



A Study To Assess The Effectiveness of Video Assisted Teaching Programme on Knowledge Regarding Prevention of Worm Infestation Among Mothers of Toddlers (1 To 3 Years) At Selected Rural Area, Bangalore

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Abstract

Background: Worm infestation remains one of the main health problems during child development especially in developing countries. Ninety percent of humans will have a problem with parasites in their lifetime. In rural areas of India, condition is even worse because of lack of portable water and proper sanitary facilities. Educating mothers will to reduce the worm infestation among their children, in a way the future citizens.

Objectives:

- To assess the knowledge regarding prevention of worm infestation among mothers of toddlers through pre-test knowledge scores.
- To assess the effectiveness of video assisted teaching program regarding prevention of worm infestation among mothers of toddlers by comparing the pre- test and post-test knowledge scores.
- To find the association between post-test knowledge scores of mothers of toddlers and their selected socio-demographic variables.

Materials and methods: The research design used for this study is pre-experimental one group pretest – posttest design. An evaluative approach with sample size about

60 mothers of toddlers was selected as sample using cluster sampling technique. The tools used for collecting the data were socio-demographic variables and self-administered knowledge questionnaire. The study was conducted at Channasandra village, Uttarahalli, Bangalore.

Results: The result of the study reveals that the pre-test mean knowledge score was 50% is less than the post-test mean knowledge score 74% after the video assisted teaching program. The paired ‘t’ test value was 18.22* which is statistically significant at 0.05 level in all aspects under study. There is no significant association between the post-test knowledge score of mother’s regarding worm infestation and its prevention with selected socio-demographic variables.

Conclusions: Findings of the present study showed that there was a significant difference between the pre-test and post-test knowledge of mothers. From this it is concluded that the video assisted teaching program is effective in improving the level of knowledge of mothers and there was no significant association between level of knowledge of mothers and selected socio-demographic variables.

Keywords: Worm infestation, prevention, video assisted teaching program, mothers of toddlers.

Introduction

The World Health Organization (WHO) classifies parasites as one among the six most dangerous diseases that infect humans. Worm infestation is one of the major causes of child hood malnutrition, anaemia, stunted physical and mental growth, psycho-social problems and this along with repeated gastrointestinal and upper respiratory tract infection contributes to high morbidity in children and remains a major cause of high infant and child mortality in our country.

One third of the world's population is infected with one or more species of intestinal helminthes. Public health specialists are concerned that these infections will impair children's growth and development. Worm infestation becomes a public health problem needs immediate attention from policy makers in developing countries. Worm infestation has a close relationship with the socio demographic and ecological factors like poverty, illiteracy, poor personal and environmental hygiene.

Children's are at special risk due to their activities like play and lack of personal hygiene. A study conducted in Kerala, India stated that impure water, low literacy rate of parents particularly mothers are the main causes of existing parasitic infections in toddlers. In case of toddlers it's impossible teach them about maintaining personal hygiene. So we have to educate their mothers about the prevention techniques of worm infestation. Preventive measures for safety availability of safe drinking water and spreading awareness related to sanitation behavior should be adopted to minimize the prevalence of worm infestation.

Simple community based measures such as increasing public awareness about the drawbacks of open air

defecation, safe disposal of waste water and safe handling of drinking water can be used for easy and short term results. Sanitary education campaigns using video assisted methods are necessary to increase awareness of populations at risk.

Materials and Methods

Study design: The study used pre-experimental one group pre-test and post-test design.

Variables

- 1. Independent variables:** Video assisted teaching material on worm infestation and its prevention.
- 2. Dependent variables:** Knowledge of mothers of toddlers regarding worm infestation and its prevention.
- 3. Extraneous variables:** Socio-demographic variables such as age, number of children, education, religion, type of family, family income, history of worm infestation and preventive methods to avoid worm infestation among their children.

Setting of the study: The study was carried out in rural community area in Bengaluru.

Sample size: Total samples selected comprising 60 mothers of toddlers from selected rural area.

