



**A STUDY TO ASSESS THE EFFECTIVENESS OF AN INFORMATION BOOKLET ON KNOWLEDGE OF MOTHERS REGARDING CARE AND PREVENTION OF DIARRHOEAL DISEASE AMONG CHILDREN BETWEEN 0-5 YEARS OF AGE ADMITTED IN PEOPLE'S HOSPITAL BHANPUR, BHOPAL (M.P).**

**Nursing**

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**ABSTRACT**

Diarrhoeal disease (age0-5)year is on the risk , emerging as a serious problem today all over the world and more so in the developing countries like India, children are an asset to the family, society, community, in which they live. Therefore this study was conducted with the aim to assess the effectiveness of an information booklet on knowledge of mother regarding care and prevention of diarrhoeal disease among children between 0-5 years of age admitted in people's hospital Bhanpur Bhopal(M.P.)

**KEYWORDS**

Assess knowledge, mothers, diarrhoeal, children, care and prevention.

**INTRODUCTION****“Healthy children today make a healthier nation tomorrow”**

Children are an asset to the family, society, community in which they live. The contribution of the mothers in creating a healthy population is beyond explanation. Diarrhoea is common but potentially severe illness in infants then become the cause of death.

More than four decades ago, on the 20<sup>th</sup> of November 1959 the United Nation Unanimously adopted the declaration of the rights of child and affirmed that “all children will be entitled to special protection, opportunities and facilities to enable them to develop in a normal and healthy manner with freedom and dignity”. This affirmation still remains a promise to be fulfilled. When assessed against a single, preventable and major cause of high mortality and morbidity among them diarrhoeal diseases.

Diarrhoea is a symptom of variety of condition and it constitute one of the main causes of morbidity and mortality among infants throughout the world. Actual rate of mortality among children due to diarrhea are difficult to pin down because of high rates of under registration of death of infants and children.

Diarrhoeal disease probably has been man's companions from the beginning of life. In 2009 diarrhoea was estimated to have caused 1.1 million deaths in people aged 5 and over 0.5 million deaths in children under the age of 5 years. In India alone, 1.5 million die annually of diarrhoea.

WHO 2004 stated that developing region of the world accounts for 3 quarts of child deaths due to diarrhoea. India along with Nigeria, Afghanistan and Utopia has got the higher child annual mortality rate due to diarrhoea i.e. 3, 86,000.

In the United states approximately 2 lakhs children younger than age 5 are hospitalization and approximately 200 children younger than 5 than die of diarrhea in each year (Malek Curns, Holman and others 2006).

**NEED OF THE STUDY**

The health & survive of child depends upon the health status of the mothers, awareness & education. Mothers are the best primary health

worker. In view of the consist & continued with her child, she is the best person to identify the early evidence illness & minor development deviation from normal.(Singh Meharban,2002)<sup>12</sup>

Diarrhoea is one of the most common cause of disease among children under age 0-5 years worldwide 3.575 million Peoples die each year from water-related disease 84% of water-related deaths are in children ages 0-14. 43% of water-related deaths are due to diarrhoea 98% of water-related deaths occurs in the developing world 1.4 million children die as a result of diarrhea each year.<sup>13</sup>

90% of all deaths caused by diarrheal are children under 0-5 years of age mostly in developing countries.<sup>14</sup>

WHO (14 Oct. 2009) reports that in 2008, 8.8 million children under 0-5 years children died, down from 9.2 million in 2007 and 12.7 million in 1990. Diarrhoea is the second leading cause of deaths among children under 0-5 years globally. Nearly one in 0-5 years child deaths – about 1.5 million each year is due to diarrhoea. It kills more young children than AIDS, Malaria and Measles combined.<sup>15</sup>

Each year nearly two million children die from diarrhoea. If childhood diarrhoea is not addressed urgently the world will fail to achieve the fourth millennium development goal (MDG) target of reducing child deaths by two-thirds by 2015.<sup>16</sup>

According to NFHS II, III (2005-2006) Madhya Pradesh has the highest infant mortality rate in India and is in second position for under 0-5 years child mortality.<sup>17</sup>

