

# “A descriptive study to assess the knowledge regarding prevention and management of diarrhoea among the mothers of under five years children in SDH, West Bengal”

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## ABSTRACT

**Introduction:** Diarrhea remains the second leading cause of death among children under five years globally. Nearly one in every five child deaths, about 1.6 million each year, due to diarrhea. Further, diarrhea kills more young children than malaria, measles and acquired immunodeficiency syndrome combined. The study aimed to assess the demographic variables, the knowledge of mother of under 5-year children and to find the association between the level of knowledge of mother of under 5-year children on diarrhea and its management with selected demographic variables.

**Material and method:** The populations comprised of the people of which 60 samples were selected, this subject was selected by purposive sampling technique. The data collection tools were; Self structured questionnaire to obtain demographic data. Self- structured questionnaire to assess the level of knowledge regarding prevention and management of diarrhoea among the mothers under five-year children in SDH. Content validity of the tool was determined by the experts. Descriptive and inferential statistics were used for data analysis.

**Major Findings:** Most of the mothers (43%) were in age between. Number of children (50%). Majority of sample (40%) were received educated. Most of the samples' religions were (90%). Majority of sample (10%) were received knowledge from mothers. The study shows (4%) samples had good knowledge, (10%) had average knowledge and (86%) had poor knowledge. The calculated mean is, median is, mode is for knowledge regarding prevention and management of diarrhoea among the mothers of under five years children in SDH, W.B. The association between the knowledge scores of the respondents with selected demographic variables such as age, number of children, education, religion previous source of knowledge was not significant at table of significance.

**Conclusion:** Study concluded the mother attending the pediatric OPD have poor knowledge about prevention and management of diarrhoea, the association between demographic variables and knowledge questionnaire among

the mother of under five years children attending in pediatric OPD is statistically non-significant.

**KEYWORDS:** Assess, Knowledge, Prevention, Management of diarrhoea, Siliguri SDH.

## **INTRODUCTION:**

Diarrhea remains the second leading cause of death among children under five years globally. Nearly one in every five child deaths, about 1.6 million each year, due to diarrhea. Further, diarrhea kills more young children than malaria, measles and acquired immunodeficiency syndrome combined<sup>1</sup>.

According to UNICEF, diarrhea is a leading killer of children, accounting for approximately 9 percent of all deaths among children under age 5 World Wide in 2019. This translates to over 1,300 young children dying each day, or about 484,000 children a year, despite the availability of a simple treatment solution.

In developing countries like India diarrheal diseases are the most prevalent disease and cause of death in children among under five years-of-age and it causes serious economic problems for developing countries. Around 1.1 billion people world-wide lack access to proper water sources and 2.4 billion have no basic sanitations in developing countries <sup>4</sup>.

Chronic mild diarrhea in infants and toddlers may occur with no obvious causes and with no other ill effects; this condition is called toddler's diarrhea. Most of the pathogenic organism that causes diarrhea is known to be major causes of diarrhea and are transmitted primary or exclusively by fae-co-oral routes. Fae-co-oral transmission may be water bone, foot bone, or direct which may be in jested by young children <sup>4</sup>.

According to WHO ,Globally estimation of number of deaths due to diarrhea among under five have shown a steady decline from 4.4 million in 1980 , 3.3 million 1990, 2.5 million in the year 2000, 1.7 million cases in 2005 and 1.9 million in the year 2007<sup>6</sup>. Diarrheal disease is a leading cause of child mortality and morbidity in the world, and mostly results from contaminated food and water sources. World Wide 780 million individuals lack assess to improved drinking-water and 2.5 billion lack improved sanitation. As a result diarrhea is a major cause of malnutrition, and malnourished children are more likely to fall ill from diarrhoea<sup>6</sup>.

The National Family Health Survey shows that the prevalence of childhood diarrhea has increased from 9% to 9.2% from 2016 to 2020 in India. It is the third most common responsible disease for under five mortality. Diarrhea remains one of the leadings cause of death, ill health and disability among children aged under five years in developing countries. In 2010, diarrhea was the second leading cause of death in under five children<sup>8</sup>.

