Original Research Paper

Management

"A STUDY TO ASSESS THE LEVEL OF KNOWLEDGE AND PRACTICE OF MOTHER OF UNDER FIVE CHILDREN REGARDING PREVENTION AND MANAGEMENT OF WORM INFESTATION IN SELECTED VILLAGES OF WAGHODIA TALUKA"

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ABSTRACT   This study was designed to to assess the level of knowledge and practice of mother of under five children regarding prevention and management of worm infestation in selected villages of Waghodia Taluka. Emphasis was put on trying to establish the relationship between age, type of family, education of mother, occupation, family income, number of children. The validity and reliability of research instruments was established and data was collected from 40 mothers of under five children selected from villages of Waghodia Taluka by using the purposive sampling method. To analyze the data, the Pearson product moment correlation statistical tool was used with the aim of establishing to find association between association between knowledge of mothers regarding prevention and management of worm infestation with their selected demographic variables.This formed the basis of the detailed analysis and conclusions and recommendations.

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OBJECTIVES OF THE STUDY

- To assess the level of knowledge and practice of mothers of under five children regarding prevention and management of worm infestation.
- To correlate knowledge and practice.
- To find out the association between knowledge of mothers regarding prevention and management of worm infestation with their selected demographic variables.

MATERIAL AND METHOD

The interventional study was conducted in selected area of Waghodia taluka. The sample consisted of 40 mothers of under five children of selected area of Waghodia taluka. The tools used for data collection was a set demographic variables such as Age of the mother, Types of family, Educational status of mother, Occupational status, Family income & Number of children. Structure knowledge questionnaire (30 questions) and practice check list will be used to assess the knowledge and practice. Mothers prepared by investigator after extensive review of literature. To assess knowledge and practice of mother regarding worm infestation belongs to Waghodia Taluka was the intervention of the study.

RESULTS

The data analyzed from the study subjects were analyzed and interpreted in terms of the objectives and hypothesis of the study. Descriptive and inferential statistics were used for data analysis: the level of significance was at 0.05%.

Reveals that Introduction of worm infestation with 5 items had a mean of 2.5 with a mean % of 50%.Causes with 3 items had a mean of 1.05 with a mean% of 35%. Prevention with 14 items had a mean of 7.28 with a mean% of 52% and Management with 8 items had a mean of 3.23 with mean % of 40.3%.

Present study shows the association between the demographic variables and knowledge scores. The chi square value shows that there is significance association between knowledge score and socio demographic variables such as age, occupation, education, family income, number of children. The calculated chi square values were greater than the table value at the 0.05 level of significance.

CONCLUSION

In the pretest conducted among 40 participants, 32.50% were having moderately adequate knowledge and 67.50% were having inadequate knowledge on prevention and management of worm infestation.

In practice checklist among 40 participants, 85% having good practice and 15% were having average practice regarding prevention and management of worm infestation.

KEYWORDS : Assessment, Knowledge, Management, Under five children, Worm infestation.

INTRODUCTION

Intestinal worm infestation is a global health problem and is a matter of serious concern for the third world countries. Overcrowding, contamination of water, poor sanitation and migration of people to cities greatly favour transmission of parasitic infection resulting in high endemicity. STH infections form the most important group of intestinal worms and account for 27% of entire school-age and preschool-age children population in the World, who are in need of anthelminthic treatment.1 Parasitic infections occur worldwide, mainly affecting the poorer sectors of society. According to the World Health Organization (WHO),around 1 billion people are infected by Ascaris or Uncinarius, 500 million by Trichurisor amoebas, and 200 million by Giardia lamblia. Furthermore, there is a wide variability in both inter- and intra-regional parasitoses within a given country and among countries. These differences may be due to a variety of factors associated with the prevalence of these infections, such as soil composition, climate, and method of transmission, among others. Similarly, socioeco

