Advanced International Journal for Research (AIJFR)
E-ISSN: 3048-7641 ● Website: www.aijfr.com ● Email: editor@aijfr.com

A Study to Assess the Effectiveness of Planned Teaching Program On Knowledge Regarding Management of Dehydration Among Mothers of Under-Five Children Residing in Selected Areas of Doddakammanahalli, Bangalore.

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Abstract

Background: Children under five experience rapid growth and have relatively high nutritional requirements. At the same time, they are vulnerable to infections that can lead to dehydration. Parents—especially mothers—are usually committed to providing every possible advantage to their children and ensuring that they are healthy and have the opportunities they need to reach their full potential. Therefore, mothers are expected to have adequate knowledge and appropriate practices for the assessment and management of dehydration in under-five children.

Aim: The aim of the study is to evaluate the effectiveness of a planned teaching programme on knowledge regarding management of dehydration among mothers of under-five children residing in selected areas of Doddakammanahalli, Bangalore.

Methodology: Research design: Pre-experimental One group pre-test, post – test research design. **Research setting:** selected Anganwadi's under Begur PHC Bangalore. **Population:** mothers of under five children from areas Under Begur PHC Bangalore. **Sample size:** 60 samples a knowledge questionnaire was used for this study.

Results: the pretest knowledge score ranged from 16 – 5 ,mean 10.05 , the mean percentage of pretest knowledge score was 33.5 % with standard deviation 2.8718 , it indicates that the subject were having average knowledge regards dehydration. The post-test knowledge score ranged from 29 – 15 ,mean 23.05 , the mean percentage of post-test knowledge score was 76.83 % with standard deviation 3.6305 , it indicates that the subject were having good knowledge regards dehydration after teaching programme.

Conclusion: the study concludes that the structured teaching programme is effective for mothers to improve the knowledge on management of dehydration of under five children.

Key words: Under-five children, Dehydration, planned teaching programme

1. Introduction

"Children are magic because they look for it "

Christopher Moore

"Children are not things to be molded but are people to be unfolded."

Under five is a short hand term for children under 5 years. Under five years is a period of rapid growth and relatively high nutritional requirements. During this period children are in a dynamic state of growth with cells multiplying fast and organ system developing in a rapid rate Protecting and improving the health of children is of fundamental importance. Over the past several decade we have seen dramatic progress in improving the health and reducing the mortality rate of young children .Among other encouraging statistics the number of children dying before the age of 5 was halve from 2000 to 2017 and more mothers and children and survived today than ever before .[1]

According to UNICEF under five mortality data in 2021, 5.0 million children under 5 years of age died globally . Infectious disease including pneumonia diarrhea and malaria remains a leading cause of under five death along with preterm birth and interpretation related complications. Diarrheal disease is the second leading cause of deaths in children under five years old and is responsible for killing around5,25,000 children every year.[2]

Diarrhea is the passage of loose or watery stools at least 3 times a in 24 hour period .Diarrhea can last several days, and can leave the body without the water and salts that are necessary for survival. Severe dehydration and fluid loss were the main causes of diarrhea deaths. During diarrheal episode, water and electrolyte (sodium, chloride, potassium and bicarbonate)are lost through liquid stools, vomit, sweat, urine and breathing. Dehydration occurs when those loses are not replaced. Other causes of dehydration are diabetic ketoacidosis and extensive burns.[3]

Dehydration causes a decrease in total body water in both the intracellular and extracellular fluid volume. Volume depletion closely correlates with the signs and symptoms of dehydration. Various signs and symptoms can be present depending on the patient's degree of dehydration which includes weight loss, thirst, altered level of consciousness, tachycardia, lethargy, irritability, changes in behavior, sunken eyes etc.[4]

Observation and interventions are essential for the detection and therapeutic management of dehydration. A wide variety of circumstances cause fluid loss in children and adverse changes can take place in a very short time . Therefore it is very important to prevent dehydration. There are many measures to prevent dehydration in home itself which includes assess to safe drinking water, use of improved sanitation, hand washing with soap to prevent disease which causes dehydration, exclusive breastfeeding for first six

months of life, goodpersonal and food hygiene . These measures can be ensured by the mothers of under five children.

If the degree of dehydration is severe other remedies can be initiated such as assessment of fluid electrolyte imbalance, Rehydration with oral rehydration salts (ORS) solution, Zinc supplements, Rehydration with intravenous fluids to prevent or avoid shock, nutrients rich food, maintenance fluid therapy, breast feeding for first six months, immunization, consult a physician as soon as possible..[5]

2. Need for Study

Dehydration is a common fluid disturbances in infants and children. Dehydration in infants and children usually is caused by vomiting, diarrhoea or both . Dehydration is a major cause of morbidity and mortality in infants and young children worldwide. According to the world health organization. It is estimated that there are 1.7 billion cases of diarrheal disease reported annually among children under five years.[6]

Most cases of dehydration in children are the consequence of acute gastroenteritis, childhood diarrhoea result in the death of approximately 700, 000 under five children yearly contributing about 16% of global child death. In developing countries diarrheal disease accounts for an estimated 1.71 and 1.09 % of all death of children under the age of five years of all the child mortality around the world. The Sub Saharan region is the most affected in the world. Diarrheal disease accounts for 10 -15 % of deaths among children under five years old annually in the world .[7]

The situation in India is worse than any other country where diarrhea caused more than 130,000 child deaths in 2013. This accounts for around one fourth of all the worldwide diarrhoea deaths among children under five years of age. The province of MP has the highest burden of infant and childhood mortality in India. According to the NFHS-4 [National Family Health Survey] report 9.19% of under five children in India (8.27% in urban and 9.57% in rural areas) had diarrhea within two weeks before the survey.[8]

In a study regarding diarrhoea in urban slums of India. It was also seen that the incidence of diarrhoea is relatively higher among children of poor strata. In rural India, children aged 12-23 months, 24-35 moths, 36-47months and 48-59 months were significantly improbable to suffer diarrheal disease. Children in rural India are often treated wrongly for diarrhoea and pneumonia. Many cases of diarrheal disease are not diagnosed either because they are mild and self limiting or the patientdoes not seek medical attention..[9]

