

## ORIGINAL ARTICLE

# A Study to Assess the Knowledge on Cause, Spread, Prevention and Management of Diarrhoeal Diseases Among Mothers of Under-five Attending SDM Paediatric OPD, Dharwad

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### Abstract

**Background and Objectives:** Diarrhoea is a leading cause of illness and death among children in developing countries. About 80% of deaths in the first two years of life are due to diarrhoeal diseases. To assess the knowledge of mothers on cause, spread, prevention and management of diarrhoeal diseases and to determine the association between the knowledge of mothers and selected socio demographic variables.

**Methods:** A descriptive survey research design was used to study the population of mothers with children under-five years of age. The sample size was 60, and the subjects were selected using non-probability purposive sampling method. The Pediatric OPD at SDM College of Medical Sciences & Hospital in Dharwad served as the study's location. Data was collected with the help of a structured knowledge questionnaire.

**Results:** The mean knowledge score of mothers regarding diarrhoea was 9.87, with a standard deviation of 2.65 and a median of 9.50. According to the findings, 50% of mothers had adequate awareness of diarrhoea, 48.33% had moderate knowledge, and just 1.67% had poor information. Knowledge significantly correlated with socio-demographic status, family income, and the number of children.

**Conclusion:** The present study concluded that mothers have adequate knowledge regarding the diarrhoeal episodes.

### Introduction

*"Teach a mother about health and she will teach rest of the mankind."*<sup>1</sup>

Under-five children is one of the most important interventions in the control of diarrhoeal diseases. It has a significant impact in reducing childhood mortality and morbidity<sup>2</sup>. The necessity of managing diarrhoea at home stems from the fact that it begins there and remains there after leaving a medical institution. Among underdeveloped nations, diarrhoea is a common cause of

disease and mortality in children. Diarrhoeal disorders are responsible for around 80% of mortality in the first two years of life<sup>3</sup>. According to WHO, one child dies due to diarrhoea every six seconds worldwide. It is projected that in India that at least 0.5 million children below the age of five years die every year due to acute diarrhoea. Diarrhoea results in a heavy economic burden on health services as children with diarrhoea occupy a third or more of hospital beds in several nations.<sup>4</sup>

**Objectives**

- ✓ To assess the knowledge of mothers on cause, spread, prevention and management of diarrhoeal diseases.
- ✓ To find the association between the knowledge of mothers with selected socio-demographic variables.

**Hypotheses:**

H1: There will be a significant correlation between the level of knowledge of mothers of under-five children regarding CSP and management of diarrhoea with selected socio-demographic variables.

**Delimitation:**

The study was delimited to;

1. Mothers of under-five children
2. Mothers attending Paediatric OPD at SDM Hospital

**Materials and Methods**

A descriptive study with a quantitative research approach was designed to study 60 mothers of under-five children in a particular paediatric OPD at the SDM College of Medical Sciences & Hospital in Dharwad. For this investigation, a non-probability purposive sampling strategy was utilised to choose the sample. Mothers with children under five were evaluated on their knowledge using a standardized knowledge questionnaire. The institutional ethics committee granted approval for the study to be conducted. All the subjects were explained about the purpose and nature of the study and before beginning the study, the subjects provided their written informed consent.

The inclusion criteria included mothers having children under-five years of age attending Paediatric OPD at SDM Hospital available throughout the data collecting period and ready to take part in the research. Whereas children whose parents were not willing to give consent were excluded from the study. The demographic variables studied were age, sex, type of family, educational status, occupation of parents and family income and the study variable was knowledge regarding diarrhoeal diseases. A descriptive and inferential statistics were used for data analysis.

**Study tool:**

The study tool was developed by the investigator based on research problem, analysis of relevant literature,

discussion and suggestions from the guide and experts, based on the level of understanding of the parents and preparation of blueprints. The designed study tool consisted of a baseline proforma and structured knowledge questionnaire.

**Content validity of tool:**

For the item that was created with the tool and the problem statement's content validity, objectives, operational definition and scoring pattern were submitted to the experts from ten nursing departments and there was 100% agreement among all the experts on all the items. It was content validated by three experts such as doctors, nursing educators, social worker, and 100% agreement among all the experts was observed. The tool's dependability was calculated using the Karl Pearson Correlation method, and it was determined to be dependable ( $r = 0.904$ ).

**Results****Section-I.** Descriptive of the baseline variables.

Age, religion, educational level, location of residence, family type, employment, total family income per month, number of children, age of children, sex of children, and house type are socio-demographic characteristics that are often and disproportionately distributed.

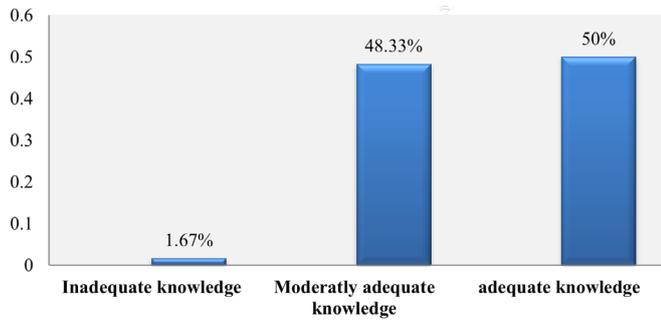
**Section-II.** Mean, Median, and Standard Deviation of Mothers' Knowledge Score.**Table 1:** Mothers' Knowledge Score

	Mean	Median	Mode	SD	Range(R)
Knowledge of Mothers	9.87	9.50	13.00	2.65	Minimum Score-4 Maximum Score-14

Mothers' knowledge average score was 9.87 with a median of 9.50 and a standard deviation of 2.65.

