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A STUDY TO ASSESS THE KNOWLEDGE REGARDING PREVENTION OF HOOK WARM INFECTION AMONG SCHOOL CHILDREN IN SELECTED VILLAGE"

"Knowledge Regarding Prevention of hook warm infections Among school children"

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Abstract: Hookworms are parasitic worms that live in the small intestine and feed on blood. They infect humans when larvae in contaminated soil penetrate the skin—often through bare feet. These infections are common in warm, humid regions with poor sanitation and can lead to anemia, fatigue, and malnutrition. Hook warm infections are commonly seen among childrens based on their personal hygiene. **Objectives:** The aim of the present study is to assess the knowledge and prevention of hook warm infection among students.
Methodology : Quantitative research approach design was adopted for the study which was conducted in primary schoosl, Hyderabad, 30 students were selected who are studying and resides in Hyderabad, were recruited in the study by nonprobability convenience sampling technique. Structured questionnaire was used to collect the data. Data was analyzed by using descriptive and inferential statistics. Percentages of categorical variables were computed.
Results: The findings obtained from the demographic variables by the analysis of the data with selected samples are having 63% are having inadequate knowledge,37% are having moderate knowledge. There is significant relationship between the age, type of family, religion and family income with level of knowledge regarding prevention of hook warm infections.
Conclusion: Structured teaching programme is necessary to improve the knowledge level among school children's.
Index Terms : school children's, hook warm infections, knowledge level

Introduction:

Hookworm infection is a significant public health concern, particularly in tropical and subtropical regions with inadequate sanitation. Caused primarily by *Ancylostoma duodenale* and *Necator americanus*, these soil-transmitted helminths infect humans through skin contact with contaminated soil. Once inside the host, the larvae migrate through the bloodstream to the lungs and eventually settle in the small intestine, where they mature and feed on blood.

Globally, hookworm affects hundreds of millions of people, contributing to iron-deficiency anemia, malnutrition, and impaired physical and cognitive development—especially in children and pregnant women. The infection burden is closely linked to socioeconomic factors such as poor hygiene, barefoot walking, and agricultural exposure.

Despite its chronic nature and widespread impact, hookworm infection often presents with non-specific symptoms, making diagnosis and control challenging. Advances in molecular diagnostics and renewed interest in vaccine development offer promising avenues for future prevention and management strategies.

Recent studies across India and other regions show that **hookworm infection remains a significant concern among school-aged children**, especially in areas with poor sanitation and hygiene practices. Here are some key findings: A study in **Bihar, India** found a **10.1% incidence rate** among 780 schoolchildren, with both boys and girls affected. Notably, **over 83% of infected children were anemic**, highlighting the health impact of the infection. In **Haryana**, a cross-sectional study reported a **20% prevalence** of hookworm ova in fingernail samples from children with untrimmed nails. Risk factors included open defecation, poor hand hygiene, and eating food dropped on the ground. **Andhra Pradesh:** A study reported **over 50% prevalence** of hookworm infection in a specific location within the state.This high rate was linked to **poor sanitation, open defecation, and lack of footwear**, especially in rural areas. **Telangana:** A hospital-based study in Hyderabad found a **10.1% incidence** of hookworm among 780 children aged 5–15 years. Among those infected, **over 83% were anemic**, with girls showing slightly higher anemia rates than boys. Most cases were concentrated in schools with **unhygienic surroundings**, and children from **low-income backgrounds** were disproportionately affected. **Trends and Improvements:** Telangana has shown **substantial reduction in worm prevalence** in recent follow-up surveys, thanks to **school-based deworming programs** and improved sanitation efforts. These findings highlight the importance of **continued surveillance, health education, and preventive treatment**—especially in schools and communities with limited resources.

OBJECTIVES

1. To assess the level of knowledge regarding prevention of hook warm infection among students.
2. To associate the level of knowledge regarding hook warm infection and selected socio demographic variables.

ASSUMPTION:

The students may have adequate knowledge regarding prevention of Hook warm infection.

MATERIALS & METHODS

The present study was conducted among 30
4^{th} and 5^{th} standard students who are studying at primary schools at Hyderabad. Samples were selected by Non probability convenience sampling technique. Samples who are willing to participate in study and who can read and write Telugu or English were included in the study were studying and residing in that area.