In karnataka and Bangalore, the contamination of water during summer and rainy season also leads to diarrheal deaths and such cases are more in families with below poverty line. This is proved by a cross sectional study on association of Hygienic Practices and Diarrhea Prevalence in Urban areas of Bangalore. A study was undertaken among 480 households in Hegganhalli locality of Bangalore city. The data on hygienic practices revealed that, 55.6% respondents were not following any methods of drinking water treatment. The study revealed poor drinking water handling and storage, improper solid waste disposal and hand washing without soap are major factors associated with diarrheal diseases. Hence, there is a need for implementation of behavioral change communication to improve the sanitation and hygiene practice.[10]

Among under five children high temperature, weight loss, weakness and lethargy are some telltale signs of dehydration. The families of under five children born in low class families often can't afford the treatment in Bangalore , they are rarely brought to the hospitals. A cross-sectional study was conducted among 295 Mothers who had under-five child with diarrhea in the last 2 weeks. The finding of this study showed that the attitude and practice of mothers were unsatisfactory about the prevention and home-based management ofunder-five. diarrheal diseases. Regarding the attitude of the mothers, 58% had poor practice towards home-based management and prevention of diarrhea among under-five children.[11]

Children are vital to the nation's present and its future. Parents especially mothers are usually committed to providing every advantage possible to the children in their families and ensuring that they are healthy and have the opportunities that they need to fulfill their potential. So the investigator felt the need to empower mothers with knowledge and practices for the assessment and management of dehydration among under five children. For this purpose an information booklet had been selected and developed for improving the knowledge.

3. Objectives

A research objective is a concise, declarative statement, which provides direction to investigate the variables. Research is a concrete statement describing, what the research is trying to achieve. Clearly defined objectives enlighten the way in which the researcher has to proceed.[12]

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of planned teaching program on knowledge regarding management of dehydration among mothers of under-five children residing in selected areas of Doddakammanahalli, Bangalore.

OBJECTIVE OF THE STUDY

1)To assess the knowledge of mothers regarding of under-five children Dehydration.

2)To find the effectiveness of planned teaching program on dehydration among mother of under -five children

3)To find the association of knowledge scores with demographic variables.

HYPOTHESIS

H1: There will be significant difference between mean pre- test and Post test knowledge regarding dehydration among mothers of under five children.

H2 : There will be significant association between the pre test knowledge regarding the dehydration among mothers of under five children.

OPERATIONAL DEFINITIONS

1) Assess :In the study it refers to the estimation of knowledge of mothers of under five children regarding management of dehydration.

2) Effectiveness : In the study it refers to the desired changes that can be brought through teaching programme.

3) Knowledge : In the study it refers to the process of acquiring information regarding management of dehydration.

4) Dehydration: In the study it refers to loss of fluid exceeds the fluid intake.

5) Mother's:- In the study it refers to mother of under five children.

6) Under five children: In the study it refers to children five years of age .

ASSUMPTIONS

Mothers have inadequate knowledge regarding management of dehydration.

The planned teaching programme will improve the knowledge level of mothers.

DELIMITATIONS

The study is limited to mothers of under-five children in selected area of Doddakammanahalli, Bangalore.

Data collection method is limited with the tool prepared by the investigator.

4. Review of Literature

Literature review is defined as a broad comprehensive, in-depth, systematic critique and synthesis of scholarly publications, unpublished, print and online materials, audiovisual materials and personal communication .[13]

A review of literature is a description and analysis of the literature relevant to a particular field or topic. It provides an overview of what work already had been carried out. The researcher has reviewed various literature and research article that are presented in this chapter. The literature review is discussed under the following headings.

Section A : literature related to Dehydration in under five children

Section B: literature related to knowledge regarding management of dehydration among mothers of under five children .

Section C: Literature related to the effectiveness of planned teaching program on management of dehydration in under five children.

SECTION A: literature related to dehydration in under-five children

A cross sectional study was conducted on incidence and risk factors for severe dehydration in hospitalized children in Ujjain, India. The sample size of the study was 332, in which 54% are boys and 46% are girls. This study reveals that the common risk factors of dehydration are child not exclusive breastfed for six months of life (AOR 5.67 95% CI), history of not receiving ORS (AOR 1.34 95% CI), history of not receiving oral Zincs (AOR 2.66 95%CI) and living in overcrowded conditions (AOR 5.52 95%CI). The children residing in urban areas are at a lower risk, water sanitation and hygiene plays a great role in the prevalence of disease which causes dehydration.[14]

Prospective observational study done on the types of dehydration and serum sodium levels in infants and young children at the time of hospital admission with acute diarrhoea in rural areas of Jharkhand.. The sample size is 68 patients in which 64.7% were males.42.6% cases were between 1-2 year of age. The concluded that 45 cases had moderate dehydration in which 57.7% had isonatraemic dehydration. 23 cases had severe dehydration in which 60.8% had hypernatraemic dehydration.[15]

A case control study was done to identify risk factors for development of dehydration in under five year olds with acute watery diarrhea in Government Medical College Hospital, Nagpur, India. The sample size was 387 cases of diarrhoea having severe or moderate dehydration. The study concluded that the underlying risk factors are more common in causing dehydration in children(95%CI) . This study identified the significance of infancy, religion, severe under nutrition, non-washing of hands by mother before preparation of food, frequency of stool >8/d, frequency of vomiting >2/d, history of measles in previous six months, withdrawal of breast feeding during diarrhoea, withdrawal of fluids during diarrhoea and not giving ORS, HAF or both during diarrhoea, in the outcome of development of moderate or severe dehydration.[16]

A cross sectional study was done on the risk factors associated with diarrhoea among children in Uganda. The sample size was 300 and the sampling technique used in the study cluster sampling technique. The study conclude that the prevalence of diarrhoea among children was 40.3 percent. risk factor for diarrhoea was low knowledge of mixing oral dehydration salts ,garbage thrown anywhere around house ,not washing hands before preparing food .so there is a need of proper health education and awareness regarding the management through personal hygiene,safe food practices, home remedies etc.[17}]

A descriptive cross-sectional study was conducted on Serum electrolyte profiles of under-five children admitted for severe dehydration due to acute diarrhea the study was at St Philomena Catholic Hospital Nigeria . The sample size was 63. The result revealed that the electrolyte abnormalities observed, hyponatremia and hypokalemia ranked first and second in frequency, respectively. The frequencies of the various types of dehydration were hyponatremic in 41 (65.1%), isonatremic in 17 (27.0%), and hypernatremic in 5 (7.9%) of the children .[18}

SECTION B : literature related to knowledge regarding management of dehydration among mothers of under five children.