nomic and health conditions, education and beliefs related to traditional health practices, as well as the presence of domestic animals in the home and contamination of water and food, have all been reported as factors associated with the presence of these diseases.2 Helminths or worm infestations refer to worms that live as parasites in the human body and are a fundamental cause of disease associated with health and nutrition problems beyond gastrointestinal tract disturbances. Globally, over 3.5 billion people are infected with intestinal worms, of which 1.47 billion are with roundworm, 1.3 billion people with hookworm and 1.05 billion with whipworm. These parasites consume nutrients from children they infect, thus retarding their physical development. They destroy tissues and organs, cause abdominal pain, diarrhoea, intestinal obstruction, anaemia, ulcers and other health problems.3 Common throughout the world, tapeworms are long and ribbon-like. Humans can ingest tapeworm larvae by eating raw or under cooked beef, pork and fish or from coming in contact with infected animals or contaminated grains. Tapeworms live in our intestines and absorb nutrients through their skin. People with tapeworm infections feel dizzy, toxic, have unclear thinking, high and low blood sugar levels, hunger pains, poor digestion and allergies.The various species of flukes – tiny flat worms that look like odd-shaped pancakes–include blood flukes, fish flukes, intestinal flukes, liver flukes, lung flukes, lymph flukes and pancreatic flukes. Humans can become infected by eating raw or under cooked seafood, eating infected vegetation like water chestnuts or watercress or drinking or wading in infected water. Once inside the body, flukes migrate to various organs and may cause liver swelling, jaundice, weakened lungs and blood clots. Such infections can be prevented by practices such as safe disposal of excreta, washing hands after defection, wearing slippers and food hygiene. These can be implemented through effective education.4 The overall prevalence of helminthes infection in children in India is about 50% in Urban and 68% in rural area. Tribal populations especially the children living under low socio-economic conditions in the rural villages where poor sanitary system exist are at higher risk of worm infestation. Majority of the mothers whose children were infected with intestinal helminths had either illiterate or primary school education level, and this might be one of factors that attributed to inability to associate worm's infection with the symptoms or being unaware of the preventive measures. In general rural areas are expected to have higher worm load, than urban area, because of the preponderance of those factors that perpetuates the continued existence of the worm, such as poverty, poor environmental hygiene, and complete absence of municipal services.5 The burden of disease due to these intestinal parasites is an estimated 22.1 million disability-adjusted life-years (DALYs) lost for hookworm, 10.5 million for Ascaris; and 6.4 million for Trichuris. Approximately 10,500 deaths each year are due to complications of Ascariasis and 65,000 deaths per year are due to anaemia caused by hookworm infection.6 Six hundred million people worldwide are infected with hookworm and one million each with roundworm and whip worm. Ascaris infestation is common during preschool period from 1-5 years of age when the child begins to lead a more independent life.The magnitude of parasitic infestation among children constitutes a major health problem in many parts of the world. It is estimated that 85% of the total incidence is due to ineffective disposal of human excreta.In India, more than 200 million children are infected with roundworm, hookworm and whip worm; 60-80% of population of West Bengal, Andhra Pradesh, Uttar Pradesh, and Orissa is infected with worms. In low and middle income countries about 1.2 billion people are infected with roundworm and more than 700 million are infected with hookworm or whipworm. In South India hookworm is more prevalent among children.In India intestinal parasitism is the priority health problem because of unhygienic practices, poor awareness, illiteracy, myths, poverty and variety of allied factors.[7]

MATERIAL AND METHOD
In this chapter methodology adopted to assess the level of "Knowledge and Practice of mother of under five children regarding prevention and management of worm infestation in selected villages of Waghodia Taluka."The methodology of the study includes the research approach, research design, and variables, setting of the study, population, sample, sampling technique, sampling criteria, development and description of the tool, content validity of the tool, reliability of the tool, pilot study, data collection and plan for data analysis.This study is aimed at assessing the level of knowledge and practice regarding   the prevention and management of worm infestation among mothers of under 5 children.

Further, it also aimed at determining the association between academic performance with selected demographical variables like age, occupation, education, family income, number of children.

In this study descriptive research design is adopted.
The study was conducted in Ropa & Mastumpura villages of Waghodia Taluka.

DEMOGRAPHIC VARIABLES:
The demographic variables in the study are age, occupation, education, family income, number of children.

Research variables are as following:-
(1) Knowledge of mother of under five children regarding prevention and management of worm infestation.
(2) Practice of mother of under five children regarding prevention and management of worm infestation.

The population will consist the mothers of under five children in selected villages of Waghodia taluka.

The samples of the study will be selected by using purposive sampling technique according to inclusive criteria as well as availability of samples from Selected villages Of Waghodia Taluka.

The structured questionnaire and practice list are planned with the statements designed to yield specific information to meet a particular need for research information about a pertinent topic. The research information is attained from respondents normally from a releated interested area.

STATISTICS DESCRIPTIVE STATISTICS
1. Frequency and percentage distribution is used to describe the demographic variables.
2. Mean and mean percentage (%) will be used to find out the level of knowledge of mothers of under five children regarding prevention & management of worm infestation.

