



## Knowledge regarding prevention of worm infestations among mothers of under five children

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### Abstract

**Background:** World Health Organization reported that worm infestation is one of the common health problems worldwide especially among children. WHO estimated that about 1400 million people worldwide are infected with at least one type of Intestinal worm. Hook worm, Pin worm and, Tape worm commonly acquired orally or parentally or both routs.

**Objectives:** 1. To assess the knowledge regarding prevention of worm infestations among mothers of under five children. 2. To find out the association between the level of knowledge regarding prevention of worm infestation with selected socio demographic variables.

**Materials and Methods:** The Non-experimental descriptive design with non probability Convenience sampling technique was adapted to select 60 mothers of under five children in Venkatachalam at Nellore District.

**Results:** The result shows that among 60 samples 60(98.4%) of mothers have inadequate knowledge and 1(1.6%) of mothers have adequate knowledge regarding prevention of worm infestation.

**Keywords:** knowledge, mothers, under five children, worm infestation

### Introduction

World Health Organization (WHO, 2013), reported that worm infestation is one of the common health problem worldwide especially among children. WHO estimated that about 1400 million people worldwide are infected with at least one type of Intestinal worm. Hook worm, Pin worm and, Tape worm commonly acquired orally or parentally or both routs. In 2013 annual report at global prevalence regarding type of worm infestation shows that 1.47 billion are ascariasis, 1.3 billion for trichiuris and 1.05 billion for hook worm infestation and more than 25% of world population infected with helminthes. Prevalence rates of 50 to 75% have been registered in Asian Countries.

Globally parasitic disease persistently remain to be one of the major public health problems. Among these diseases infectious due to intestinal parasites are most commonly present in developing countries. In both urban & rural area communities, especially among the poorest. Global estimates indicate that more than half of the total population nearly (3.5 billion people) are alternated from parasitic infections among them, 450 million become ill, the majority being children.

Worm infestations is the chronic debilitation infection with the nematodes, it is prevalent in sub-tropical countries. The intestinal parasitic disease including helminthes worms & protozoa constitutes the most frequent infection process, parasitic disease especially at risk because of typical hand, mouth activity, and uncontrolled feces activity.

The under five children are vulnerable or special risk group in

any population observing special health care because of their community & various stage of growth & development. The under five children are more prone to appear same infection which is not seen in adult medical care through their life span. All children are most vulnerable group in the society, certain diseases affect them, & increases morbidity and mortality rates. These diseases include diarrhea, vector bone diseases, helminthes infestations, respiratory infections & injuries.

### Need For the Study

WHO (2009), estimated that infection with roundworm, hookworm and whipworm with associated morbidity affect approximately 250 million, 46million and 151million people respectively. About half of the population in south India and 50% of school children in tribal areas of central India are infected with *Ascaris lubricants*, *Trichiuris trichiura* and hookworm. In western part of Nepal 86.7% of the preschooler children are infected with a single geohelminth infection & 13.3% with mixed infection.

### Statement of the Problem

“A Study to Assess the Knowledge Regarding Prevention of Worm Infestations among Mothers of Under five Children at Venkatachalam in Nellore District.”

### Objectives

1. To assess the knowledge regarding prevention of worm infestations among mothers of under five children.

- To find out association between the level of knowledge regarding prevention of worm infestation with selected socio demographic variables.

**Delimitations**

The study is delimited to

- The mothers of under five children at venkatachalam only.
- The sample size of 60 only.
- 2 weeks data collected period only.

**Methodology**

**Research Approach:** The qualitative research approach was used to assess the knowledge regarding prevention of worm infestations among mothers of under five children.

**Research Design:** Non experimental descriptive research design.

**Research Setting:** The study was conducted in a rural area, in Venkatachalam village at Nellore District.

**Target population:** The Target population of the present study were mothers of under five children.

**Sampling Technique:** The convenience sampling technique was used for present study to select the sample.

**Sample Size:** The sample size for the present study was 60 mothers of under five children.

**Criteria for Sample Selection**

**Inclusion Criteria:** The mothers who were

- Willing to participate in the study.
- Mother who were having at least one under 5 children.
- Available during the period of data collection.
- Residing in community area at venkatachalam, Nellore.

**Exclusion Criteria**

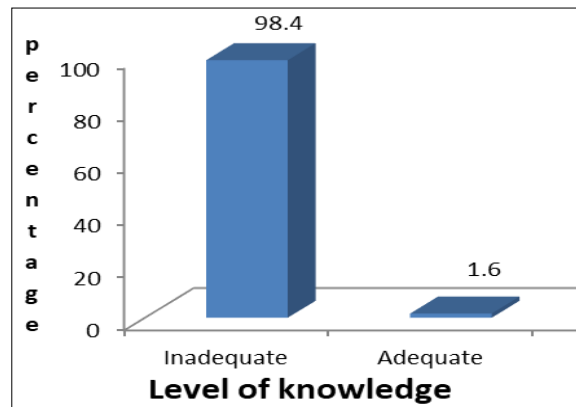
- Who are not willing to participate in the study.
- Who is not having under five children
- Who is unavailable during the period of data collection.