A descriptive cross sectional study was conducted on mother's knowledge and practices regarding prevention of dehydration in children under five years of age at Eed Hussein in the Jabelawlia section, in the Alazhari unit, Khartoum state in Sudan. The sample size of the study was 80. A standard interview questionnaire was used to collect data from the respondents. The study concluded that most mothers (90%) aren't able to specify and respond by giving multiple signs and there is a lack of knowledge regarding some signs, symptoms, management and prevention of dehydration in children. .[8]

A descriptive cross sectional study was conducted on awareness and attitude towards dehydration and its management amongst mothers and factors influence in under five children of Omdurman locality, Sudan. The sample size was 198 mothers out of 222 enrolled mothers of under five children have participated in the study of 26-30 years. A semi structured questionnaire that involves information of dehydration signs, rehydration solution and preparation, in home practices and remedies used by mothers on the management of dehydration. Awareness regarding dehydration signs amongst mothers of under five children was high and 88% of them were able to detect more than 50% of signs. Most mothers who are able to detect the warning signs are educated and have at least primary education.[19]

A Descriptive Study was conducted to Assess the Knowledge on Management of Dehydration in Diarrhoea Among the Mothers of Under-five Children in Anakaputhur, Chennai.The sample size is 30 mothers of under five children. The study concluded that 11(37%) had adequate knowledge, 16(53.3%) had moderate adequate knowledge and 3(10%) had inadequate knowledge on management of dehydration among the mothers of under five children.[20]

A case control study was conducted on the assessment of effectiveness of oral rehydration therapy against severe diarrheal dehydration in selected hospital in North Jakarta Municipality, Jakarta, Indonesia.The sample size was 202 children aged 24 months or less. A questionnaire was used to interview all study subjects. The study concluded that the effectiveness of ORT against severe diarrheal dehydration was 72.1 % for proper ORT preparation and was decreased to 63.2% when ORT was improperly prepared.[21]

An experimental study on oral rehydration with a plantain flour based solution precooked with standardized electrolytes in selected areas of Spain. A sample size is 101 children, ranging in age from 1 to 48 months, was selected, which had presented diarrhea for less than one week from onset, with mild dehydration. The result reveled that successful rehydration was achieved in 94.4 percent of the children in the ORS or WHO group and 91.5 percent in the ORS or plantain group.[22]

A cluster survey study to assess the skill of mothers in preparing packet ORS solution carried out in rural Chittagong district, Bangladesh.The sample size is 420 mothers whose children had been suffering from acute diarrhoea. One hundred and forty (33.3%) mothers were able to demonstrate the preparation correctly and the rest 237 (56.4%) demonstrated the preparation incorrectly. The study concludes that demonstration of preparation of ORS solution to the mothers should be in built in the health education package of oral rehydration therapy for diarrhoeal diseases.[23]

Section C : Literature related to the effectiveness of planned teaching program on management of dehydration in under five children.

An evaluative study was conducted on effects of health teaching on knowledge regarding assessment and management of dehydration in children among mothers in community area of Phulenagar Pimpiri Pune - 18. Non probability purposive sampling techniques was used for 60 mothers of under five children. A structured questionnaire was used for assessing the knowledge regarding assessment and management of dehydration in children and a health teaching on assessment and management of dehydration in children was also prepared. The study reveals that the pretest score (43.33%) shows the majority of mothers have poor knowledge regarding the assessment and management of dehydration. After providing health teaching the score of mothers having good knowledge increase to 90%..[24]

A Quasi experimental study was conducted to evaluate the effectiveness of video assisted teaching programme on knowledge and practices regarding prevention and home management of dehydration among the mothers of under five children in selected rural areas of Bangalore. The sample size was 60 mothers of under five children and a structured knowledge questionnaire was used for collecting the data. The results shows that there was statistically significant difference found between pre test and post test knowledge and practices scores of mothers of under five children.[25]

An evaluative study was conducted on effects of health teaching on knowledge regarding assessment and management of dehydration in children among mothers in selected hospitals of Bangalore. The sample size was 100 mothers were selected by purposive sampling technique. A structured knowledge questionnaire was used as a tool. The study concluded that the majority (63%) of participants have inadequate knowledge. After a structured teaching program the score has improved to 69% of mothers has good knowledge on management of dehydration in children.[26]

A study was conducted to assess the knowledge of preparing oral rehydration and homemade salt sugar solution (SSS)among mothers in Srinagar, Uttaranchal. After the education program significant improvements in their knowledge was found. 86 percent know the correct method of preparing packet ORS and 80.88 percent knew the correct method of preparing homemade SSS Invention of this kind should be carried out to improve the knowledge and skill of mother in treating childhood diarrhea.[27]

5. Methodology

Research methodology involves the systematic procedure by which the researcher starts from the time of initial identification of the problem to the conclusion.

The present study aimed at assessing the effectiveness of planned teaching program regarding management of dehydration among mothers of under five children

This chapter include research approach, research design, variables, setting of study, Population, sample size, sampling technique, sample selection criteria, development of tool, description of the tool, content of the tool, data collection procedure and plan for data analysis.

RESEARCH APPROACH

Research approach indicates the basic procedure for conducting research. The research approach adopted for this study was Quantitative approach.

In quantitative research the aim is to determine the relationship between one thing (an independent variable) and another (a dependent variable) in a population.

In the view of nature of the problem study was aimed to evaluate the knowledge regarding management of dehydration among mothers of under five children.

RESEARCH DESIGN

The research design is the master plan specifying the methods and procedure for collecting and analyzing the needed information in a research study. Pre-experimental One group pre-test, post - test, this design is relatively straightforward research design in which there is a treatment group without a control group. All subjects were given pretest, received treatment and were given a post test.

After considering the entire factors related to the selected problem, the investigator has selected one group, Pré experimental, Pretest, Post test design for testing pre-experimental Knowledge regarding dehydration the effectiveness of planned teaching program on knowledge regarding dehydration among mothers of under five children.

The design chosen for the study is presented as table:

Group	Pre test	Intervention	Post test
Experimental Mothers of under five children who are attending Anganwadis of Begur PHC	Knowledge (O1)	Intervention planned teaching programme	Knowledge (O2)

VARIABLES

Variables are qualities, properties or characteristics of the person, things or situation that changes or vary.

Independent variable: planned teaching program on dehydration.

Dependent variable: -knowledge of mothers of under five children regarding the management of dehydration.

3) Extraneous Variable: -

Extraneous variables: - In the present study it refers to selected variables such as age, religion, educational status, occupational status, type of family, number of children, diet, previous knowledge regarding dehydration.

