



---

## **A Longitudinal Study to assess the mother's awareness and skill regarding Worm infestation among school age children at selected Slums in Indore City**

*Mrs. Gunjan Singh<sup>1</sup>, Prof.Dr.Jinu K.Rajan<sup>2</sup>*

<sup>1</sup>Research Scholar, Malwanchal University, Indore

<sup>2</sup>Research Supervisor, Malwanchal University, Indore

---

### **Introduction**

Although prevention is essential, early intervention can improve outcomes. The global strategy health for all is shifting more toward primary health care, which can only be accomplished by encouraging community participation, mobilising community resources, and employing appropriate technology to reduce morbidity and mortality among children. Furthermore, round worm infestations place an additional burden on rapidly growing children, particularly those whose health is already compromised by illness and malnutrition. In India, parents and children are poorly informed about the mode of spread of various parasitic infestations and their impact on health. As a result, they must be taught about personal hygiene and ways to prevent intestinal parasitic infestation, reducing the impact on various aspects of health in children.

The study's goal was to assess the knowledge and skills of mothers with school-aged children about worm infestations in the Indore district. Structured questionnaires were used, and data was gathered through the self-report method. This study's conceptual framework was based on Modified Rosenstoch (1974) and Becker's Health Belief Model (1978). The samples were chosen using convenient sampling. To analyse the data and test the hypothesis, descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (chi-square) were used.

---

### **METHODOLOGY:**

The descriptive Longitudinal research design and non-experimental research approach were used in this study. The study included 100 mothers with school-aged children. The mothers were chosen from slums in Indore, Madhya Pradesh. The following structured interview questionnaire was used to collect data: This is divided into three sections. Section A contains demographic information. Section B: A structured interview schedule on worm infestation awareness with 30 items comprised Section B. Section C: Consists of a structured interview schedule with ten items about worm infestation skills.

---

### **RESULTS**

The majority of mothers (28%) were between the ages of 31 and 35.45 percent of mothers had graduated from high school. Out of 100 mothers, 57% were housewives. 48 percent of mothers earn between Rs.1001 and 5000 per month, and 51 percent have two school-aged children. 58 percent consumed nonvegetarian foods. A total of 74 percent of families practised open field defecation. Eighty-one percent of families do not have pets. The majority of mothers (41%), obtained information about worm infestation from the media.

An assessment of mothers' level of awareness about worm infestation among school-age children revealed that the majority 44 percent had moderately adequate awareness, the minority 18 percent had adequate awareness, and the remaining 38 percent of mothers had inadequate awareness. The overall mean awareness score was 13.66 (standard deviation=3.426).

An assessment of mothers' level of worm infestation prevention skills among school-age children revealed that the majority (40%) had fair skill, the minority (30%) had poor skill, and the remaining 30% had good skill. The overall mean skill score was 6.33 (standard deviation = 2.351).

<sup>TM</sup>The correlation  $r=0.67$  between awareness and skills regarding worm infestation revealed a highly significant positive correlation. It means that as their awareness grows, so does their skill. <sup>TM</sup>There was a statistically significant relationship found between level of awareness and demographic variables such as mothers' educational qualification ( $p=0.0008$ ), source of information ( $p=0.0018$ ) regarding worm infestation. <sup>TM</sup>The stated research hypothesis was accepted.

## Discussion

The study's findings revealed that mothers of school-aged children are aware of and knowledgeable about worm infestation. The assessment of mothers' level of awareness regarding worm infestation among school-age children revealed that the majority 44 percent had moderately adequate awareness, the minority 18 percent had adequate awareness, and the remaining 38 percent of mothers had inadequate awareness. The overall mean awareness score was 13.66 (standard deviation=3.426).

The assessment of mothers' level of skill in worm infestation prevention among school-age children revealed that the majority (40%) had fair skill, the minority (30%) had poor skill, and the remaining 30% had good skill. The overall mean skill score was 6.33 (standard deviation = 2.351).

The findings were supported by the findings of this study.

Mascie - Taylor GG, (2001) conducted a study in Bangladesh that examined the impact of regular health education on improving awareness, attitude, and skills in the control of intestinal parasites in four rural areas of Bangladesh; two areas received health education and the other two areas served as controls. When compared to control households, households receiving health education showed highly significant improvements in awareness, water and sanitation facilities, and personal hygiene by the end of the 18-month study.

