



“Assess The Effectiveness Of Information Booklet On Knowledge Regarding Prevention Of Worm Infestation Among The Mothers Of Under Five Years Of Children In Selected Rural Area.”

Ms. Ashwini Mankar¹ (Associate Professor), Ms. Monali Barsagade² (Assistant Professor), Ms. Sunita Mirpagare³ (Assistant Professor), Ms. Vidhya Partil⁴ (Lecturer)

Department of Child Health Nursing

Godavari college of Nursing Jalgaon, (Maharashtra University of health science Nashik) Maharashtra.

ABSTRACT

Worm infestation is one of the most common public health problems affecting under-five children, especially in rural areas where poor sanitation, inadequate hygiene practices, and lack of health awareness are prevalent. Intestinal worm infestation can lead to malnutrition, anemia, impaired physical growth, and reduced immunity among children. Mothers play a vital role in maintaining the health and hygiene of their children; therefore, improving mothers knowledge regarding prevention of worm infestation is essential for reducing the incidence of infection.

Keywords: Prevention, Worm infestation, Mother, Under five years of children, Rural area.

INTRODUCTION

Children under five years of age are more likely to suffer from different infectious diseases because their immunity is not fully developed and they are often exposed to unhygienic surroundings. Among these diseases, worm infestation is a common health problem in developing countries like India. Different types of intestinal worms such as roundworms, hookworms, whip worms, and tapeworms can affect children and may cause serious health problems if not treated properly. Worm infestation usually happens due to poor sanitation, unsafe drinking water, contaminated food, open defecation, walking barefoot, and poor hand washing habits. Children living in rural areas are more affected because of lack of health awareness, clean water, and proper sanitation facilities. Under-five children are at higher risk because they often play on the ground and depend on their mothers or caregivers to maintain cleanliness and hygiene.

OBJECTIVES

1. To assess the existing knowledge regarding prevention of worm infestation among the mothers of under five years of children.
2. To evaluate the effectiveness of informational booklet on knowledge regarding prevention of worm infestation among the mothers of under-five years of children.
3. To find out the association between pre-test knowledge score regarding prevention of worm infestation among the mothers of under five years of children.

HYPOTHESIS

H1: There will be **significant difference** between pre & post test knowledge score regarding prevention of worm infestation among the mothers of under five years of children.

H2: There will be significant association between pre-test knowledge score regarding prevention of worm infestation among the mothers of under five years of children with their selected demographic variables.

H0: There will be no **significant difference** between pre & post test knowledge score regarding prevention of worm infestation among the mothers of under five years of children.

MATERIALS & METHODS

- Design Pre-experimental (One group pre-test and post-test design)
- Target population: Mothers of under 5 years of children
- Accessible Population: The mothers of under 5 years of children in selected rural area who are available at the time of data collection.

Sampling technique: Non-probability convenient sampling

STATISTICAL ANALYSIS

DATA INTERPRETATION, ORGANIZATION OF DATA: TABLES, FIGURES AND GRAPHS

The data collected of the study was classified, organized and analyzed under following sections:-

SECTION I

Deals with analysis of demographic data of mothers of under five years of children in selected rural area in terms of frequency and percentage.

SECTION II

Deals with analysis of data related to assessment of knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area in terms of frequency and percentage.

SECTION III

Deals with analysis of data related to effectiveness of information booklet on knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area.

SECTION IV

Deals with analysis of data related to the association between pretest knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area with selected demographic variables.

SECTION I

Deals with analysis of demographic data of mothers of under five years of children in selected rural area in terms of frequency and percentage.

Table 1: Frequency & percentage distribution of mothers of under five years of children in selected rural area

Sr. No.	Variable	Groups	Frequency	Percentage
1	Age of mother (in years)	20-25	20	33.33
		26-30	26	43.33
		31-35	14	23.33
		above 35	0	0.00
2	Education	Primary	16	26.67
		Secondary	19	31.67
		Graduate/diploma	12	20.00
		Postgraduate and above	13	21.67
3	Occupation of mother	Housewife	29	48.33
		Private Job	3	5.00
		Government Job	19	31.67
		Hand business	9	15.00
4	Types of family	Joint family	20	33.33
		Nuclear family	33	55.00
		Extended family	7	11.67
5	Number of children	1	11	18.33
		2	48	80.00
		3	1	1.67
		4	0	0.00
6	Religion	Hindu	10	16.67
		Muslim	17	28.33
		Christian	7	11.67
		Any other	26	43.33
7	Types of motherhood	Widow	19	31.67
		Divorce	34	56.67
		Step mother	3	5.00
		None of the above	4	6.67
8	Do you have knowledge regarding child sexual abuse	Yes	33	55.00
		No	27	45.00
9	If yes, then source of information	Family/ friends	25	41.67
		Television	25	41.67
		Health professionals	5	8.33
		Others	5	8.33