Assumptions:

1. Mothers will be having limited knowledge on management of dehydration among under five children

Delimitations: The study was limited to mothers of under-five children

SETTING OF THE STUDY

It refers to the physical location and condition in which data collection takes place in a study. The present study was conducted in selected Anganwadi's under Begur PHC Bangalore.

POPULATION

In the present study Population was defined as 60 mothers of under five children from areas Under Begur PHC Bangalore.

SAMPLE AND SAMPLING

Sample : samples for the present study are mothers of under five children who are attending Anganwadi's under Begur PHC.

Sample size of the study is 60 mothers of under-five children.

Sampling technique - Non-probability Purposive sampling technique.

SAMPLING CRITERIA

INCLUSION CRITERIA

• Mothers of under five children.

• Mothers who can understand and speak Kannada and English.

EXCLUSION CRITERIA

• Mother's who are not having under five children.

•Mothers who are not available at the time of study.

6. Results

This chapter deals with the analysis and interpretation of data obtained from 60 participants among the mothers of under five children of selected Anganwadis under Begur PHC Bangalore. In order to find a meaningful answer to the research problem,the data was processed and analyzed on the basis of objectives and hypothesis formulated for the study.

OBJECTIVE OF THE STUDY

1)To assess the knowledge of mothers regarding Dehydration of under-five children

2)To find the effectiveness of planned teaching program on dehydration among mother of under -five children

3)To find the association of knowledge scores with demographic variables.

HYPOTHESIS

H1: There will be significant difference between mean pre- test and Post test knowledge regarding dehydration among mothers of underfive children.

H2: There will be significant association between the pre test knowledge regarding the dehydration among mothers of underfive children.

PRESENTATION OF DATA

The data collected was organized and presented under following sections:

Section 1: Analysis of the demographic variables of the subjects

Section 2: Analysis of the knowledge among the mothers of under five children regarding dehydration.

Section 3: Analysis to compare pretest and post test scoring

Section 4: Association between pretest and posttest knowledge score with selected demographic characteristics of subject.

SECTION –1

DEMOGRAPHIC VARIABLES OF THE SUBJECTS

TABLE 2: frequency and percentage distribution by age of child in years.

(N = 60)

AGE OF CHILD	FREQUENCY	PERCENTAGE
0 – 1 years	9	15 %
1 -3 years	13	21.67 %

3 – 5 years	**38**	**63.33%**
Total	**60**	**100%**

Table 2 shows the distribution of respondents according to age of the child .In the group 38 (63.33%) respondents are in the age group of 3 – 5 years followed by 13(21.67%) respondents in age group 1 –3 years and only 9 (15%) are in the age group 0 – 1 years .

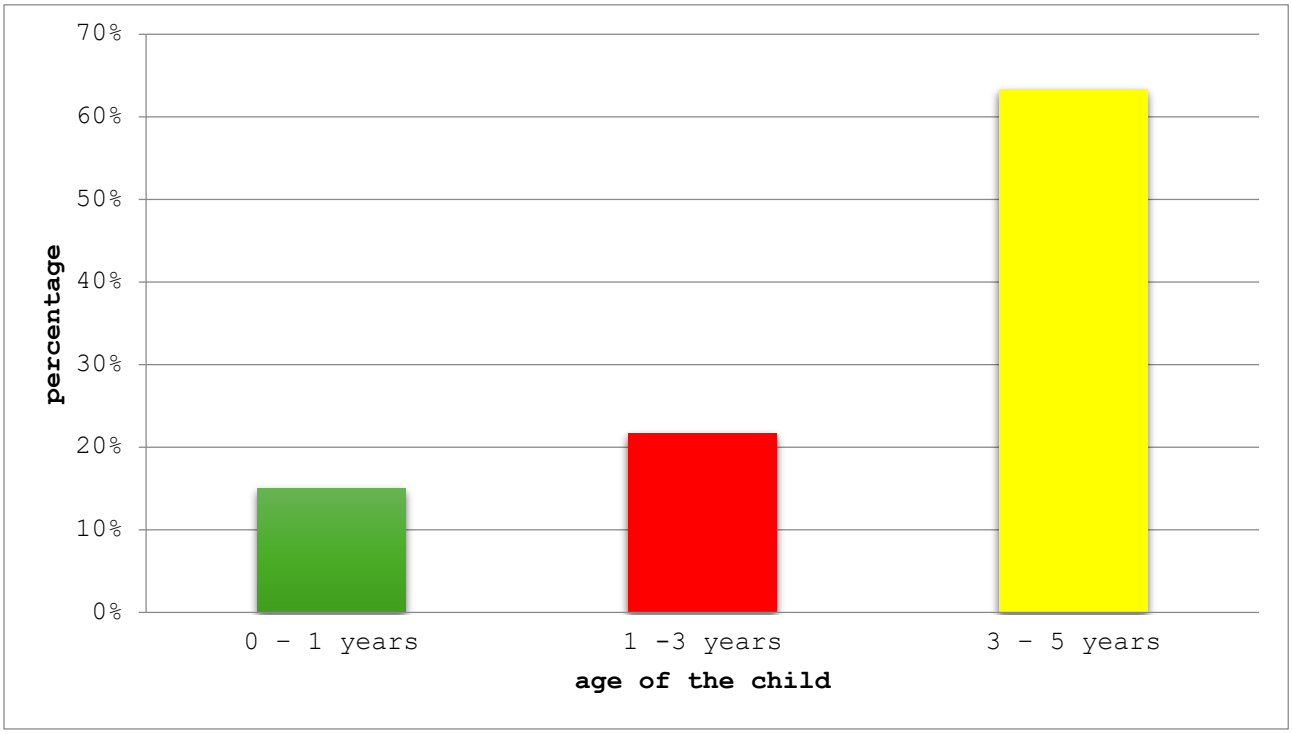

Figure 2 : Bar graph distribution by age of child in years.

TABLE 3 : Frequency and percentage distribution by the number of under five children in the family.

(N = 60)

NUMBER OF UNDER FIVE CHILDREN IN THE FAMILY	FREQUENCY	PERCENTAGE
One	**15**	**25%**
Two	**32**	**53.33%**
Three	**9**	**15%**
Four	**4**	**6.67%**
Total	**60**	**100%**

Table 3 shows the distribution of respondents by the number of under five children in the family. In the group 32 (53.33%) respondents have two under five children and 15 (25%) respondents have one under five child followed by 9 (15%) respondents have three under five children in the family and only 4 (6.67%) respondents have four under five children in the family .

