

# Worm Infestation among School Age Children: Explorative Study to Assess Mothers Knowledge and Practice

P. Senbagam

Research Scholar, Department of Nursing, Shri Venkateshwara University, Amroha, India

**Abstract:** This paper presents a study to assess mother's knowledge and practice on worm infestation among school age children.

**Keywords:** worm infestation, knowledge, practice

## 1. Introduction

Prevention is the key, but early intervention can improve the outcomes. The global strategy health for all more towards primary health care which can be possible only by encouraging the community participation and mobilizing the community resources and using appropriate technology for reducing the morbidity and mortality among children. Moreover, Round worm infestations throw an additional burden on the rapidly growing child, particularly on those children whose health status is already compromised by illness and malnutrition. In India the awareness of parents and children about the mode of spread of various parasitic infestations and their impact on health is poor. Hence they need to be taught about personal hygiene and ways to prevent intestinal parasitic infestation and thereby the impact on various aspects of health in children can be reduced.

The purpose of the study was to assess the knowledge and practice of mothers of school age children regarding worm infestations, at Paruvachi, Erode district. Structured questionnaires were used and data was collected by self-report method. The conceptual framework of this study was based on Modified Rosenstoch (1974) and Becker's Health Belief Model (1978). Convenient sampling was used for selecting the samples. Descriptive statistics (frequency, percentage, mean and standard deviation) and inferential statistics (chi-square) was used to analyze the data and to test hypothesis.

## 2. Methodology

The research design adopted for the study was descriptive design and research approach adopted for this study was non experimental approach. The sample size was 100 mothers of school age children. The mothers were selected in Barabanki Lucknow. Data was collected by using structured interview questionnaire: This consists of three sections Section A: Comprised of demographic data Section B: Comprised of

structured interview schedule on the knowledge regarding worm infestations, which had 30 items. Section C: Comprised of structured interview schedule regarding practices on worm infestations, which had 10 items.

## 3. Results

- The maximum number of mothers 28% was in the age group of 31-35 years.
- 45% of mothers had completed high school education.
- Out of 100 mothers 57% were housewives.
- 48% of the mother's monthly income of the family is between Rs.1001-5000/
- 51% of mothers had two school age children. 58% were consuming non vegetarian.
- The maximum number 74% of families were practicing open field defecation.
- 81% of the families do not have pet animals.
- Maximum number of mothers 41% acquired information about worm infestation from mass media.
- Assessment of level of knowledge of mothers regarding worm infestation among school age children showed that majority 44% had moderately adequate knowledge, minority 18% had adequate knowledge and remaining 38% of mothers have inadequate knowledge. Overall mean knowledge score was 13.66 (SD=3.426).
- Assessment of level of practices of mothers regarding worm infestation among school age children revealed that majority 40% were fair practice and minority 30% were poor practice and remaining 30% of mothers were good practice of prevention of worm infestation. Overall mean practice score was 6.33 (SD=2.351).
- The correlation between the knowledge and practices regarding worm infestation  $r=0.67$  showed that there was a highly significant positive correlation. It means when the knowledge increases their practice also increases highly.
- There was a statistically significant association found between level of knowledge and demographic variables such as educational qualification of the mothers ( $p=0.0008$ ), source of information ( $p=0.0018$ ) regarding worm infestation.

- There was a statistically significant association found between level of practice and demographic variables such as educational qualification of the mothers ( $p=0.0001$ ), source of information ( $p=0.0023$ ) regarding worm infestation.
- Research hypothesis stated were accepted.

#### 4. Discussion

The finds of the study revealed the knowledge and practice regarding worm infestation among the mothers of school age children. Assessment of level of knowledge of mothers regarding worm infestation among school age children showed that majority 44% had moderately adequate knowledge, minority 18% had adequate knowledge and remaining 38% of mothers have inadequate knowledge. Overall mean knowledge score was 13.66 (SD=3.426)

Assessment of level of practices of mothers regarding worm infestation among school age children revealed that majority 40% were fair practice and minority 30% were poor practice and remaining 30% of mothers were good practice of prevention of worm infestation. Overall mean practice score was 6.33 (SD=2.351).

The result of this study supported the findings Mascie-Taylor GG, (2001) conducted study in Bangladesh stated that carried out the impact of regular health education in improving knowledge, attitude and practices in the control of intestinal parasites was examined in four rural-areas of Bangladesh; two areas received health education and the other two areas were controls. By the end of the 18-month study, households receiving health education showed highly significant improvements in knowledge, water and sanitation facilities and personal hygiene compared with households in the control areas.