Galati reported that 76 children die out the thousand born within the first year of their life; diarrhoea is one of the contributors to the same. State also has high incidence of malnutrition among children especially under three years of age, when malnourished child suffers with diarrhoea it aggravates the situation and increase chances of his or her mortality.<sup>18</sup>

The Daily News and Analysis reported that the under 0-5 year's children mortality rate in Kerala is 14 deaths per 1000 live births. This state at a sharp contrast to Madhya Pradesh at 92 per 1000, 91 per 1000 for Utter Pradesh and 89 per 1000 for Orissa.<sup>19</sup>

According to population data (2002 census) the awareness of diarrhoea among women in Bhopal was reported that 56.2% of women were aware of diarrhoea 23.6% had episodes of diarrhoea and 46.0% women gave ORS to children with diarrhoea.<sup>20</sup>

It is rightly said that prevention is better than cure. Keeping in view that there is an epidemiological increase in incidence of diarrhoea among under 0-5 years children the investigator decided to conduct a study to assess the knowledge care and prevention of diarrhoea among mothers of 0-5 years children.

Diarrhoea is a major public health problem in India, among children below the age of 1 year.

The diarrhoea is the most common in children especially those between 6 months to 2 years. The incidence is highest during weaning period i.e 6 to 12 months of age.

**Diarrhoea is defined as the passage of loose, liquid or watery stools, more than three times per day. The recent change in the consistency and character of stool rather than number of stools is more important.**

Although young nursing infants tend to have five or more motion per day, mothers know when the stool pattern change and their children have diarrhoea (Ronsman, Bennis and Wierzba 1988).

One of the diarrhoea in babies is viral infection caused by rotavirus, bacteria, protozoa and helminthes that are transmitted from the faecal-oral transmission.

#### AIM OF THE STUDY

The main aim of study is to assess the knowledge regarding diarrhoeal disease 0-5 years children in people's hospital bhanpur Bhopal.

#### OBJECTIVES

1. To assess the level of Pre-test knowledge of mothers of children between 0-5 years regarding diarrhoeal disease.
2. To give information booklet regarding care and prevention of diarrhoeal disease.
3. To assess the effectiveness of an information booklet on care and prevention of diarrhoeal disease.
4. To assess the level of post- test knowledge about diarrhoeal disease by the oral rehydration solution.
5. To find out the association between knowledge of mothers regarding diarrhoeal disease with selected demographic data.

#### HYPOTHESIS

A hypothesis is a Statement of the researcher's expectation about relationship between variables under study.

**H0-** There will be no significant difference between the knowledge regarding care and prevention of diarrhoeal disease among mothers of 0-5 year's children and selected demographic variable.

**H1-** There is significant relationship between knowledge regarding care and prevention of diarrhoeal disease among mothers of 0-5 year's children and selected demographic variables.

#### ASSUMPTION

Mother's of 0-5 year's children will have some knowledge regarding care and prevention of diarrhoeal disease.

#### DELIMITATION

- Mothers of 0-5 years children who are willing to participate in this study.
- Mother's 0-5 year's children who are able to communicate in Hindi and English.
- Mother of 0-5 years children who are available at the time of study.

#### METHODOLOGY & APPROACH

KOTHARI C.R. defined that the methodology of research indicates the general pattern of organising the procedure of gathering valid and reliable data for problems under investigation. The chapter deals with the methodology of the present study which includes: research approach, research design, variables under study, setting of the study, population and samples, sampling technique, criteria for sample collection, description of tools, pilot study, data collection process and plan for data analysis.

Methodology is the significant part of any study which enables the investigator to project blue print of the research project undertaken.

Research approach indicates the basic procedure for conducting the research. **Qualitative approach** is an applied form of research with the well structured questions how the program is meeting its objective. Its goal is to evaluate the success of a program.

#### RESULT

##### Demographic variables of mothers

The characteristics of demographic variables have been described in terms of frequency and percentage distribution.