**Results and Discussion**

**Table 1:** Frequency and Percentage Distribution of Level of Knowledge Regarding Prevention of Worm Infestation among Mothers of Under Five Children (n=60)

Level of knowledge	Frequency (f)	Percentage (%)
a) Inadequate	59	98.4
b) Adequate	1	1.6
<b>Total</b>	60	100

Table No-1: Shows that among 60 samples 60(98.4%) of mothers had inadequate knowledge and 1(1.6%) of mothers had adequate knowledge regarding prevention of worm infestation.



**Fig 1:** Percentage distribution of level of knowledge regarding prevention of worm infestation among mothers of under five children

**Table 2:** Mean and Standard Deviation of Level of Knowledge Regarding Prevention of Worm Infestation among Mothers of Under Five Children

Mean	Standard deviation
11.4	2.29

Table No-2: Shows that the mean of knowledge of mothers of under five children. The mean is 11.4 and standard deviation is 2.29.

**Table 3:** Association of Level of Knowledge Regarding Prevention of Worm Infestation of Worm Infestation with Demographic Variable of Mothers of Under Five Children

S. No	Demographic variables	Inadequate		Adequate		Chi square
		f	%	f	%	
1.	<b>Sanitation</b>					C=46.45008
	a) Open field defecation	44	73.4	1	1.6	T=5.99
	b) Using own latrine	11	18.4	-	-	df=2
	c) Use of public	4	6.6	-	-	P=0.05
						<b>S*</b>
2.	<b>No. of children in the family</b>					C=5.961
	a) 1	8	13.4	1	1.6	T=5.99
	b) 2	46	76.6	-	-	df=2
	c) 3	5	8.4	-	-	P=0.05
						<b>S*</b>

NS=Non Significant S= Significant df = (r-1) (c-1) P< 0.05

Table No-3: Shows that there is a significant association between the level of knowledge regarding prevention of worm infestations with number of children and sanitation. There is no association between level of knowledge with age, education, occupation, family income, type of family, religion, food pattern, source of water and use of anthelmintic drug.

**Major Findings**

- Majority of respondents, 33(55%) are between the age group of 21- 25yrs.
- Majority of respondents, 35(58.3%) have completed primary education.
- Majority of respondents, 57(95%) are house wives.

- Majority of respondents, 37(61.7%) were earning family income less than Rs. 5001
- Majority of respondents, 46(76.7%) live in nuclear family
- Majority of respondents, 60(100%) live in rural area
- Majority of respondents, 48(80%) are Hindus
- Majority of respondents, 52(87%) are non vegetarian
- Majority of respondents, 45(75%) are following open field defecation
- Majority of respondents, 43(71.7%) use bore well water
- Majority of respondents, 46(76.7%) have two children
- Majority of respondents, 54(90%) use the antihelmenthic drug using once in 6 months.
- Majority of respondents, 60(100%) received information from the parents and grandparents.
- Majority of respondent, 59 (98.4%) are having inadequate knowledge on prevention of worm infestation.
- There is a significant association of level of knowledge regarding prevention of worm infestation with number of children and sanitation.

### Recommendations for the Research

\*The study was conducted to assess the knowledge regarding prevention of worm infestations among the mothers of under five children at community area in Venkatachalam, Nellore.

\*The mother who are lacking the knowledge can attend PHC for improvement of knowledge.

### Conclusion

In the present study the following conclusion were drawn from findings of study. Majority of the mothers of under five children have inadequate knowledge regarding prevention of worm infestation in Venkatachalam village at Nellore district. Educational programme to be organized or prevention of worm infestation to improve the knowledge of mothers of under five children to reduce the prevalence of worm infestation.

### References

1. Basavanthappa BT. The text book of community health nursing, 2<sup>nd</sup> edition, J.P. brothers, Medical publishers, Pvt. Ltd., 2008.
2. Dorothy Morlows, The text book of Paediatric Nursing, 6<sup>th</sup> edition, published by Philadelphia, W.B. Saunders publications in, 1998.
3. Behrman E. The text book of Paediatric nursing, 17<sup>th</sup> edition, published by Saunders Elsevier.
4. Aswathy. Risk factors of worm infestation, published in Journal of Para Medical and Nursing time, may. 2010; 14:32.
5. Edrisinghe JS. Factors influencing parasites infestation. published in Journal of Nightingale nursing time. 2013; 7:29.
6. Humidi M. prevalence of worm infestation. Published in Journal of Paediatric nursing February. 2012; 22:86-87.
7. Lahariys, Knowledge regarding helmenthic infestation. Published in Journal of health devoted to healthful living. 2013; 8:22.
8. Education on prevention of nosocomial infection among staff nurses at neonatal intensive care unit in Sri Ramakrishna hospital, Coimbatore. 2014; 3(3):33-35.