**NitishGarg, SulanthungKikon and Rohan Ramesh**, conducted a cross sectional study from March 2017-2018 in secondary hospital in Dimapur, Nagaland. The study conducted over a period of one year including 449 mothers in the age groups more than 45 years with at least one child under five years of age using and interviewer administer. They used non – experimental research design and the used tool in research demographic variables which included such as age, education, number of children, occupations and the data collected using a structured

knowledge questionnaire. The findings showed 97.8% had good knowledge regarding causes and prevention of diarrhea, 65% had good knowledge regarding the management of diarrhea, while 31% mothers had moderate knowledge, 98% mothers had good attitude but only 17.8% had good practice source<sup>9</sup>.

**Laxmipati Hanumantagouda, Gollar, Shreedhara AvabrathaKadke**, conducted a cross sectional study in a medical college hospital, Mangaluru, 2017. They used a non-experimental research design for this study. The sample of the study was the mothers of under five children and the calculate number of sample size for this study was estimated 100 mothers with children between 6 months and five years age group. Data were collected using a structured administer questionnaire and analyzed using. The used tool in research demographic variable which includes such as age, sex, education, number of children, occupation etc. The findings GJ showed 47% of mothers adequate knowledge 37% mothers in adequate knowledge about diarrhea majority (40%) of them were in the age group 21 to 24 years. All of them were literate with 47% mothers completed high school education. Majority (40%) of mothers belonged to class 3 social- economic status. Most of the mothers (84%) had good knowledge regarding sign and symptoms spread and prevention, majority of mother (77%) has serious attitude toward diarrheal illness<sup>10</sup>.

**Ranjan Gopi Krishna and Ranjan Rahul** conducted a descriptive cross-sectional study in Bhubanswar 2020 the objective of the study was to assess the knowledge among mother of under five children. Structure knowledge questionnaire was prepared regarding prevention of diarrhea. They used non- experimental research design. The total of 30 participants were included in the study. They used demographic tools such as age, sex, types of family, occupation etc. Among 30 participants, 07 had adequate knowledge, 12 had moderate knowledge and 11 had inadequate knowledge. Among 40% of the participants had moderate knowledge, in 36.7% inadequate knowledge and in 23.3% adequate knowledge regarding prevention of diarrhea among mothers of under-five children. The mean knowledge score was 11.86 with standard division of 3.84 and the range score was 16<sup>11</sup>.

Diarrhea is a global killer and its one of the five-leading cause of mortality and morbidity among under 5-year children and other leading cause such as pneumonia, malaria, measles and malnutrition can also cause mortality and morbidity among children under 5 years. The knowledge of diarrhea hence becomes very important among the mother of under five children which serves as a need for this study.

## OBJECTIVES

- To assess the demographic variables of mother age of under five years children.
- To assess the knowledge of mother of under five years children regarding prevention and management of diarrhea.
- To find the association between the level of knowledge of mother of under 5-year children on diarrhea and its management with selected demographic variables.

## RESEARCH METHODOLOGY

A quantitative approach was considered to be appropriate for this study which is to assess the knowledge regarding prevention and management of diarrhea among the mother of under five children. The design selected for this study is descriptive survey research design. The target population is the mother of under 5-year children of Pediatric OPD of 'Siliguri District Hospital'. The accessible population was the mother of under five year children who is available at the time of data collection. In this study sample size was 60. Sampling technique in this study is non- probability sampling technique. The data was collected from the sample from 11.10.23 to 28.10.23

### DATA COLLECTION TOOLS AND TECHNIQUE

SL. NO.	DESCRIPTION	COMPONENTS	VARIABLES	TECHNIQUE
TOOL 1 Section A	It comprises of 4 questions for the demographic variables such as age of the mother, number of children, education level of the mother, religion of parents	Demographic Performa	Age of the mother, Number of children, Education level of the mother, Religion of parents	Self report

TOOL 1 Section B	It comprises of 16 questions self structural knowledge and management of questionnaires of assessing the level of knowledge on prevention and management of diarrhoea among the mothers of under five year children	Knowledge regarding prevention and management of diarrhea among the mothers under five years children	Questions regarding knowledge about prevention and management of diarrhoea	Self report
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**ANALISIS AND INTERPRETATION OF DATA****SECTION -1****N=60**