To correlate the knowledge and practice of worm infestation among the mothers of school age children. The correlation between the knowledge and practices regarding worm infestation  $r=0.67$  showed that there was a highly significant positive correlation. It means when the knowledge increases their practice also increases highly. This finding is supported by Gunawardena GS et.al (2007) conducted study in Srilanka stated studied about the knowledge and practice of childrens affecting the prevalence of ascariasis infection in a low - country tea plantation in Srilanka. Most (90.3%) obtained their drinking water from common taps, and 48.8% boiled their drinking water. In congested living conditions with poor sanitary facilities, the level of faecal contamination of the environment is invariably high. Even under these conditions, however, good hygiene and the boiling of all drinking water can reduce the risks of *Ascaris* infection. In the study setting and in similar environments, regular anthelmintic therapy, improvements in housing conditions and sanitary facilities, and health education, to promote risk-reducing patterns of behaviour, the study revealed that there is a positive correlation between knowledge and practice of the children.

To find out the association between the knowledge of

mothers regarding worm infestation and selected demographic variables. There was a statistically significant association found between level of knowledge and demographic variables such as educational qualification of the mothers ( $p=0.0008$ ), source of information ( $p=0.0018$ ) regarding worm infestation. , There was a statistically significant association found between level of practice and demographic variables such as educational qualification of the mothers ( $p=0.0001$ ), source of information ( $p=0.0023$ ) regarding worm infestation Research hypothesis stated were accepted. These findings are supported by Hosain GM, (2007) conducted study in UK stated investigated impact of sanitation and health education on intestinal parasites infection among mothers of school age Children to determine the impact of sanitary latrine use. This result is consistent with observations that the effect of sanitation and health education is slow to develop. It shows that significant association between practices and educational status of parents. Concerted primary healthcare activities with community development efforts should be undertaken to improve the overall living conditions of the people of this area to control this problem.

#### 5. Conclusion

The present study assessed the knowledge and practices of mothers regarding worm infestation among school age children. The result revealed that majority 42% of the mothers moderately adequate knowledge regarding worm infestation and 44% of them had fair practices towards prevention of worm infestations. Demographic variables have influence on the knowledge and practices of mother regarding worm infestation among the school age children. There is a positive relation between knowledge and practice regarding worm infestation among the school age children.

#### References

- [1] Akbar K. Ahmad (2005), Frequency of intestinal parasitic infestation in children of 5- 12 years of age in abbotabad, Journal of Paediatrics, 5 p. 52.
- [2] Albonico.M (1996), Control of intestinal parasitic infections in seychell, A comprehensive and sustainable approach, WHO Bulletin, 74 (6), Pp 577-586.
- [3] Bora D.et al (2003), Status of soil transmitted helminthic infestation in an urban locality of Assam, Journal of communicable diseases, 35, pp. 273-278.
- [4] Bundy Dap et.al (1991), Evaluating measures to control intestinal parasitic infections, World Health Statistics Quarterly, 45 (3), Pp 168-179.
- [5] C. Savoli (1999), Intestinal helminthes infestation among school children in Visakhapatnam, Indian journal of pediatrics, 66 (3), Pp 61-63.
- [6] Farag Z, Bassly and S. Schulery A.R (1994), Blood loss in a Egyptian farmers infected with *Ancylostoma duodenale*, Transactions of Royal society of Tropical Medicine and Hygiene, 12(3), Pp:486-90
- [7] Gupta and R.S. Meena (2003), Soil transmitted intestinal helminthes infections in urban and rural areas of alwar district, journal of communicable disease, 35(4), Pp:306-309.
- [8] Justus. J. Schlufferes (1998), Essentials of Healthy living Environmental Health, journal of public health, 5 (2), Pp:357-365.
- [9] Mahler (1984), Message for world health day WHO regional office for South East Asia, New Delhi.
- [10] Mascie – Taylor C. G. (2003), The cost – effectiveness of health education in improving knowledge and awareness about intestinal parasites in rural Bangladesh, journal of elono human biology, 1 (3), pp. 321-330.

- [11] Mehalo. M. C, Mchale and J. Streatifield G.F (1994), Children in the world facts, United nations Washington, UNICEF, ,1(4), p. 58.
- [12] Okyay P (2004), Intestinal parasites prevalence and related factor in school children, a western city sample-turkey, British journal of public health, 22 (1), p. 50.
- [13] V. Ramankutty et.al (2005), Pattern of helminthic infestation in primary school children of Thiruvanthapuram district, Thiruvanthapuram Medical college, 4(2), p. 45.
- [14] Rao VA et al (2003), Intestinal parasitic infections, Anaemia and under nutrition among tribal adolescents of Madhya Pradesh, Indian journal of community medicine, 28 (1), pp. 26-28.
- [15] Stephenson LS (1994), Helminth parasites a major factor in malnutrition, world health forum, 15 (2), pp. 169-172.
- [16] Srivastha (1999), Umesh intestinal parasites among school children in Visakhapatnam, 66 (3), Indian journal of pediatrics, pp. 53-59.
- [17] Traub RJ et al (2004), The prevalence infestation and risk factors associated with helminthic infection in tea-growing communities of Assam, Tropical medical international health, 9 (6), pp. 688-701.
- [18] Umarul Farrook. M (2001), Intestinal helminthic infestation among tribal population, Journal of communicable disease, 34 (3), pp. 171-172.