Sampling technique: Samples selected using cluster sampling method

Inclusion and Exclusion criteria

Inclusion criteria

- Mothers with toddlers
- Mothers between 20-35 years of age
- Mothers willing to participate in study
- Mothers who knows Kannada and English

Exclusion criteria

- Mothers of toddlers who are not willing to participate in study.

- Mothers who are not available at the time of data collection.
- Mothers having age below 20 years and above 35 years.

Description of the tool

The tool was exclusively prepared after an extensive review of literature of the present study and discussing with the experts. Questionnaire derived after considering the previous studies and from the investigators personal experience.

Validity

Prepared tool along with objectives of the study was submitted to experts for validation. Final tool has been modified according to the suggestions given by experts.

Reliability

Reliability of the tool was checked using test-retest method. The reliability of the tool was $r=0.92$. So the tool was found reliable for the data collection.

Pilot study

A pilot study was conducted in Channasandra village, Uttarahalli, Bangalore. Total 6 mothers were selected for pilot study. The pilot study results showed that the setting, samples and tool were feasible enough to conduct the main study.

Data collection procedure

Data was collected in Channasandra village, Bangalore after obtaining formal permission from concerned authorities. Subjects who met inclusion criteria were requested to answer the questions in research tool related to socio-demographic profile and knowledge related to worm infestations and prevention methods.

The study was conducted as follows:

- 1) On day one, purpose of study was explained to the sample and informed consent was taken before starting the study. A pre-test was conducted b self-

administration of structured knowledge questionnaire to each sample.

- 2) On the same day video assisted teaching program on worm infestation and its prevention was administered for 45 minutes.
- 3) Post-test was conducted by using the same structured knowledge questionnaire after 7 days of video assisted teaching program.

Statistical Method

Descriptive statistics

Frequency and percentage distribution used to describe the socio-demographic variables. Mean and standard deviation were used to describe the knowledge about different aspects of worm infestation.

Inferential statistics

Paired T test was used to compare the knowledge scores of mothers of toddlers in pre-test and post-test.

Chi-Square test was used to find the association between post- test knowledge scores of mothers of toddlers and their selected socio-demographic variables.

Results

The collected data was analyzed according to the objectives of the study, the findings are presented below. The result indicated that out of 60 mothers, majority (43%) were found in the age group of 23 – 25 years followed by (30%) in the age group of 20 – 22 years followed by (27%) in the age group of 26 – 28 years of age.

Number of children among mothers of toddlers reveals that (57%) were with more than three children followed by (30%) were with two children and (13%) with only one children.

The frequency and percentage distribution of mothers with their educational qualification reveals majority of them 27 (45%) having education up to secondary school followed by primary school 18 (30%) then 10 (17%)

having high school education and only 5 (8%) studied PUC and above.

Food habits of mothers reveal (70%) were non-vegetarians and (30%) were vegetarians.

The frequency and percentage distribution of mothers of toddlers according to religion, 31 (52%) of them are Hindu, 18 (30%) of them are Muslims and 11 (18%) of them are Christians.

The frequency and percentage distribution of mothers according to type of families shows that 37 (62%) are from nuclear families and 23 (38%) are from joint families.

Family income depicted that 13 (22%) possessed income of Rs. <5000/- followed by 27 (45%) had income range of Rs. 5001/- – Rs. 10,000/-, followed by 11 (18%) had income range of Rs. 10,001/- - Rs. 15,000/- and 9 (15%) had income of Rs. >15,001/- among the mothers of toddlers.

Majority of the mothers, 37 (62%) had history of worm infestation and 23 (38%) had no history of worm infestation among their children.

Majority of mothers, 34 (57%) not tried any method and 26 (43%) had tried some methods to prevent worm infestation among their children.

The result shows that 36 (60%) of mothers had inadequate knowledge and 24 (40%) of mothers had moderate knowledge level in the pre-test. Further none of them had adequate knowledge on worm infestation and its prevention. The overall mean value in pre-test is 15 with Standard deviation of 1.9 and mean percentage is 50.

