

# To Assess the Knowledge on Prevention and Control of Worm Infestations Among the Mothers' of Underfive Children at Erode, Tamilnadu

Indira.S<sup>1\*</sup>, Radha.R<sup>2</sup>, Shajin Gijo.Y<sup>3</sup>, Revathi.S<sup>4</sup>  
 Professor<sup>1,2</sup>, Associate Professor<sup>3,4</sup>  
 Dhanvantri College of Nursing, Namakkal

**Abstract:-** Most of the health problems of children are preventable. Worm infestations are probably more significant than specific vitamin and mineral deficiencies. In India, the problem is to be more common because of bad hygiene, poor awareness, illiteracy, misbelieves and poverty.<sup>1</sup> **Objectives:** 1. To assess the knowledge level on worm infestations among the mothers. 2. To compare the knowledge of mothers with demographic variables. **Material and Methods:** A descriptive research design with cross sectional survey approach and convenient sampling technique were used. The target population was mothers of underfive children and structured interview schedule were used to collect the data for 100 samples. **Results:** An overall mean score was 8.24±3.9 which indicates that the mothers had (51%) average knowledge on worm infestations and 85% had excellent knowledge on prevention and control of worm infestations.

**Keywords:-** Assess the Knowledge, Prevention and Control, Worm infestations, Mothers' of Underfive Children.

## I. INTRODUCTION

In India, 263 million young people with children below five years constituting 12.6% of the country's population.<sup>1</sup> Intestinal parasitism is an important public health problem among the children in developing countries.<sup>2</sup> The round worm and hook worm are most common in underfive children. Pinworm and tapeworm are found in young children.<sup>3</sup> Due to worm infestations many of the children are having malnutrition, anaemia, abdominal pain, intestinal obstruction, diarrhoea, loss of appetite, fever, weakness and respiratory infections.<sup>4</sup>

### A. Need for the Study

India being a large country and large population but small resources, the community services is not reachable to all children. In India, the prevalence of intestinal worm infestations among children is 76% and in the Tamilnadu is 82%.<sup>5</sup> Community involvements is an important aspect in the prevention and control of worm infestations. They help by improving hygienic living conditions like good water supply, safe disposal of excreta and proper handling of food.<sup>6</sup>

### B. Statement of the Problem:

To assess the knowledge on prevention and control of worm infestations among the mothers' of underfive children at Erode, Tamilnadu.

### ➤ Objectives:

- To assess the knowledge level on worm infestations among the mothers.
- To compare the knowledge of mothers with demographic variables.

### ➤ Hypothesis:

**H01:** There is no significant association between demographic variables with knowledge on prevention and control of worm infestations among the mothers' of underfive children.

## II. METHODOLOGY

In this study, a descriptive research design with cross sectional survey approach and convenient sampling technique were used to collect the data from 100 mothers' of underfive children. A structured interview schedule was used and it consists of 42 knowledge questionnaire on prevention and control of worm infestations.

## III. RESULTS

- Frequencies, percentage distribution,, mean and standard deviation was used. Chi-square test was done to compare the knowledge of mothers with their demographic variables.
- The overall highest percentage in the demographic data includes 81% of mothers belong to the age group of <25years, 78% were coolie, 37% had middle school and 67% of their monthly income was Rs.300-499.

### Classification of knowledge score:

Very poor - Below 20%  
 Poor - 21% to 40%  
 Average - 41% to 60%  
 Good - 61% to 80%  
 Excellent - 81% to 100%

**Table.1: Area-wise distribution of Mean, SD and Mean percentage of knowledge scores of the mothers on worm infestations.**

Area	Max. Score	Knowledge Score		
		Mean	S.D	Mean %
Meaning and causes	4	1.91	0.9	47
Mode of transmission	6	3.32	1.5	55
Signs and symptoms	4	1.81	0.99	45
Complications	2	1.2	0.5	60
<b>Total</b>	<b>16</b>	<b>8.24</b>	<b>3.9</b>	<b>51</b>

Table.1: The overall mean 8.24±3.9 score shows that 51% of the mothers had average knowledge on worm infestations. The mean (1.2±0.5) score was high (60%) for the items on complications and lowest (45%) mean score (1.81±0.99) for signs and symptoms of worm infestations.