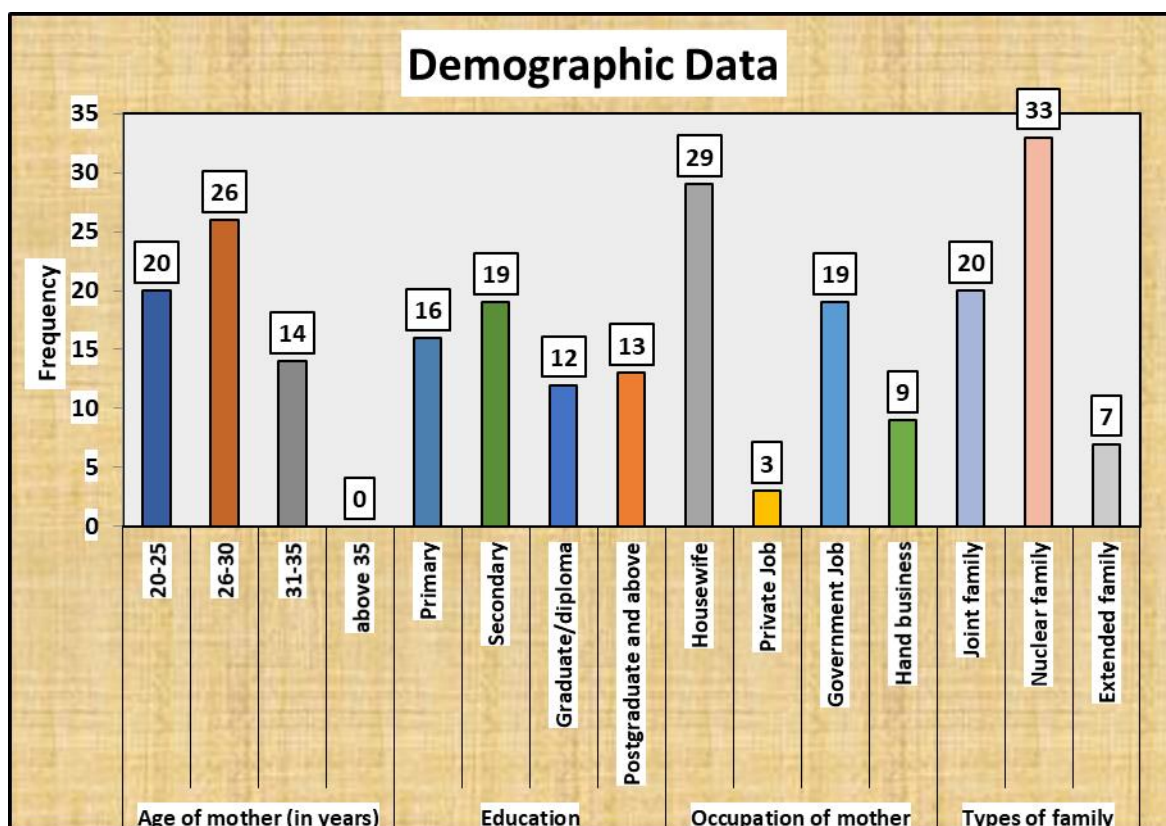


Figure No-1: Distribution of mothers of under five years of children

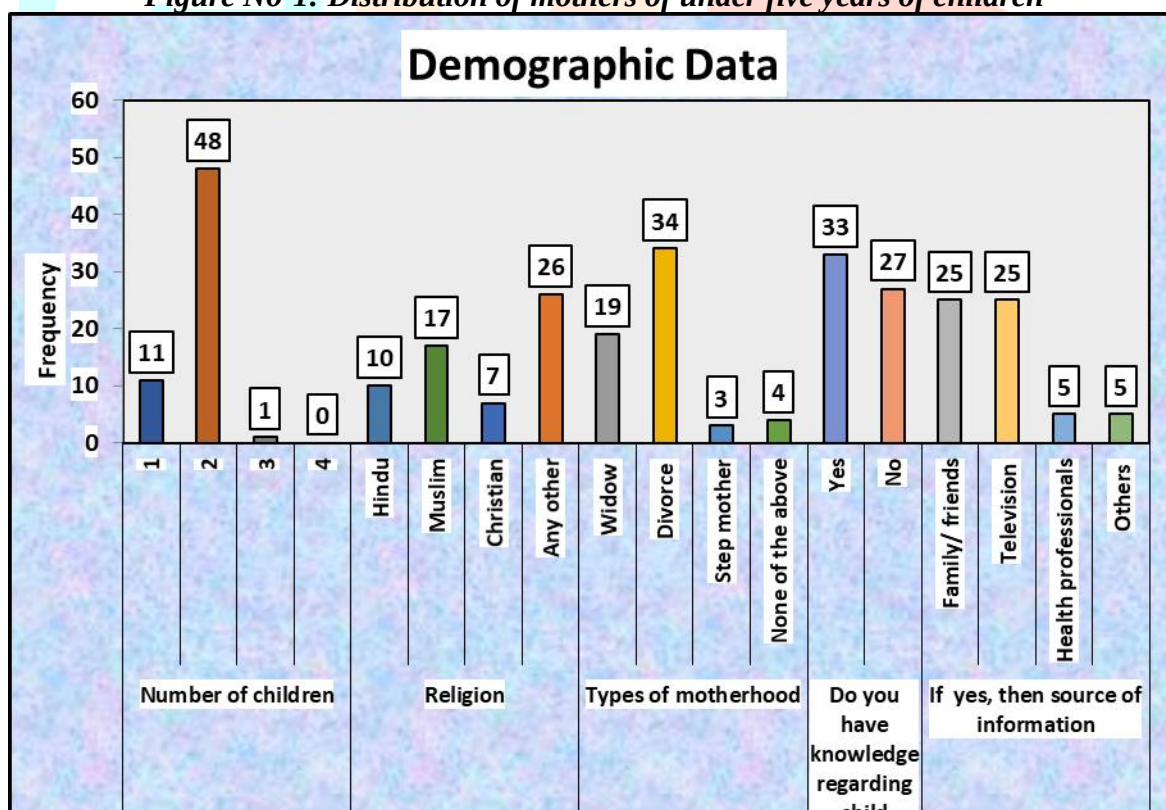