SL NO.	DEMOGRAPHIC VARIABLES	FREQUENCY	%
Q1.	Age of the mother Less than 18 years		
a)	19- 25 years	0	0%
b)	26- 32 years	10	33.3%
c)	33 year and above	13	43.3%
d)		7	23.3%
Q2.	Number of children 1		
a)	2	11	36.6%
b)	3	15	50%
c)	4 and above	3	10%
d)		1	3.33%
Q3.	Education level of mother Primary level		
a)	level	12	40%
b)	Secondary level	6	20.3%
c)	Higher secondary and above	8	26.6%
d)	Illiterate	4	13.3%
Q4.	Religion of parents Hindu		
a)	Muslim Christian Buddhist	27	90%
b)		2	6.6%
c)		1	3.3%
d)		0	0%

*Table 1: Frequency and percentage distribution of demographic variables.*

## SECTION I- Frequency and percentage distribution of demographic variables

N=60

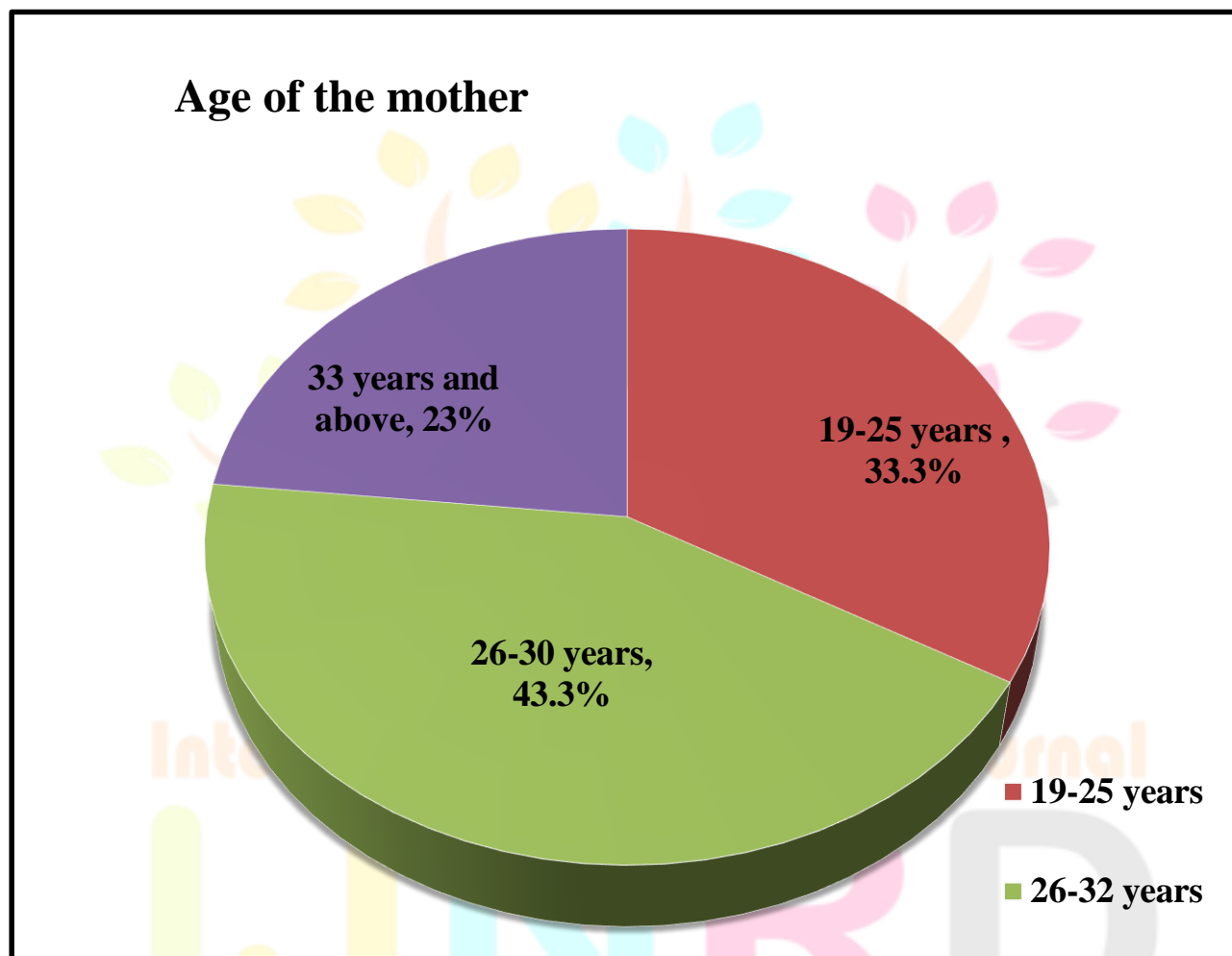
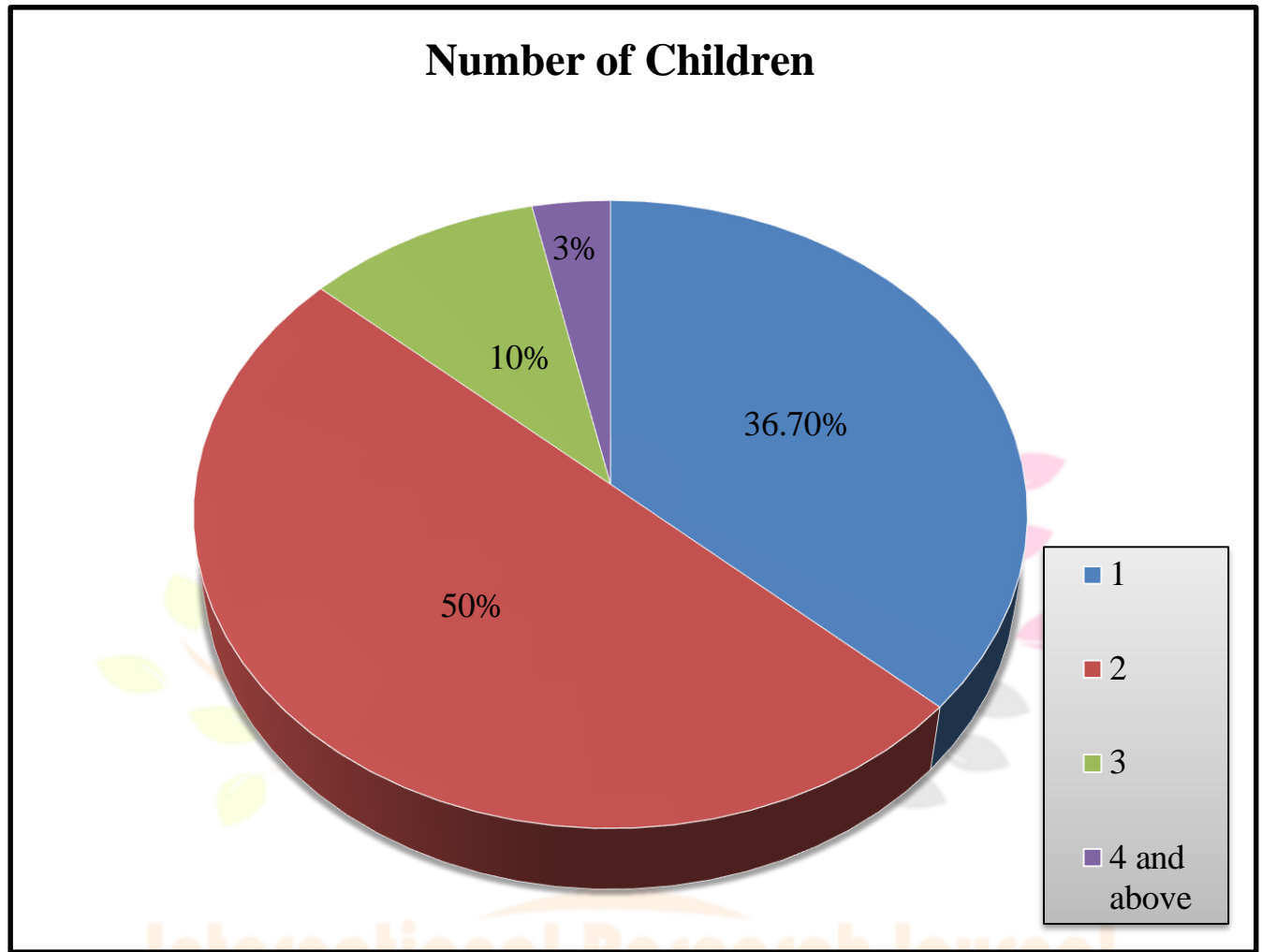