DESCRIPTION OF THE TOOL

A semi structured questionnaire which consists of 30 questions related to hook warm infections to assess the knowledge level one mark carries for correct answer.
The scores samples are having 63% are having inadequate knowledge, 37% are having moderate knowledge.
There is significant relationship between the age, type of family, religion and family income with level of knowledge regarding prevention of hook warm infections

DATA COLLECTION PROCEDURE

The data collection was carried out from
February 2024 for 2 weeks. The permission was obtained to conduct the study from Institutional ethical committee, community medicine, Principal. About nature and purpose of study and informed consent was obtained. Data was collected by using semi structured questionnaire it took 10-15 minutes to collect the data from each sample.
Samples who fulfilled the inclusion criteria were recruited for the study.

DATA ANALYSIS

The data was analyzed by using Descriptive
Statistics that include mean standard deviation and inferential statistics namely and Chi square.

RESULTS

Table-1 Frequency and percentage distribution of knowledge prevention of hook warm infection among students.

INADEQUATE KNOWLEDGE		MODERATE KNOWLEDGE	
F	%	F	%
19	63%	11	37%

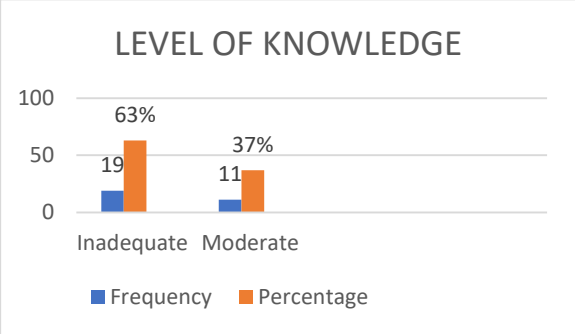

Fig 1. Shows that 63 % inadequate knowledge, 37% are having moderate knowledge among 30 students.

Table 2.
Frequency and percentage Distribution of central values with knowledge regarding prevention of hook warm infection.

MEAN	MEDIAN	SD
15.56	15.5	3.081

TABLE 3. Association between the level of knowledge on prevention of hook warm infection among students.

Demographic variables	**Level of knowledge**			**Chi-sq x^2**
	Frequency	**Inadequate**	**Moderate**	
Age of the student				
8-9 years	17	11	6	Chi sq x^2 = 6.393 df=2 (0.0041)
10-11 years	10	8	2	S
12 years	3	0	3	

Gender of the student a. Male b. Female	 15 15	 11 8	 4 7	Chi sq = 1.292 df=1 p= 0.255 NS
Education of the student a. 4th class b. 5th class	 15 15	 10 9	 5 6	Chi sq = 0.142 df= 1 p= 0.706 NS
Food habits Non vegetarian b. Vegetarian Mixed	 8 2 20	 7 1 11	 1 1 9	 Chi sq= 2.76 df= 2 p= 0.251 NS
Occupation of father Professional Semi professional Clerical Skilled Unskilled Unemployed	 6 5 8 7 2 2	 3 1 6 5 2 2	 3 4 2 2 0 0	Chi sq = 7.634 df=5 p=0.18 NS
Type of family Nuclear family Joint family	 20 10	 16 3	 4 7	Chi sq = 7.15 df= 1 p= 0.0076 S

Religion Hindu Muslim Others	25 3 2	14 3 2	11 0 0	Chi sq= 3.49 df=2 p=0.17 NS
Any affected person in family No Yes	28 2	18 1	10 1	Chi sq= 0.17 df= 1 p=0.68 NS
Family income 2301-11,450 11,451-22,850	23 7	18 1	5 6	Chi sq= 9.42 df= 1 p=0.002 S

level of significance, C: calculated value, NS: No Significant, S*: Significant

DISCUSSION

Findings related to level of knowledge regarding prevention of dengue fever

The findings obtained from the demographic variables by the analysis of the data with selected samples that 63 % are having inadequate knowledge, 37% are having moderate knowledge among 30 students.

Findings related to the association between knowledge level with demographic variables. The finding shows that there is significant relationship between the age, type of family, religion and family income with level of knowledge regarding prevention of hook warm infections.

RECOMMENDATIONS FOR FUTURE

RESEARCH

- The study can be conducted in different areas like PHC's , CHC's, and in large populations.
- The study is conducted among students and health professionals like Anganwadi workers, ANMs.
- The study is conducted among staff nurses in clinical set up.

Conclusion

From this study it is found that 63 % are having inadequate knowledge, 37 % are having moderate knowledge among students.

LIMITATIONS

The study is limited to

1. A sample size of 30 students
2. Who are studying at primary schools and residing at Hyderabad.

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