The overall post-test result shows that 38 (63.33%) of the mothers had adequate knowledge and 22 (36.67%) of mothers had moderate knowledge level. Further, none of them had inadequate knowledge level in the post-test. The overall mean value of post-test significantly

increased after VAT (22.47) with increased SD(2.57) and also with increased mean percentage about (74.9%).

The study reveals that There is no significant association between the post-test knowledge score with selected socio-demographic variables like Age, No. of children, educational qualification, food habits, Religion, Type of family, Family income per month, History of worm infestation and methods for prevention of worm infestation at 0.05 level.

Discussion

The findings obtained from the study are discussed as follows:

First objective: To assess the knowledge regarding prevention of worm infestation among mothers of toddlers in selected rural area.

In pre-test knowledge score out of 60 mothers, 60% had inadequate knowledge, 40% had moderate knowledge and none of the mothers had adequate knowledge. The highest mean percentage knowledge score of 56.42% in the aspect of causes and risk factors of worm infestation, 52.85% in the aspect of signs & symptoms and complication of worm infestation, 47.5% in the aspect of treatment and prevention of worm infestation, 39% in general aspect of worm infestation. Thus the investigator assumes that there is need for imparting knowledge to mothers.

In post-test knowledge score out of 60 mothers of toddlers, 63.33% of the mothers had adequate knowledge, 36.67% of the mothers had moderate knowledge and none of the mothers had inadequate knowledge. The highest mean percentage knowledge score was found in the aspect regarding causes and risk factors of worm infestation 82.28%, followed by 78.75% was seen in the aspect regarding prevention and treatment of worm infestation, 70.75% was seen regarding general aspects of worm infestation and least

mean percentage knowledge score of 67.57% was seen in the aspect regarding signs & symptoms and complication of worm infestation. It is evident from the post-test knowledge assessment that there is considerable increase in knowledge among the respondents.

Second objective: To assess the effectiveness of video assisted teaching method regarding worm infestation and its prevention among mothers of toddlers in selected rural area.

The pre-test mean knowledge percentage is 50% with standard deviation of 1.9. Further, post-test mean knowledge percentage found to be 74.9% with standard deviation of 2.57. It indicates that there is enhancement of knowledge score of 24.9% of the mothers. The statistical paired 't' test value is found significant (18.22*) revealing the effectiveness of video assisted teaching method on knowledge regarding worm infestation and its prevention among mothers of toddlers in selected rural area. However, this study reveals that the video assisted teaching method on knowledge regarding worm infestation and its prevention was effective. Thus the analysis reveals that there is significant difference between pre-test and post-test knowledge score of mothers of toddlers on worm infestation and its prevention.

Third objective: To find the association between post-test knowledge score of mothers with toddlers and their selected demographic variables.

The association of the knowledge level of mothers with selected socio-demographic variables reveals that there is no significant association of post-test knowledge scores with their Age group, Number of children, Education, Food habits, Religion, Type of family, Family income per month, History of worm infestations and prevention methods of worm infestation with their corresponding Chi-square values 3.35, 0.07, 0.62, 1.21, 0.41, 0.11, 1.01,

0.46 and 4.52 respectively in post-test at 0.05% level of significance. There is no significant association between post-test knowledge score and any of the selected socio-demographic variables.

Conclusion

The study was undertaken to assess the effectiveness of video assisted teaching program on knowledge regarding worm infestation and its prevention among mothers of toddlers in selected rural area at Bangalore.

The findings showed that most of the mothers had inadequate knowledge in Pre-test whereas most of the mothers had adequate knowledge in Post-test. The 't' test which was computed between pre-test and post-test knowledge scores indicated a true gain in the knowledge. Hence it was concluded that video assisted teaching program was effective as a method to improve knowledge on worm infestation and its prevention among mothers of toddlers was an effective strategy as revealed by statistical method.

There was no significant association of the knowledge level of mothers of toddlers regarding worm infestation with the Age group, Number of children, Education, Food habits, Religion, Type of family, Family income, History of worm infestation and methods of prevention.

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