To correlate worm infestation awareness and skill among mothers of school-aged children. The correlation  $r=0.67$  between awareness and skills regarding worm infestation revealed a highly significant positive correlation. It means that as their awareness grows, so does their skill. Gunawardena GS et al. (2007) conducted a study in Sri Lanka that stated studied the awareness and skill of childrens affecting the prevalence of ascariasis infection in a low-country tea plantation in Sri Lanka. The majority (90.3 percent) got their drinking water from ordinary taps, and 48.8 percent boiled it. The level of faecal contamination of the environment is invariably high in congested living conditions with inadequate sanitary facilities. Even in these circumstances, good hygiene and boiling all drinking water can reduce the risk of *Ascaris* infection. The study found a positive correlation between children's awareness and skill 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.

3.To investigate the relationship between mothers' awareness of worm infestation and certain demographic variables. There was a statistically significant relationship found between level of awareness and demographic variables such as mothers' educational qualification ( $p=0.0008$ ) and source of information ( $p=0.0018$ ) regarding worm infestation. There was a statistically significant relationship found between level of skill and demographic variables such as mothers' educational qualification ( $p=0.0001$ ) and source of information ( $p=0.0023$ ) regarding worm infestation. The research hypothesis stated were accepted. Hosain GM, (2007) conducted a study in the UK that investigated the impact of sanitation and health education on intestinal parasite infection among mothers of school-age children to determine the impact of sanitary latrine use. This finding is consistent with observations that the impact of sanitation and health education takes time to manifest. It demonstrates a significant relationship between parental skills and educational status. Primary healthcare activities should be coordinated with community development efforts to improve the overall living conditions of the people in this area in order to control this problem.

## CONCLUSION

The current study examined mothers' knowledge and skills regarding worm infestation in school-aged children. The findings revealed that 42 percent of mothers had moderately adequate awareness of worm infestation and 44 percent of them had fair skills in worm infestation prevention. Demographic factors have an impact on mothers' awareness and skills regarding worm infestation among school-aged children. There is a positive relationship between worm infestation awareness and skill among school-aged children.

## Reference

- kbar K.Ahmad (2005), Frequency of intestinal parasitic infestation in children of 5- 12 years of age in abbotabad, Journal of Paediatrics, 5 Pg 52
- Albonico.M (1996), Control of intestinal parasitic infections in seychell, A comprehensive and sustainable approach, WHO Bulletin, 74 (6), Pp 577-586.
- 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.
- Bundy Dap et.al (1991), Evaluating measures to control intestinal parasitic infections, World Health Statistics Quarterly, 45 (3), Pp 168-179.
- .Dr.C.Savoli (1999), Intestinal helminthes infestation among school children in Visakapattinam, Indian journal of pediatrics, 66 (3), Pp 61-63.
- .Farg 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
- 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.
- Justus.J.Sclufferes (1998), Essentials of Healthy living Environmental Health, journal of public health, 5 (2), Pp:357-365.
- Mahler (1984), Message for world health day WHO regional office for South East Asia, New Delhi.
- Mascie – Taylor,CG (2003), The cost – effectiveness of health education in improving awareness and awareness about intestinal parasites in rural Bangaldesh, journal of elono human biology, 1 (3), Pp 321-330.
- Mehalo.M.C,Mchale and J.Streatfield G.F (1994), Children in the world facts, United nations Washington, UNICEF, ,1(4), Pg 58.
- Okyay P (2004), Intestinal parasites prevalence and related factor in school children, a western city sample-turkey, British journal

- of public health, 22 (1), Pg 50.
- V.Ramankutty et.al (2005), Pattern of helminthic infestation in primary school children of Indore district, Indore Medical college, 4(2), Pg45
  - 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.
  - Stephenson LS (1994), Helminth parasites a major factor in malnutrition, world health forum, 15 (2), Pp 169-172.
  - Srivastha (1999), Umesh intestinal parasites among school children in Visakapattinam, 66 (3), Indian journal of pediatrics, Pp 53-59.
  - 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.
  - Umarul Farrook.M (2001), Intestinal helminthic infestation among tribble population, Journal of communicable disease, 34 (3), Pp 171-172.