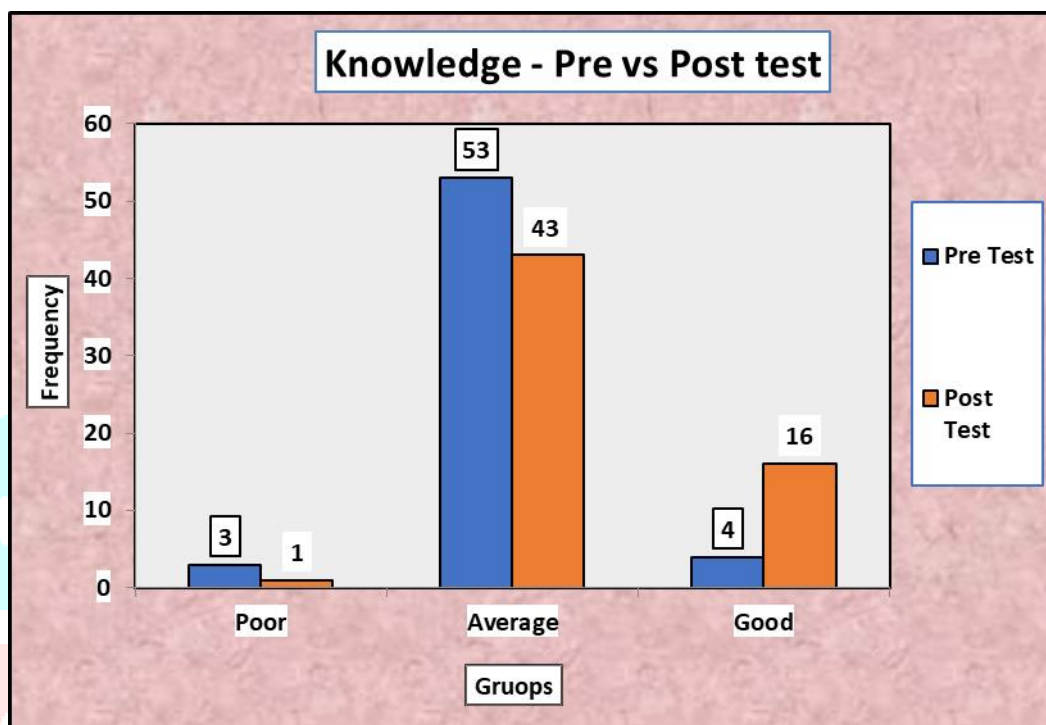
Figure No-2: Distribution of mothers of under five years of children