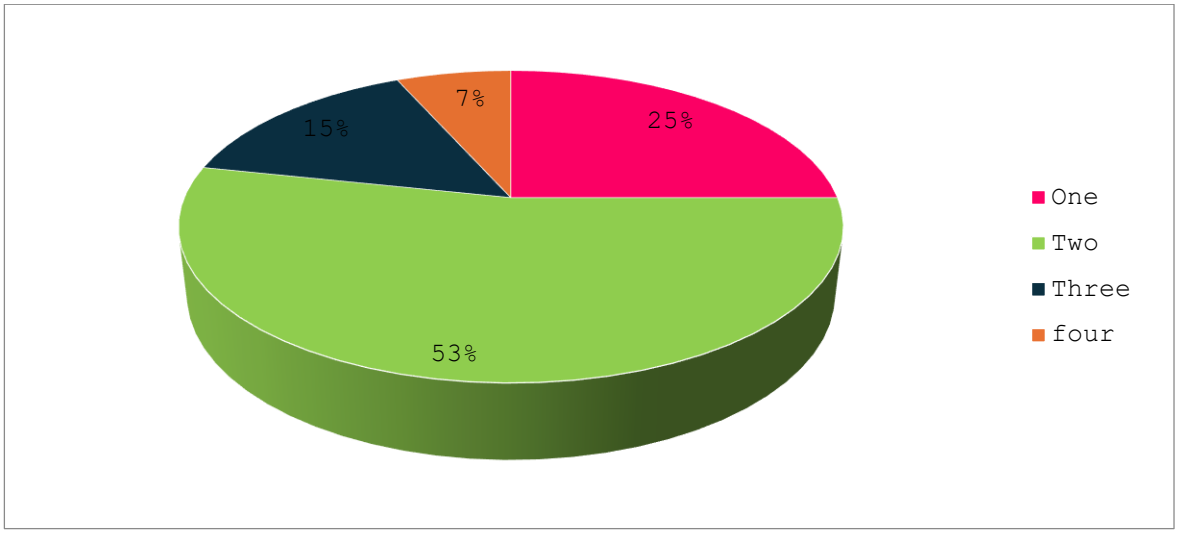

Figure 3 : 3D Pie chart distribution by the number of under five children in the family.

TABLE 4- Frequency and percentage distribution by gender of the child.

(N = 60)

GENDER OF THE CHILD	FREQUENCY	PERCENTAGE
Male	**16**	**26.67%**
Female	**44**	**73.33%**
Total	**60**	**100%**

Table 4 shows the distribution of respondents by gender of the child. Majority of the respondents 44 (73.33%) have female child followed by 16 (26.67%) respondents have male child.

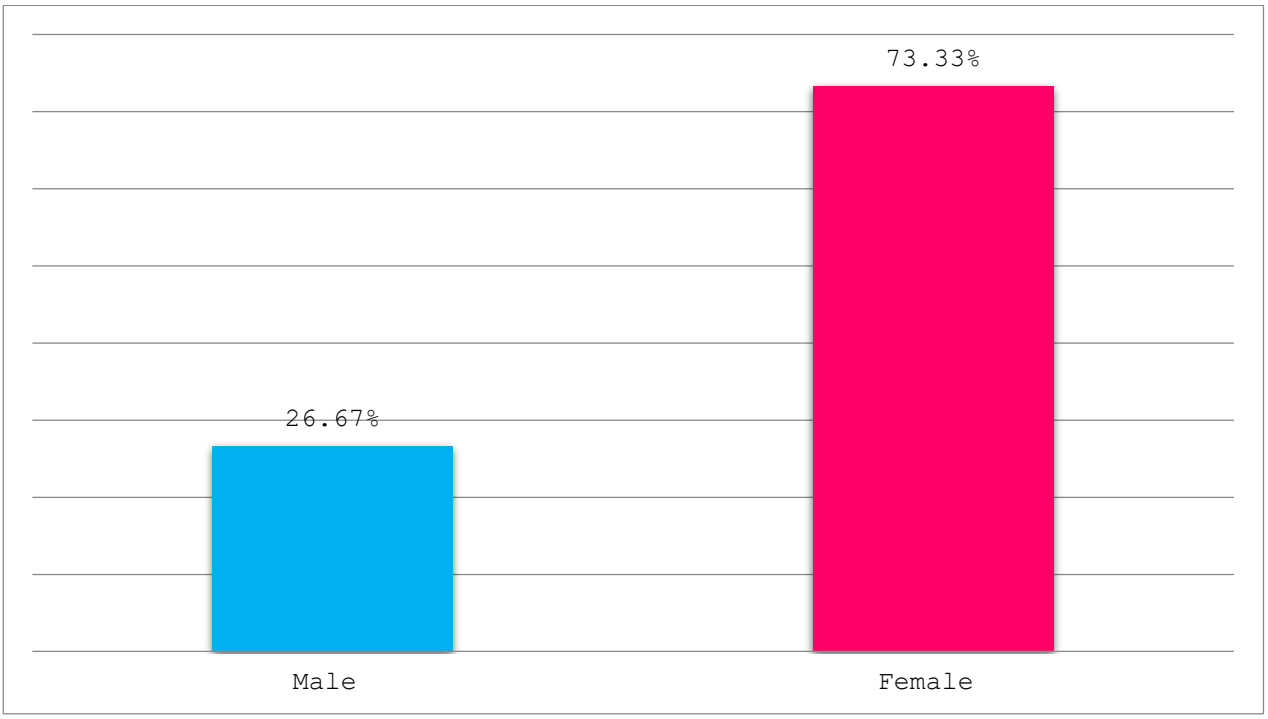

Figure 4: Bar graph distribution by gender of the child.

TABLE 5 - Frequency and percentage distribution by type of diet.

(N = 60)

TYPE OF DIET	FREQUENCY	PERCENTAGE
Vegetarian	**27**	**45%**
Non vegetarian	**33**	**55%**
Total	**60**	**100%**

Table 5 shows the distribution of respondents by type of diet. About half of the subjects 33 (55%) are non vegetarian followed by 27 (45%) respondents are vegetarian.