Fig no. 1. Pie diagram showing distribution of respondents according to age.

The above data depicts that (0%) of sample were within age of less than 18 years, (33.3%) were age of 19-25 years, (44%) were in age of 26-32 years and some of (23.3%) were in age of 33 and above.



*Fig no. 2. Pie diagram showing distribution of respondent according to number of children.*

The above data depicts that (36.70%) had 1 children, (50%) has 2 children, (10%) has 3 children, and some of (3.3%) has 4 children.



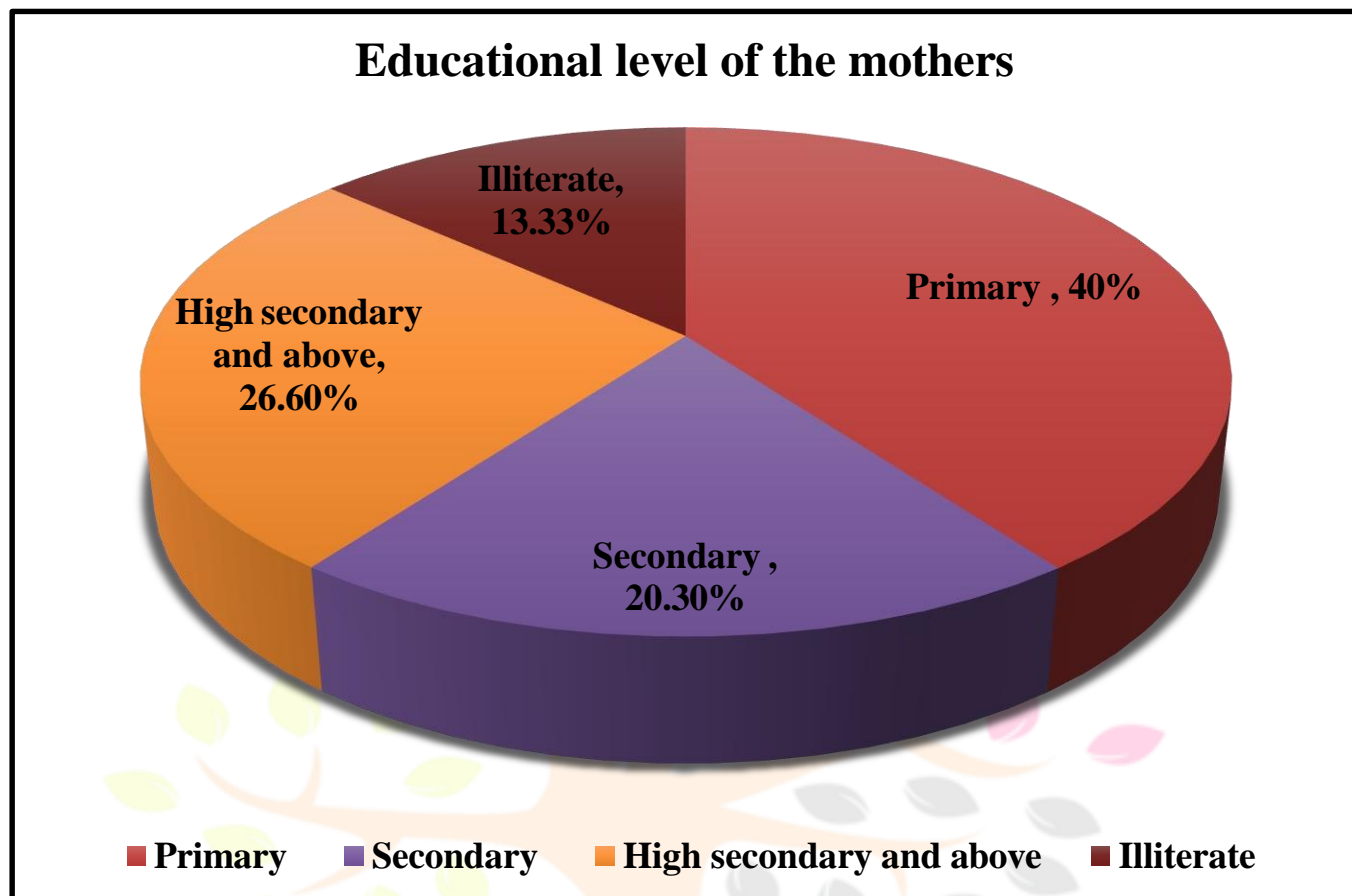
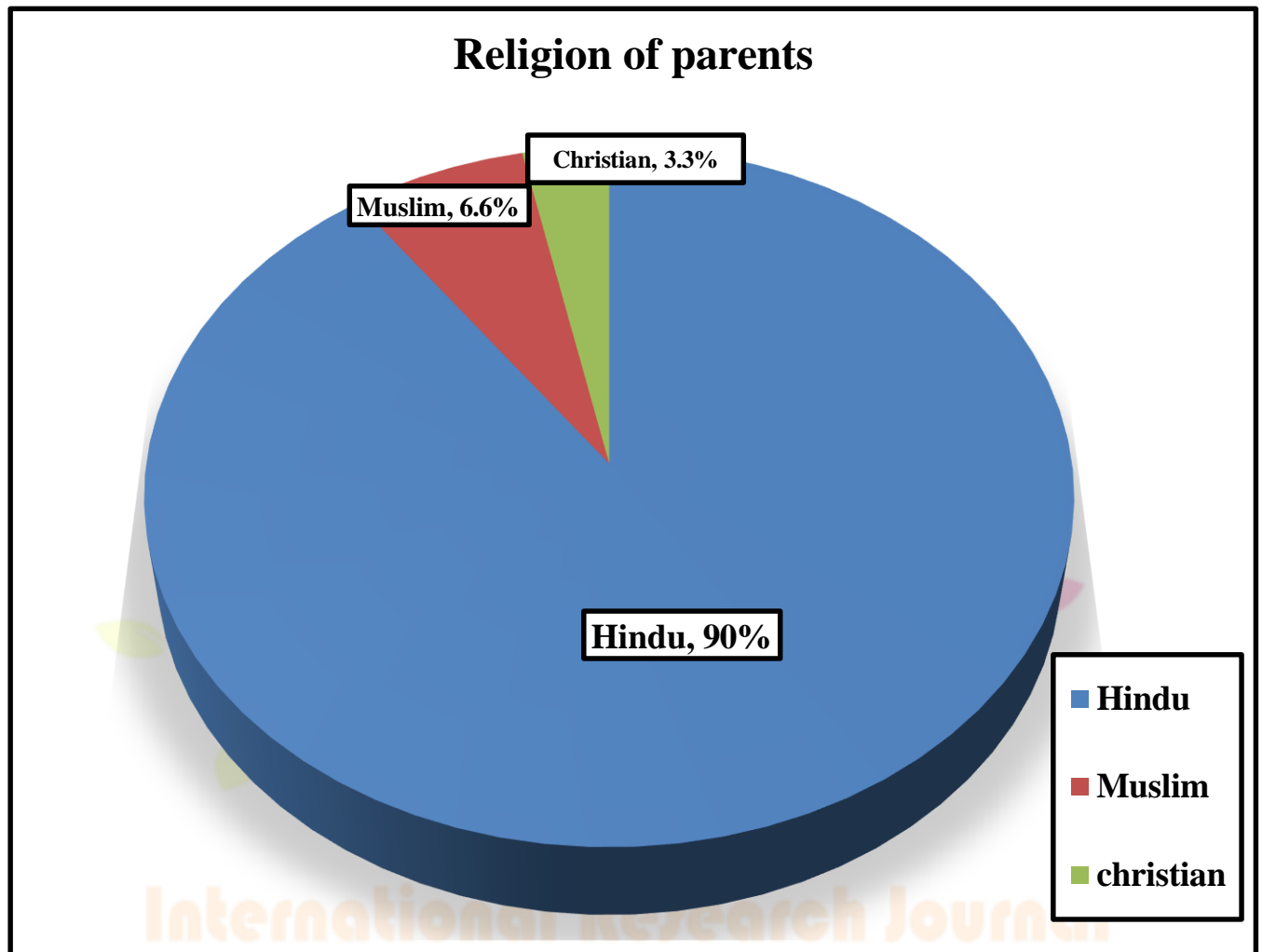