9. Care study on status asthmaticus, Narayana Nursing Journal. 2016; 5(2).
10. A study to assess the knowledge regarding home management of diarrhoea among mothers of underfive children, International journal of applied research. 2017; 3 (5):376-380.
11. Prevalence of Diarrhea among childrens of underfive children Narayana Nursing Journal, 2017.
12. Nutritional status of underfive children International journal of applied research. 2017; 3(5):594-598.
13. A study to assess the effectiveness of video teaching programme on immunization regarding knowledge among the mothers of under five children admitted in pediatric wards of RMMCH at Chidambaram. Narayana Nursing Journal, 2014, 4.
14. Ramya K, Dr. Indira S. A study to assess the knowledge regarding recording and interpretation of blood pressure among staff Nurses and Nursing students in Narayana Medical College and Hospital published by Nurses of India. 2016; 17(7):16-17.
15. Ramya K, Dr. Indira S. A study to assess the knowledge regarding recording and interpretation of respiration of staff nurses and nursing students in Narayana Medical College and Hopital, Nellore, published in Nightingale Nursing Times. 2016; 9(2):37-38.
16. Ramya K, Dr. Indira S. An exploratory study to assess the factors contributing to childhood obesity among school children at Narayana Medical college and Hospital, Nellore, published nurses of India. 2016; 16(7):21-22.
17. Ramya K, Dr. Indira S. A study to assess the knowledge of mothers regarding care of low birth weight babies in Narayana Medical College and Hospital, Nellore published in Narayana nursing Journal. 2016; 4(2):29-3.
18. Ramya K, Dr. Indira S. A study to assess the effectiveness of video teaching programme on immunization regarding knowledge among the mothers of under five children admitted in paediatric wards of RMMCH at Nellore published in Narayana nursing Journal. 2014; 2(2).
19. Ramya K, Athira babu Indira S, Suganya Dadam Revathi, Samhita jyothi. Astudy to assess the knowledge regarding oral hygiene among staff Nurses and nursing students in Narayana medical college hospital, Nellore, published in International Journal of Applied Research. 2017; 3(10):153-155.
20. Ramya K. female infanticide in india Narayana Nursing Journal. 2013; 2(2):2.
21. Ramya K. Shaken Baby syndrome. Narayana Nursing Journal. 2014; 5(4):2.
22. Dadam Revathi T, oniya Kurian swapna N, Suganya Ramya MK. A Study to assess the knowledge regarding Creche among staff nurses and nursing students in Narayana Medical College Hospital, Nellore, International Journal of Applied Research. 2013; 3(10):118-121.
23. Swapna N, Revathi D, Subhashin N, Arundhathi S, Indira S, A study to assess the Effectiveness of self-instructional module on nursing care of child under phototherapy among staff nurses at Narayana medical college Hospital, Nellore IJAR. 3(6):1025-1027.

24. Chandana Dadam Revathi T. A study to assess the knowledge regarding collection of stool specimen for infants among staff nurses and nursing students at Narayana Medical College Hospital, Nellore. *International Journal of Applied Research*. 3((10))1:18-12.
25. Sarithareddy VR, Indira A, Revathi D. A study to assess the knowledge regarding renal rehabilitation among staff nurses in NMCH, Nellore. *IJAR*. 2017; 3(8):345-347.
26. Merlin Golda JM, Revathi D, Subhashini N. Assess the effectiveness of cold application on preprocedure (A V fistula puncture) pain among hemodialysis patients in tertiary care hospital, Nellore, *International Journal of Applied Research*. 2016; 2(6):660-664.
27. Revathi D. Effectiveness of structured teaching programme on Knowledge regarding postp artum haemorrhage among mphw Students in selected mphw schools, hyderabad, a.p. *International Journal of Recent Scientific Research*. 6(10):6685-6689.
28. Suganya V, *et al*. Effectiveness of oil massage therapy on weight and neurobehavioral response among LBW infants, published in *international journal of science and research*. 2015; 4(5):2999-3002.
29. Budda Kavitha. Effectiveness of activity friendly play intervention on healthy habits among children, *international journal of applied research*. 3(2):14-15.