

“A Study To Assess The Effectiveness Of Information Booklet On Knowledge Regarding Worm Infestation And Its Prevention Among Mothers Of Under- Five Years Children In Selected Area Of Waghodia Taluka.”

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ABSTRACT

Introduction: Worm infestation is a common problem among under-five children, leading to anaemia, malnutrition and impaired growth. Poor hygiene and lack of awareness among mothers contribute to its prevalence. Educational interventions such as information booklets can improve mothers' knowledge and help in prevention.

Objectives: To assess the effectiveness of an information booklet in improving the knowledge of mothers of under-five children regarding worm infestation and its prevention.

Materials and Methods: A quasi-experimental one-group pre-test and post-test design was adopted. The study was conducted among 80 mothers of under-five children selected through purposive sampling from villages of waghodia taluka. A structured knowledge questionnaire was used to assess participants' knowledge before and after the administration of the information booklet. Data were analysed using descriptive and inferential statistics.

Results: Mean pre-test knowledge score was 10.58 (SD = 2.90) and mean post-test score was 20.57 (SD = 4.19). The calculated t value was 10.8, higher than tabulated value at 0.05 significance level, indicating a significant improvement.

Conclusion: The information booklet was effective in improving mothers' knowledge regarding worm infestation and its prevention. Health education using simple materials can play a vital role in reducing worm-related morbidity among under-five children

Keywords: Worm infestation, Information booklet, Knowledge, Prevention, Under-five children, Mothers

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1. INTRODUCTION

Worm infestation, also referred to as intestinal helminthiasis, is a significant public health problem, particularly in developing countries where poor sanitation, inadequate hygiene practices, and unsafe drinking water are prevalent. Intestinal parasites such as *Ascaris lumbricoides* (roundworm), *Trichuris trichiurid* (whipworm), and hookworms (*Nicator americanus*, *Ancylostoma duodenale*) are among the most common species affecting humans (WHO, 2023). Globally, it is estimated that **more than 1.5 billion people** are infected with soil-transmitted helminths, with the highest prevalence

observed in children aged 1–14 years (CDC, 2022). Children are more susceptible due to their frequent contact with contaminated soil, poor personal hygiene habits, and lower immunity levels. Worm infestation in children has been linked to malnutrition, iron-deficiency anaemia, stunted growth, and impaired cognitive development (Bethony et al., 2006).^{1,2}

Children constitute a large section of the population in India. It has been a great challenge to the nation to provide health, education and food to the children below 5 years. School age population comprising of 38% of the country, who are dependent, unproductive but has great potential. The formative years of childhood has greater risk for morbidity and mortality. In most cases, the manifold childhood problems are interrelated and affect the growth and development of children, the most commonness being infections, parasitic infestations and malnutrition. The magnitude of parasitic infestations among children constitutes a major public health problem in many parts of the world. In India, the worm infestation is particularly heavy in the areas with warm, damp climates with heavy rainfall, as in the west coast. 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 Favor transmission of parasitic infection resulting in high endemic. Soil transmitted helminth (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 anthelmintic treatment. WHO recommends preventive chemotherapy (Primary Care) to all at risk people living in endemic areas once a year where the prevalence of Soil transmitted helminth in the community is over 20%, and twice a year where it is over 50%. However, administration of albendazole 400mg and mebendazole is not recommended in pregnancy during its first trimester for safety reasons; but is permissible in the 2nd and 3rd trimester of pregnancy.³

2. OBJECTIVE OF THE STUDY:

To assess the knowledge of mother regarding worm infestation and its prevention before and after information booklet.

To compare pre-test and post-test knowledge of mother regarding worm infestation and prevention.

To find out the association between the effect of information booklet with sociodemographic variables of the mother.

3. HYPOTHESIS

H0: There is a significant relationship between knowledge of mothers regarding worm infestation.

H1: There is a significant association between level knowledge of mothers and selected socio demographic variables.

4. RESEARCH METHODOLOGY

A quantitative research approach was adopted for the study to assess the effectiveness of an information booklet at Waghodia taluka Vadodara (Gujarat), children with worm infestation (itching around the anus, abdominal pain, diarrhoea, fatigue and weight loss) from Waghodia Taluka Gujarat are the sample for the study and sample size was 80. The sampling techniques adopted from the study was non probability convenient sampling technique. Criteria for the sample, inclusion criteria children's which aged under five-year have to diagnose at least one out of worm infestation. Sociodemographic data and medication compliance were assessed using a self-structured questionnaire. The data collection tool was sent to 6 experts for validation out of whom 4 received back with their valuable suggestions and comments on the study tool. 8 Sample were taken for the pilot study. section II – self-structured questioners containing 30 items the tool was administered to 10 selected children of worm infestation.

