. 1000 per month.
- Maximum families of samples (77%) were using latrines.
- Most of the samples (87%) were having prior knowledge about worm infestation.
- Majority (77%) have suffered from worm infestation.
- Most of the students (70%) were suffering from symptom like stomach ache.
- With regards to grade of the samples in class majority of them (43%) were obtaining medium grade, 37% were satisfactory and only 20% of samples were good in studies.

Objective of the study was to assess the level of knowledge and practice of children about worm infestation.

Assessment of aspect-wise pre-test mean knowledge about Worm Infestation among Primary School Children.

The findings of present study regarding introduction of worm infestation illustrated that the mean knowledge was about 37.59% (In aspect of Round worm 35.80% , Hook worm 42.33% , Thread worm 40.39% ,Tape worm 40.25%). The total mean knowledge score was 39.11% and SD was 2.881.

The findings of the present study is similar with the study of Leena K.C. & Sr. Jacinta D'Souza, Mangalore who conducted an evaluative study using quasi experimental research design to determine the effectiveness of traditional and child to child approach of health education among 100 primary school children selected through cluster sampling technique.

VI. REFERENCES

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