SECTION II

Deals with analysis of data related to assessment of knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area in terms of frequency and percentage.

Table 2: General assessments of Knowledge- PRE & POST test

Variable	Groups	Score	Frequency	Percentage
KNOWLEDGE	Poor	0-14	41	34.17
	Average	15-22	75	62.50
	Good	23-30	4	3.33
KNOWLEDGE	Minimum		8	
	Maximum		27	
	Average (SD)		15.37 (3.82)	

**Figure No-3: General assessments of Knowledge - PRE & POST test****GENERAL ASSESSMENTS OF KNOWLEDGE- PRE & POST TEST**

For the assessment purpose total score of knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area was divided in to three groups like poor (0-10 score), average (11-20 score) and good (21-30 score).

Pre Test:

At the time of pretest, assessment of the knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area shows that, 5% of mothers had poor knowledge, 88.33% had average knowledge and 6.67% of them had good knowledge.

Average knowledge score at the time of pretest was 15.41 with standard deviation of 3.19. The minimum score of knowledge was 8 with maximum score of 22.

Post Test:

At the time of posttest, assessment of the knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area shows that, 1.67% of mothers had poor knowledge, 71.67% had average knowledge and 26.67% of them had good knowledge.

Average knowledge score at the time of posttest was 18.45 with standard deviation of 4.07. The minimum score of knowledge was 9 with maximum score of 27.

SECTION III

Deals with analysis of data related to effectiveness of information booklet on knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area.

Table 4: Comparison of the pre and posttest Knowledge (paired t test)

Group	Frequency	Mean	S.D.	t value	P value
Pre Test	60	15.41	3.19	5.61	0.000
Post Test	60	18.45	4.07		

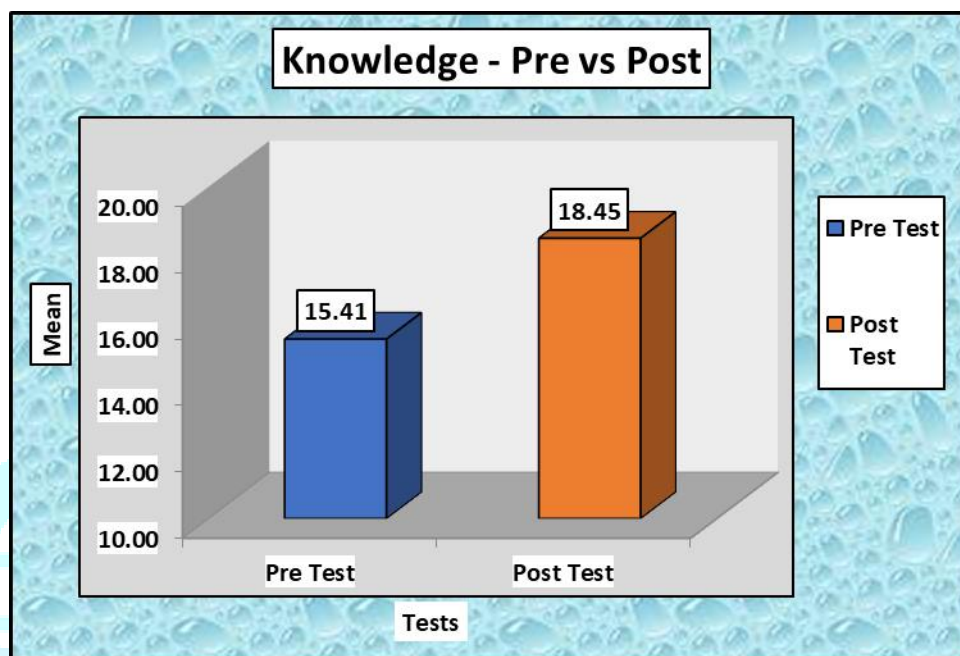


Figure 4: Comparison of the average pre and posttest Knowledge score

SECTION IV

Deals with analysis of data related to the association between pretest knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area with selected demographic variables.