1. Analysis revealed the majority
2. Analysis revealed that majority of the 20(40%) mothers belongs to the age group of 26-30 years, 17(34%) belongs to the age group of 21-25 years, 8(16%), belongs to the age group of above 30 years, 5(10%) belongs to the age group of below 20 years.
3. Analysis revealed that majority of the 29(58%) baby belongs to the age group of below 12 months 8(16%) belongs to the age group of 12-24 months, 7(14%), belongs to the age group of above 36 months, 6(12%) belongs to the age group of 26-36 months.
4. Analysis revealed that majority of the 47(94%) family belongs to the Hindu family, 2(4%) belongs to the Muslim family, 1(14%), belongs to the Christian.
5. Analysis revealed that majority of the 45(90%) mothers were housewife, 4(8%) mothers were private employee, 1(2%) mothers were others.
6. Analysis revealed that majority of the 19(38%) mothers education status was higher secondary, 14(28%) mothers were primary school, 13(26%) mothers were graduated and above, 4(8%) mothers were illiterate.
7. Analysis revealed that majority of the family income was is Rs.6000-10,000/- is 21(42%), Rs.11000-15000/- is 14(28%), above Rs.16000/- is 10(20%), below Rs. 5000/- is 5(10%).
8. Analysis revealed that majority of the 26(52%) mothers are having two children 20(40%) having one children 3(6%) having three children and 1(2%) mothers having children above three.
9. Analysis revealed that majority of the 29(58%) mothers are having joint family, 21(24%) having nuclear family.
10. Analysis revealed that majority of source of drinking water from tap was 40(8%) using hand pump was 5(10%) from well were 3(6%) and from others was 2(4%).
11. Analysis revealed that majority of source of waste disposal was 15(30%) using others, 14(28%) was throwing outside, 14(28%) was dumping and 7(14%) was burning.
12. Analysis revealed that majority of the 25(50%) family are using mold rain drainage system, 16(32%) family are using closed drainage system, 9(18%) family are using open drainage system.
13. Analysis revealed that majority of the family using sanitary latrine 48(98%) and family using municipal latrine 1(2%).
14. Analysis revealed that majority of the 30(60%) family are living in city, 15(30%) family are living in village, 5(10) family are living in town.
15. Analysis revealed that majority of the 38(76%) family are living in pucca house, 7(14%) family are living in sami pucca house, 5(10%) family are living in kaccha house.
16. Analysis revealed that majority of the 25(50%) source of information from family and friends, 16(32%) from social media, 9(18%) from health personal.

##### Findings related to assess the pre-test and post-test knowledge score of mothers regarding care and prevention of diarrhoea

The following are the major findings of majority of participants in pretest 49(98%) having average knowledge, 1(2%) mothers are having poor knowledge mean score 11.62 and SD 1.87. Majority of the participants in post test 50(100%) mothers are having good knowledge mean score 17.76 and SD 0.84.

##### Frequency & Percentage distribution of mothers according to pre test knowledge score evaluation criteria.

N=50

Level of knowledge	Frequency(f)	Percentage (%)	Mean	S.D
Good	0	0	11.62	1.87
Average	49	98		
Poor	1	2		
Total	50	100		

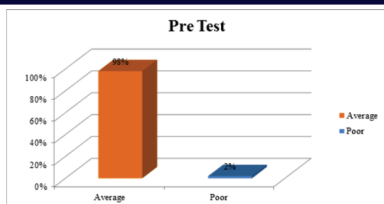


Fig. No. 18 Bar diagram showing the percentage distribution of mothers according to pre test knowledge score.

Table No. 16(Fig. No.18) Shows that majority of the 49(98%) mothers are having average knowledge, 1(2%) mothers are having poor knowledge.

**Frequency & Percentage distribution of mothers according to post test knowledge score evaluation criteria.**

N=50

Level of knowledge	Frequency(f)	Percentage (%)	Mean	S.D
Good	50	100	17.76	0.84
Average	0	0		
Poor	0	0		
Total	50	100		

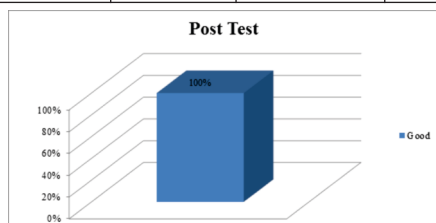


Fig. No. 19 Bar diagram showing the percentage distribution of mothers according to post test knowledge score.

Table No. 17(Fig. No.19) Shows that majority of the 50(100%) mothers are having good knowledge.