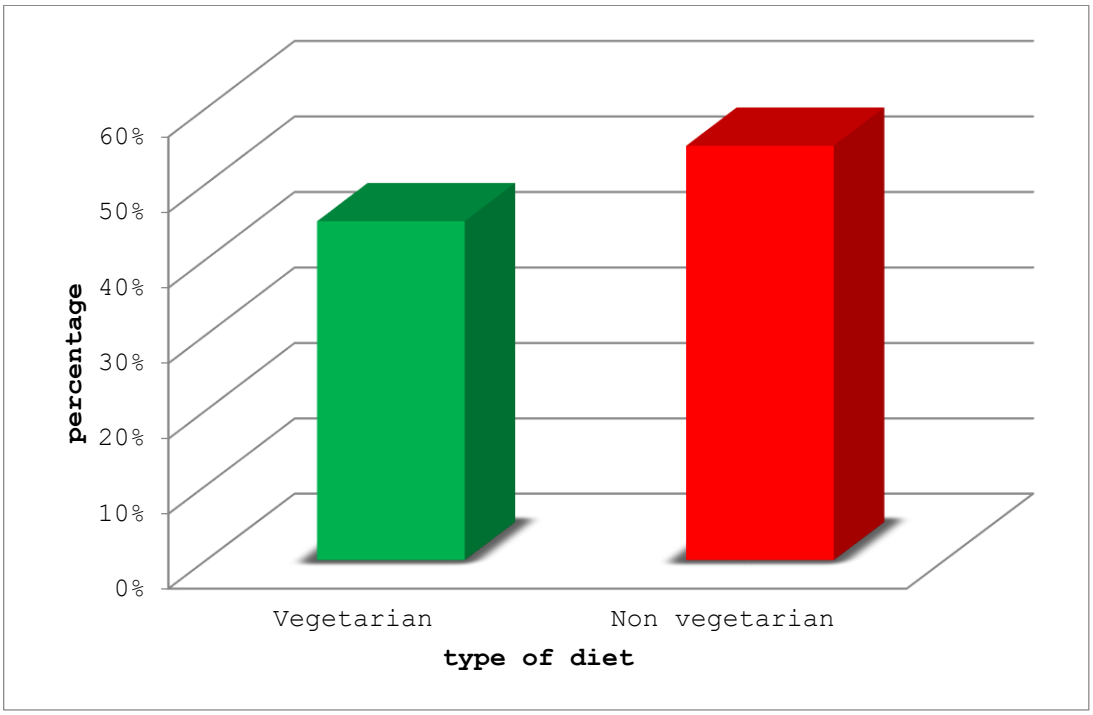

Figure 5 : 3D bar graph distribution by type of diet.

TABLE 6 - Frequency and percentage distribution by age of mother

(N = 60)

AGE OF THE MOTHER	FREQUENCY	PERCENTAGE
21 – 25 years	**12**	**20%**
26 – 30 years	**36**	**60%**
Above 30 years	**12**	**20%**
Total	**60**	**100%**

Table 6 show the frequency and percentage distribution by age of mother. Majority of the respondents are 26-30 years (60%) followed by both respondents in the group of 21-25 years and above 30 years (20%) are 12 each.

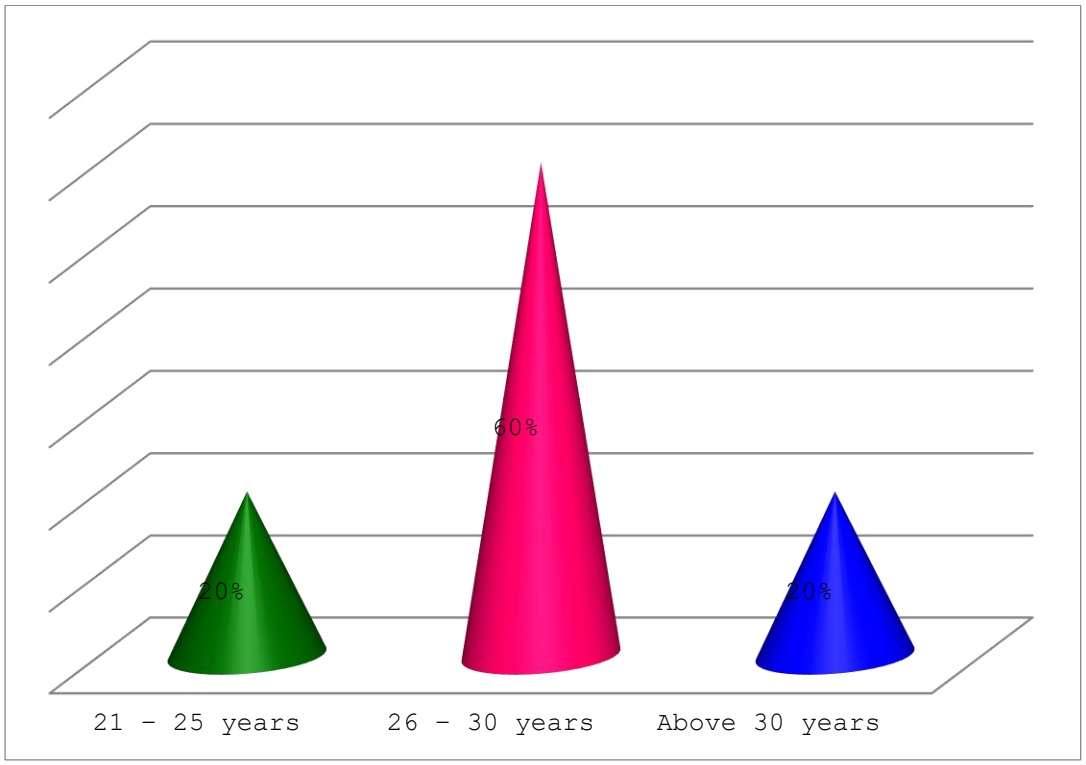

Figure 6 : 3D conical graph distribution by age of mother

TABLE 7: Frequency and percentage distribution by educational status of the mother

(N = 60)

EDUCATIONAL STATUS OF MOTHER	FREQUENCY	PERCENTAGE
No formal education	10	16.67%
Primary education	15	25%
Secondary education	16	26.67%
Graduate	15	25%
Post graduate	4	6.66%
Total	60	100%

Table 7 shows the distribution by educational status of mother. In the study the maximum subjects 16(26.67%) have secondary education followed by 15(25%) having primary education . 15(25%) respondents are graduates followed by10 (16.67%)mothers having no formal education and 4(6.66%) mothers being post graduates.