**Table.2: Area-wise distribution of Mean, SD and Mean percentage of knowledge scores of the mothers on prevention and control of worm infestations.**

Area	Max. Score	Knowledge Score		
		Mean	S.D	Mean %
Food hygiene	8	7.95	0.2	99
Water hygiene	1	0.5	1.4	50
Toilet hygiene	2	1.95	0.2	97
Personal hygiene	4	3.45	0.5	86
Environmental hygiene	3	2.34	0.5	78
Specific protection	1	0.98	0.01	98
Control of worm infestations	7	4.93	1.02	70
<b>Total</b>	<b>26</b>	<b>22.1</b>	<b>2.83</b>	<b>85</b>

Table.2: The overall mean 22.1±2.83 score shows that 85% excellent knowledge on prevention and control of worm infestations. The highest (99%) mean score (7.95±0.2, 0.98±0.01, 1.95±0.2) on food hygiene, (98%) specific protection and (97%) toilet hygiene. Most (86%) of the mothers (3.45±0.5, 2.34±0.5, 4.93±1.02) correctly responded for the items on personal hygiene, environmental hygiene (78%) and control of worm infestations (70%). Only one sample had (50%) average knowledge on water hygiene.

**Table.3: The Comparison of Mean, SD and Mean percentage of knowledge scores of the mothers with demographic variables.**

Demographic variables	No. (100)	Knowledge Score		
		Mean	S.D	Mean %
<b>Age (years)</b>				
<20 years	8	31.9	2.7	75
20-25 years	81	29.9	3.7	71
26-30 years	11	32.4	3.4	77
<b>Educational status</b>				
No formal education	19	30.1	2.7	71
Primary school	24	31.1	3.3	74
Middle school	37	29.6	3.9	70

High school	15	30	4.2	71
Graduation	5	34.2	3.9	81
<b>Occupation</b>				
House wife	13	29.6	3.3	70
Coolie	78	30.2	3.7	71
Private employee	9	32.6	4.1	77
<b>Monthly Income/capita (Rs.)</b>				
<150	10	30.7	4.5	73
151-299	6	32.5	3.3	77
300-499	67	30.2	3.6	71
500-999	9	28.4	3.6	67
>1000	8	33	4.1	78
<b>(P&gt;0.05) - Not significant</b>				

Table.3: Mean, SD and Mean percentage of knowledge scores in relation to age of mothers shows that mean (32.4±3.4, 31.9±2.7, 29.9±3.7) score (77% to 71%) for the age group of 26-30 years, <20 years and 20-25 years. The highest (81%) mean score (34.2±3.9) for graduates and 74% to 70% for primary school, high school, no formal education and middle school. The mean (32.6±4.1) score for private employee (77%) and mean score (29.6±3.3) for the house wife (70%). The high (78%) mean (33±4.1) score for monthly income >Rs.1000 and low (67%) mean score (28.4±3.6) for the income group Rs.500-999. It shows that all mothers had good knowledge of their age, education, occupation and income but only five graduate mothers had excellent knowledge on prevention and control.

➤ *Nursing Implications:*

- The findings of the study will help the nursing professionals working in hospital and community to know the level of knowledge of mothers.
- It helps for nurses to prepare a module for health educates the mothers for better care.

**IV. RECOMMENDATIONS**

- A self learning teaching module can be prepared and tested to assess the effectiveness of the module on actual practice.
- Actual practice for prevention and control of worm infestations can be observed to assess the practice.

**V. CONCLUSION**

- 81% of mothers belong to the age group <25years, 37% had middle school, 78% were coolie, 67% of their monthly income was Rs.300-499.
- In the overall mean, mothers had (51%) average knowledge on worm infestations and they had (85%) excellent knowledge on prevention and control of worm infestations.
- There is no significant association (P>0.05) between the knowledge scores of mothers with their demographic variables. It shows that none of the demographic variables affect the mothers' knowledge level.

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