**Section-III.** Levels of Knowledge

Figure 1 Demonstrates that 50% of mothers of children under five had adequate awareness of diarrhoea, 48.33% had moderate knowledge, and just 1.67% had poor information.



**Figure 1:** Awareness of Diarrhoea

**Section-IV.** Knowledge and socio-demographic characteristics are associated (Table 2)

**Table 2:** Knowledge and Socio-demographic Characteristics

Personal variable	X <sup>2</sup>	df	Level of significant
<b>Age</b>	27	4	S
a) 18-21 Years			
b) 22-25 years			
c) 26-29 years			
d) 30-33 years			
e) 34 and above			
<b>Religion</b>	32.267	1	S
A) hindu			
B) muslim			
C) christian			
D) jain			
<b>Educational status</b>	19.600	3	S
A) informal			
B) primary education			
C) secondary education			
D) graduation and above			
<b>Type of family</b>	1.667	1	NS
A) nuclear			
B) joint			
C) extended			
<b>Occupation</b>	1.156	3	NS
A) home maker			
B) coolie			

C) private employee			
D) govt. employee			
<b>Family income (per month)</b>	15.867	3	S
A) less than 5000			
B) 5001-10000			
C) 10001-15000			
D) 1500-20000			
<b>Number of children</b>	12.900	2	S
A) one			
B) two			
C) more than two			
<b>Age of the children</b>	6.100	2	S
A) below 1 year			
B) 1-2 year			
C) 3-5 year			
<b>Sex of the children</b>	.0000	1	NS
A) male			
B) female			
<b>Type of house</b>	30.900	2	S
A) kuccha			
B) semipucca			
C) pucca			
<b>Residential area</b>	13.900	2	S
A) rural			
B) semi urban			
C) urban			

Age, Religion, Education Status, Family Income (per month), Number of Children, Age of Children, Type of House, Residential area, and the rest of the variables were significant at the 0.05 level, according to the Chi-Square test.

**Discussion**

The majority of subjects (45%) were in the group 22-25 years, 11.67% were of age group 18-21 years, 21.67% of 26-29 years, 15% of 30-33 years, and only 6.67% of 34 and above.

This study is consistent with the findings of another study that shows 41% of participants were in the age

range of 21–25 years, 24.50% in the group of 26–30 years, 20.67% in the group of 31–35 years, and 13.12% in the group of 36 years and over<sup>5</sup>.

Majority of the subject (50%) had adequate knowledge (48.33%) had moderately adequate knowledge and (1.67%) had inadequate knowledge score.

Similar results were found in another study, where the majority of the participants (48% had acceptable knowledge, 43.35% had intermediate knowledge, and 8.2% had inadequate information) scored well on knowledge tests<sup>6</sup>.

There is a significant correlation between knowledge score and age of mother, religion, education, income, number of children, age of children, type of house, and residential area.

which contrasts with the results of another study, which found a strong association between knowledge score and mother's age, income and education<sup>7</sup>.

## Conclusion

The present study indicates that mothers of under-five children have adequate knowledge on diarrhoeal diseases. In order to preserve their children's quality of life, mothers require community-wide educational initiatives.

## Conflicts of Interest

Nil

## References

1. <https://www.whatisbiotechnology.org/index.php/people/summary/Franklin>
2. Tomkins K, Raynor J, Rothwell L The management of Clostridium difficile-associated diarrhoea in a community hospital. *West Indian Med J.* 2011 Jan; 60(1):57-60.
3. Uchendu UO, Emodi IJ, Ikefuna AN. Department of Paediatrics, University of Nigeria Teaching Hospital Enugu Nigeria, *Africa Health Sci.* 2011 Mar; 11(1):41-7.
4. Patel AB, Ovung R, Badhoniya NB, Dibley MJ. Risk factors for predicting diarrheal duration and morbidity in children with acute diarrhea. *Indian J Paediatric.* 2012;79(4):472.
5. Motlagh ME, Heidarzadeh A, Hashemian H, Dosstdar M. Patterns of Care Seeking During Episodes of Childhood Diarrhea and its Relation to Preventive Care Patterns: National Integrated Monitoring and Evaluation Survey (IMES) of Family Health. Islamic Republic of Iran. *Int J Prev Med.* 2012; 3(1):60-7.
6. Chaturvedi S, Sandhir M, Bajpai R. Compliance of mothers in home management of acute Diarrhoea. *Indian Pediatrics.* 1996;33(4):318-320.
7. Kapoor P and Rajput VJ. Maternal knowledge, attitudes and Practice in Diarrhoea. *Indian Pediatrics.* 1993;30(1):85-8.