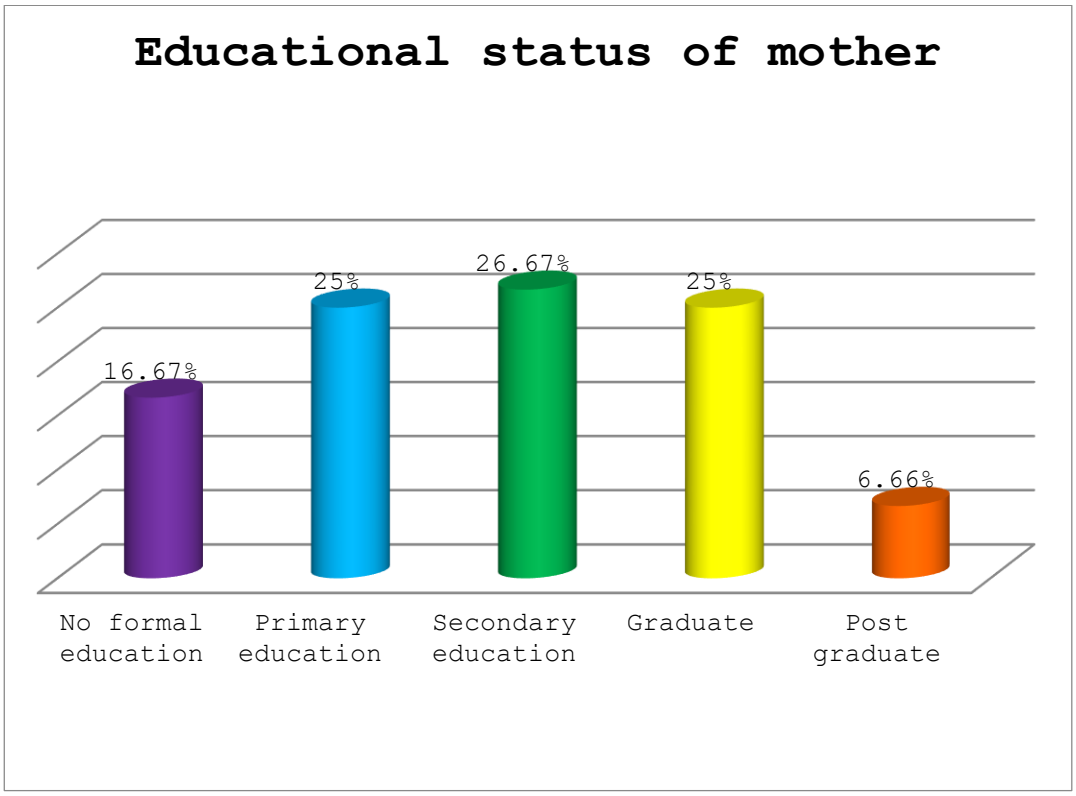

Figure 7 : 3D Cylindrical graph distribution by educational status of the mother

TABLE 8- Frequency and percentage distribution by religion

N = (60)

RELIGION	FREQUENCY	PERCENTAGE
Hindu	**32**	**53.33%**
Christian	**14**	**23.33%**
Muslim	**10**	**16.67%**
Others	**4**	**6.67%**
Total	**60**	**100%**

Table 8 show the distribution of respondents by Religion. About half of the subject 32(53.33%) are Hindu followed by Christian 14(23.33%) Muslim10(16.67%) and others 4(6.67%).

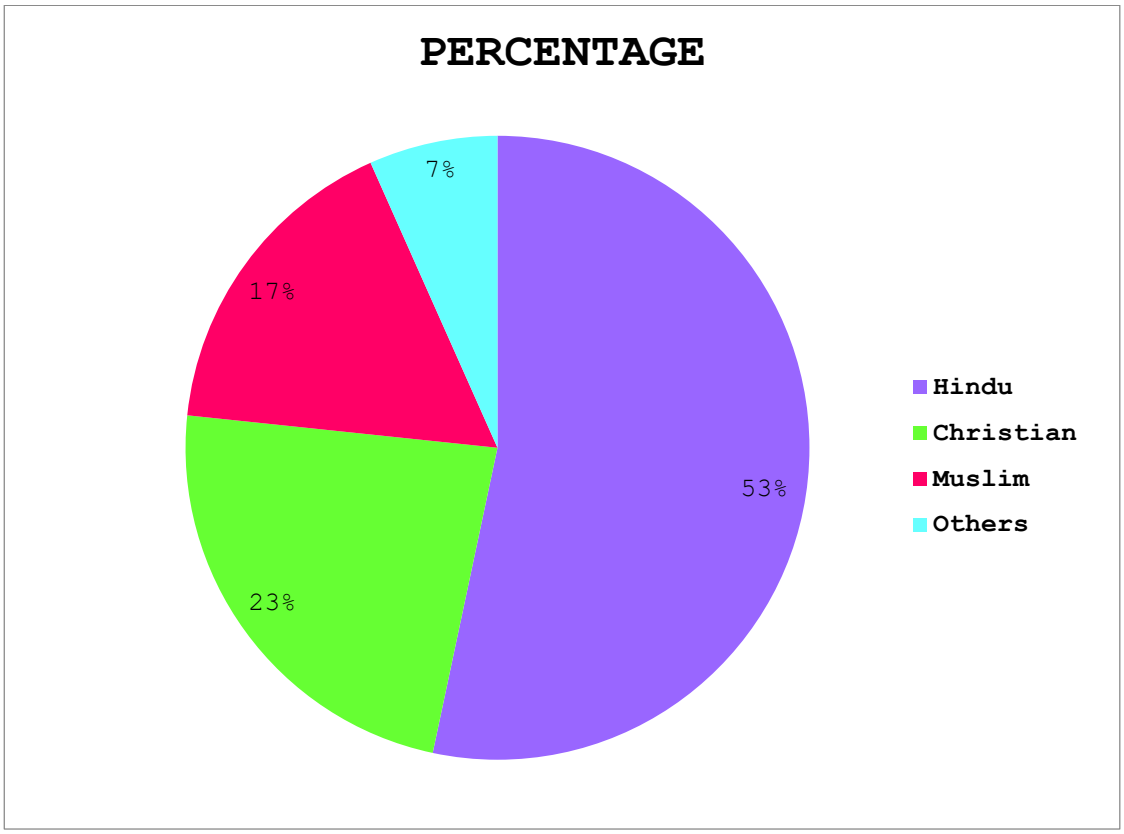

Figure 8 : pie chart distribution by religion

TABLE 9 - Frequency and percentage distribution by Type of family

(N = 60)

TYPE OF FAMILY	FREQUENCY	PERCENTAGE
Nuclear	**23**	**38.33%**
Joint	**32**	**53.33%**
Extended	**5**	**8.34%**
Total	**60**	**100%**

Table 9 shows that most of the subjects 32(53.33%) are living in joint family, 23 (38.33%) in Nuclear family and only 5(8.34%) belongs to Extended family.