**Frequency & Percentage differences between pre test and post test knowledge score regarding care and prevention of diarrhoeal disease.**

N= 50

Knowledge	Mean	SD	T value	P value
Pre Test	11.62	1.87	24.17	0.00*
Post Test	17.76	0.84		

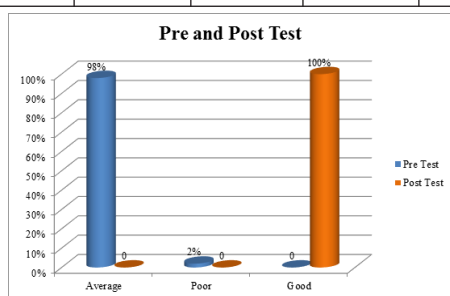


Fig. No. 20 Bar diagram showing the percentage difference pre-post test knowledge score regarding care and prevention of diarrhoeal disease.

Table No. 18(Fig. No.20) indicates that according to mean there was significant difference between pre and post test knowledge score, which is increased from 11.62 to 17.76 after administering information booklet.

**CHI-SQUARE TABLE**

S. No	Demographic Variables	df	Chi square value	P Value <0.05	Inference
1	Age of mother (in year)	3	5.35	0.14	NS
2	Age of baby (in year)	3	7.48	0.05	NS
3	Religion	2	0.06	0.96	NS
4	Occupation of mother	2	0.11	0.94	NS

5	Education of mother	3	11.73	0.00	S
6	Monthly income	3	1.40	0.70	NS
7	Number of children	3	0.94	0.81	NS
8	Type of family	1	0.73	0.39	NS
9	Source of drinking water	3	15.98	0.00	S
10	Source of waste disposal	3	2.62	0.45	NS
11	Drainage system	2	1.02	0.60	NS
12	Type of latrine	1	0.02	0.88	NS
13	Living area	2	0.68	0.71	NS
14	Condition of house	2	0.32	0.85	NS
15	Source of information	2	1.02	0.60	NS

The above table shows that association between the score of mothers of infant with selected demographic variable such as Age of mothers , Age of baby, religion , education of mothers , occupation of mothers , family monthly income , number of children , type of family, source of drinking water ,source of waste disposal ,drainage system, type of latrine ,living area, condition of house , source of information . The association between them was analysed by chi – square test. The chi – square value of age of the mothers age was 5.35 at 3 degree of freedom , age of baby was 7.43 at 3 degree freedom, religion was 0.06 at 2 degree freedom, occupation of mothers was 0.11 at 2 degree of freedom ,education of mother was 11.73 at 3 degree of freedom , family monthly income was 1.40 at 3 degree of freedom , No. of children was 0.94 at 3 degree of freedom ,type of family was 0.73 at 1 degree of freedom , Source of drinking water was 15.98 at 3 degree of freedom , source of waste disposal was 2.62 at 3 degree of freedom, drainage system was 1.02 at 2 degree of freedom, type of latrine was 0.02 at 1 degree of freedom, type of living area was 0.68 at 2 degree of freedom, condition of house was 0.32 at 2 degree of freedom, source of information was 1.02 at 2 degree of freedom are significant and others are no significant where p value <=0.05.

**CONCLUSION**

On the basis of the findings of the study the following conclusion were drawn.

1. The knowledge of mothers regarding care and prevention of diarrhoea 0-5 years children that (100%) of the mothers had good knowledge.
2. Chi - square test value of selected demographic variables of age.

**BASED ON THE FINDINGS RELATED TO ASSESS THE PRE TEST AND POST TEST KNOWLEDGE SCORE OF MOTHERS REGARDING CARE AND PREVENTION OF DIARRHOEA.**

**Analysis of pre test knowledge score** of mother regarding care and prevention of diarrhoea was done and tabulated in table no. 16. The findings depicts that Table-16 and Fig-18 depicts that majority of the 49(98%) mothers are having average knowledge, 1(2%) mothers are having poor knowledge, Mean score 11.62 and SD 1.87.

**Analysis of post test knowledge score** of mother regarding care and prevention of diarrhoea was done and tabulated in table no. 17. The findings depicts that Table-17 and Fig-19 depicts that majority of the 50(100%) mothers are having Good knowledge, Mean score 17.76 and SD 0.84.

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