Table 6: Association of Knowledge with demographic variables – Pre Test

Variable	Groups	Knowledge - PRE Test		Chi Square	d.f.	P value	Significance
		below Md	above Md				
Age of mother (in years)	20-25	7	13	12.64	2	0.002	Significant
	26-30	11	15				
	31-35	13	1				
	above 35	0	0				
Education	Primary	5	11	4.26	3	0.23	Not Significant
	Secondary	10	9				
	Graduate/diploma	8	4				
	Postgraduate and above	8	5				
Occupation of mother	Housewife	13	16	2.01	3	0.57	Not Significant
	Private Job	1	2				
	Government Job	12	7				
	Hand business	5	4				
Types of family	Joint family	9	11	0.55	2	0.76	Not Significant
	Nuclear family	18	15				
	Extended family	4	3				

Number of children	1	5	6	1.11	2	0.57	Not Significant
	2	25	23				
	3	1	0				
	4	0	0				
Religion	Hindu	5	5	3.57	3	0.31	Not Significant
	Muslim	12	5				
	Christian	3	4				
	Any other	11	15				
Types of motherhood	Widow	11	8	4.41	3	0.22	Not Significant
	Divorce	17	17				
	Step mother	0	3				
	None of the above	3	1				
Do you have knowledge regarding child sexual abuse	Yes	10	23	13.40	1	0.000	Significant
	No	21	6				
If yes, then source of information	Family/ friends	14	11	1.05	3	0.78	Not Significant
	Television	11	14				
	Health professionals	3	2				
	Others	3	2				

ASSOCIATION OF KNOWLEDGE SCORE IN RELATION TO DEMOGRAPHIC VARIABLES – PRE TEST

The chi square test was used to see the association between pretest knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area with selected demographic variables.

The test was conducted at 5% level of significance.

Significant Association:

For demographic variables age of mother and have knowledge regarding child sexual abuse, p value of the association test with pretest knowledge was less than 0.05. That means, knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area was associated with these demographic variables.

Concludes that, there was significant association of these demographic variables with the pretest knowledge.

No Significant Association:

For demographic variables education, occupation of mother, type of family etc., p value of the association test with pretest knowledge was more than 0.05. That means, knowledge regarding prevention of worm infestation among the mothers of under five years of children in selected rural area was not associated with these demographic variables.

Concludes that, there was no significant association of these demographic variables with the pretest knowledge.

REFERENCES

1. Dr. Harish Kumar Sharma¹, Mr. Gagan Deep² asses knowledge, attitude and practices of mothers of under five children regarding prevention of Protein Energy Malnutrition International Journal Dental and Medical Sciences Research Volume 4, Issue 3, May-June 2022 pp 512-516 www.ijdmsrjournal.com
2. Harishankar Meena¹, Nirbhay Singh Choudhary², Dharmesh Chaturvedi³ Teaching Program on Knowledge Regarding Malnutrition and its Prevention Among Mothers of Under Five Children International Journal of Pediatric Nursing Volume 6 Number 2, May–August 2020 DOI: <http://dx.doi.org/10.21088/ijpen.0974.5777.6220.3>
3. Ashi RS, Peerapur SM. Instructional Programme on Knowledge Regarding Protein Energy Malnutrition among the Mothers of Preschool Children from Selected Rural Areas of Karnataka: Pretest. Deleted Journal. 2024 Feb 15;2(3):62–74
4. Pierce AG. Measurement. In: Talbot LA, editor. Principles and Practice of Nursing Research. St Louis: Mosby; 1995. pp. 265–291.
5. Parul Datta, M.sc. (N), fifth edition (2022), published by jaypee bothers medical publishers ISBN-13: 978-9354656347.