INFERNTIAL STATISTICS
1. Chi square test will be used to find out association between knowledge of mothers regarding prevention and management of worm infestation with their selected demographic variables.

SCORING PROCEDURE
The scoring scale consists of one correct option for all multiple questions. There are total of 30 question items to assess the knowledge. Score "1" is given for correct response. Score "0" is given for incorrect response. The score range from minimum of "score 0" and maximum of "score 30".

There are total of 10 question items to assess the practice of mothers. Score "1" is given for correct response. Score "0" is given for incorrect response. The score range from minimum of "score 0" and maximum of "score 10".

The knowledge level is arbitrarily divide into 3 categories based on self-administered knowledge questioner and accordingly the scores were allotted
Adequate knowledge   > 80
Moderate adequate knowledge   50%-79%
Inadequate knowledge   < 50%

The practice level is arbitrarily divide into 3 categories based on self-administered knowledge questioner and accordingly the scores were allotted

Good practice	> 70%
Average practice	50%-69%
Poor practice	< 50%

RESULTS

The findings shows association between knowledge of mothers regarding prevention and management of worm infestation with their selected demographic variables. The findings shows that association between demographic variables and knowledge score of Age (2.81), Type of family (6.22), Education (2.49), Occupation (11.17), Family income (1.94), Number of children (4.49) was found. There is 0.05 level of significance are accepted. Thus it can be interpreted that there is a significant association between knowledge of mothers of under five children with selected socio-demographic variables such as age, education, occupation, family income and number of children in the family and there is no significant association between knowledge of mothers of under five children with their type of family.

DISCUSSION AND CONCLUSION

Findings and discussion of the study:- The following are the major findings of the study with discussion:

DEMOGRAPHIC DATA:-

Distribution of respondents in relation to age of mothers of under five children revealed that among 40 participants 27(67.5%) belonged to the age group of 20-25 years, 12(30%) belonged to the age group of 25-30 years and 1(2.5%) belongs to the age group of 30-35 years and no one belongs to age group between 35-40 years. Distribution of respondents in relation to type of family of mothers among 40 participants 28(70%) belongs to joint family and 12(30%) were belongs to nuclear family. Distribution of respondents in relation to education of mothers among 40 participants 1(2.5%) were illiterate, 20(50%) were belongs to primary education, 15(37.5%)belongs to secondary education and 4(10%) were graduate. Distribution of respondents in relation to occupation reveals that among 40 participants 28(70%) were unemployed, and rest of 12(30%) belongs to skilled worker occupation. Distribution of respondents in relation to monthly family income reveals that among 40 participants 24(60%)belongs to income below 5000 Rs, 13(32.5%) have income between 5001-10000 Rs, 3(7.5%) has income between 10001-15000 Rs and no one belongs to income above 10000. Distribution of respondents in relation to number of children in the family among 40 participants 11(27.5%) have a 1 children in the family, 24(60%) have 2 children in the family,3(7.5%) have a 3 children in family and rest of 2(4%) have 4 children in the family.

RESEARCH VARIABLES

All data findings that existing knowledge in pre-test respondents 67.50% were having inadequate knowledge and 32.50% were having moderately adequate knowledge.

All data findings that existing practice in pre-test respondents 85% respondents were having good practice and 15% were having average practice.

Reveals that Introduction of worm infestation with 5 items had a mean of 2.5 with a mean % of 50%.Causes with 3 items had a mean of 1.05 with a mean% of 35%. Prevention with 14 items had a mean of 7.28 with a mean% of 52% and Management with 8 items had a mean of 3.23 with mean % of 40.3%.

CONCLUSION

The following conclusion can be drawn from the study findings:-

The structured questionnaire has shown remarkable association between knowledge with selected demographic variables. Using the statistical formula we have computed the association between the demographic variables and knowledge.

So we conclude that from the entire six variables from that one is significantly associated with pre-test knowledge score with their demographic variable.

ABBREVIATIONS

N	Number of Samples
R	Correlation coefficient
Rs	Rupees
S	Significant
NS	Non significant
>	Greater than
<	Less than
≤	Less than or equal to
≥	Greater than or equal to
UNICEF	United Nations International Children Emergency Fund

WHO	World Health Organization
IPI	Intestinal parasitic infections
STHI	Soil transmitted helminth infection
GIT	Gastro Intestinal Tract
DALYs	Disability-adjusted life years
PC	Preventive chemotherapy

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