5. DATA COLLECTION PROCEDURE

The researcher gathered information regarding mothers of under five-year children from the sarpanch of Limda and Vyara villages. The researcher approached mothers of under-five year children by survey in many villages. During data collection the researchers introduced herself to mothers of under five-year children and explain the purpose of study, once the consented for the study; researcher obtained written consent from the sarpanch. Then, the researcher conducted self-reporting for the Spriest to assess the knowledge regarding worm infestation and its prevention among mothers of under-five-year children. The pre-test conducted using information booklet on knowledge questionnaires on worm infestation and its prevention among mothers of under-five year children.

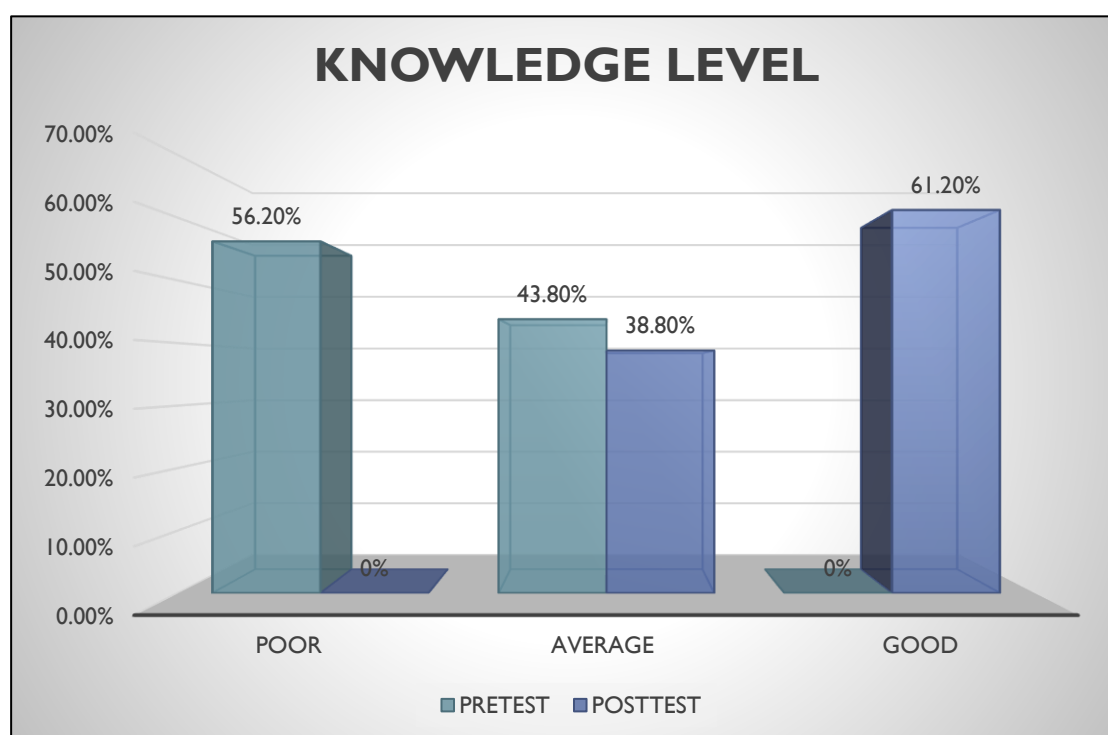
6. DATA ANALYSIS AND INTERPRITITION

Effectiveness of information booklet on knowledge regarding worm infestation and its prevention.

*Significant at $p \leq 0.05$ level; Table value = 2.000

Knowledge	Mean	SD	df	Paired 't' value
Pretest	10.58	2.90	79	16.97
Post test	20.57	4.19		

The above table reveals that the pretest mean score on Knowledge is 10.58 ± 2.90 and post-test mean score is 20.57 ± 4.19 respectively. The 't' value is 16.97 which is greater than the table value 2.000. Hence the research hypothesis H1 is retained at $p \leq 0.05$ level. Thus, it becomes evident that information booklet is effective in improving the knowledge regarding worm infestation and its prevention among mother of under five children.



Bar diagram showing percentage distribution of the sample according to the knowledge

pre-test and post-test level of knowledge

7. CONCLUSION:

In pre-test there was lack of adequate knowledge regarding worm infestation and its prevention among the mothers of under-five year children of selected villages of Waghodia Taluka but after the administration of information booklet there was significant improvement in knowledge on mothers of under-five year children. So, it can be concluded that administration of information booklet is found to be an effective and feasible method of teaching strategy to improve knowledge on mothers of under-five year children..

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