Fig no. 2. Pie diagram showing distribution of respondent according to level of education of mother.

The above data depicts that (40%) were from primary level, (26.6%) were from secondary and above level and very few of (13.3%) were illiterate.

N=60



*Fig no. 2. Pie diagram showing distribution of respondent according to number of children.*

The above data depicts that (37.6%) had 1 children, (50%) has 2 children, (10%) has 3 children, and some of (3.3%) has 4 children.

**SECTION -II**

N=60

KNOWLEDGE	MEAN	MEDIAN	SD	MAXIMUM VALUE	MINIMUM VALUE	RANGE
Poor Moderate Adequate	4.2	4	1.72	16	0	16 - 0

Table-2: Mean, Median, Mode, Standard Deviation scores of knowledge on prevention and management of diarrhoea among the mothers of under five years children.

The data presented in table -2 shows that the calculated mean is 0.03, median is 4.5, mode is 13.44 and SD is 4.5 for knowledge on prevention and management of diarrhoea among the mothers of under five years children.

**SECTION- III**

N=60

VARIABNLES	BELOW THE MEDIAN <4	UPPER THE MEDIAN >4	X <sup>2</sup> P>0.05	df	REMARKS
AGE					
<18	1	1	0.05	3	Significant
19-25	5	4			
26-32	8	4			
33and above	4	3			
NO OF CHILDREN					
1	7	4			Not applicable
2	9	6			
3	1	2			
4and above	1	0			
EDUCATIONAL LEVEL OF THE MOTHERS					
Primary level	5	7	0.4		Not significant
Secondary level	5	1			
Higher secondary and above	5	3			
Illiterate	3	1			
RELIGION OF MOTHERS					
Hindu Muslim	16	12			Not applicable
Christian	1	0			
Buddhist	1	0			
	0	0			

*Table -4: Table shows the association between selected demographic variables and knowledge on prevention and management of diarrhoea among the mothers of under five years children.*

## FINDINGS

- The findings of the study depict that majority (43.3%) of sample were within age of 26- 32 years, (32.3%) were age of 19-25 years, (23%) were in age of 33 and above (0%) were in age of less than 18 years.
- The findings of the study depict that majority of mothers (50%) had 2 children, (37.6%) had 1 child, (10%) has 3 children, and some of (3.3%) has 4 children.
- The findings of the study depict that majority belongs to (93.3%) Hindu, (3.3%) were Muslim, (3.3%) were Christian and (0%) were Buddhist.
- The findings of the study depict that majority (40%) were from primary level, (20.3%) were from secondary and above level and very few of (13.3%) were illiterate.

## CONCLUSION

The conclusion drawn from the study is:

- The mother attending the pediatric OPD have poor knowledge about prevention and management of diarrhoea.
- The association between demographic variables and knowledge questionnaire among the mother of under five years children attending in pediatric OPD is statistically non- significant.

## IMPLICATION

The findings of the study have implication for nursing education, nursing administration, nursing research, nursing practice.

## LIMITATION

- The study was confined to 60 samples.
- The study was limited to mothers of under five years children who were present at the time of data collection.

## RECOMMENDATION

The following recommendations are made on the basis of the present study.

- A similar study can be conducted on the large number of samples there by findings can be generalized for a large population.
- A descriptive study can be conducted among mothers of under five-year children in Siliguri district hospital.

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