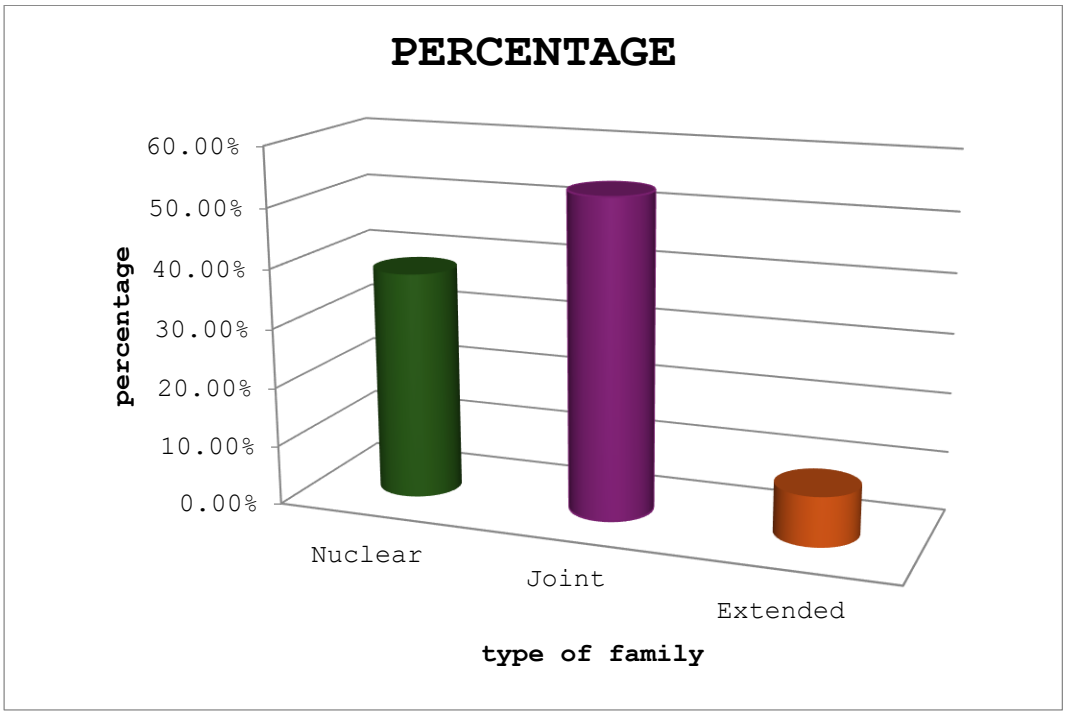

Figure 9 : 3D Cylindrical graph distribution by Type of family

TABLE 10- Frequency and percentage distribution by source of water supply

(N = 60)

SOURCE OF WATER SUPPLY	FREQUENCY	PERCENTAGE
Municipal water supply	**15**	**25%**
Bore water	**18**	**30%**
Kaveri water supply	**15**	**25%**
Other	**12**	**20%**
Total	**60**	**10**

Table 10 shows the distribution of source of water supply. Majority of the subject 18(30%) have Bore water supply, are followed by Municipal water supply and Kaveri water supply 15(25%) each and others 12(20%).

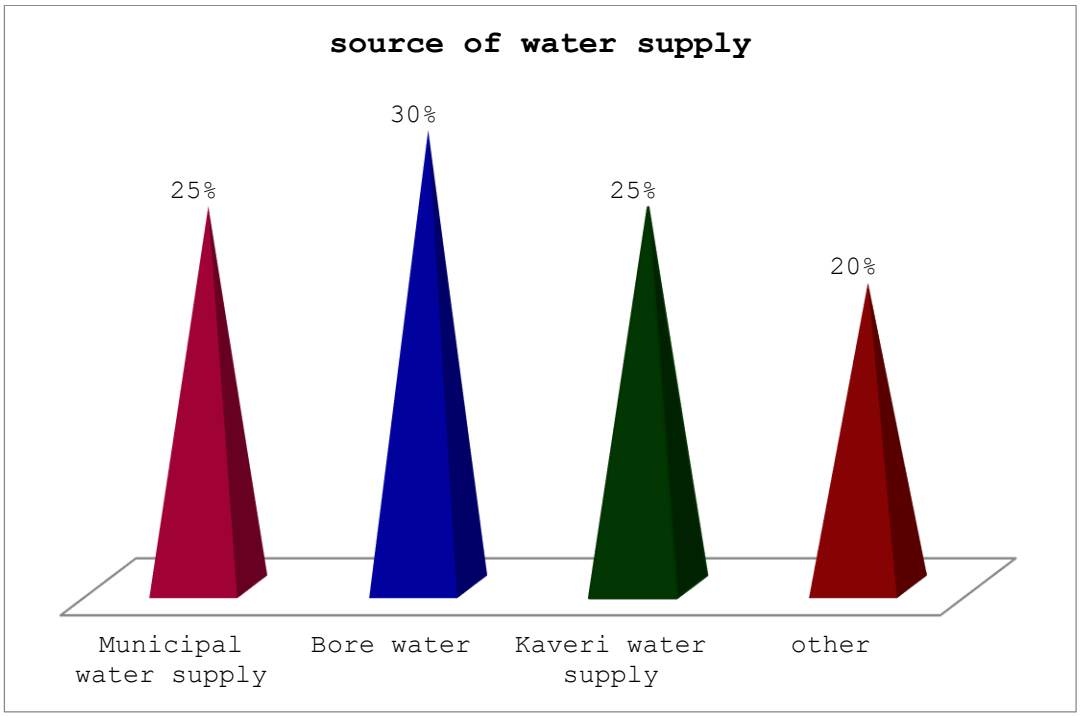

Figure 10 : 3D Pyramid graph distribution by source of water supply

TABLE 11 - Frequency and percentage distribution by source of information

N = (60)

SOURCE OF INFORMATION	FREQUENCY	PERCENTAGE
Mass media	**21**	**35%**
Health worker	**21**	**35%**
Family member	**13**	**21.67%**
No information	**5**	**8.33%**
Total	**60**	**100%**

In the table 11 it is observed that the majority of the respondents have mass media 21 (35%) and health worker 21 (35%) as the source of health information followed by 13 (21.67) having family members as source of information and only 5 (8.33%) members doesn't have any information regarding dehydration.

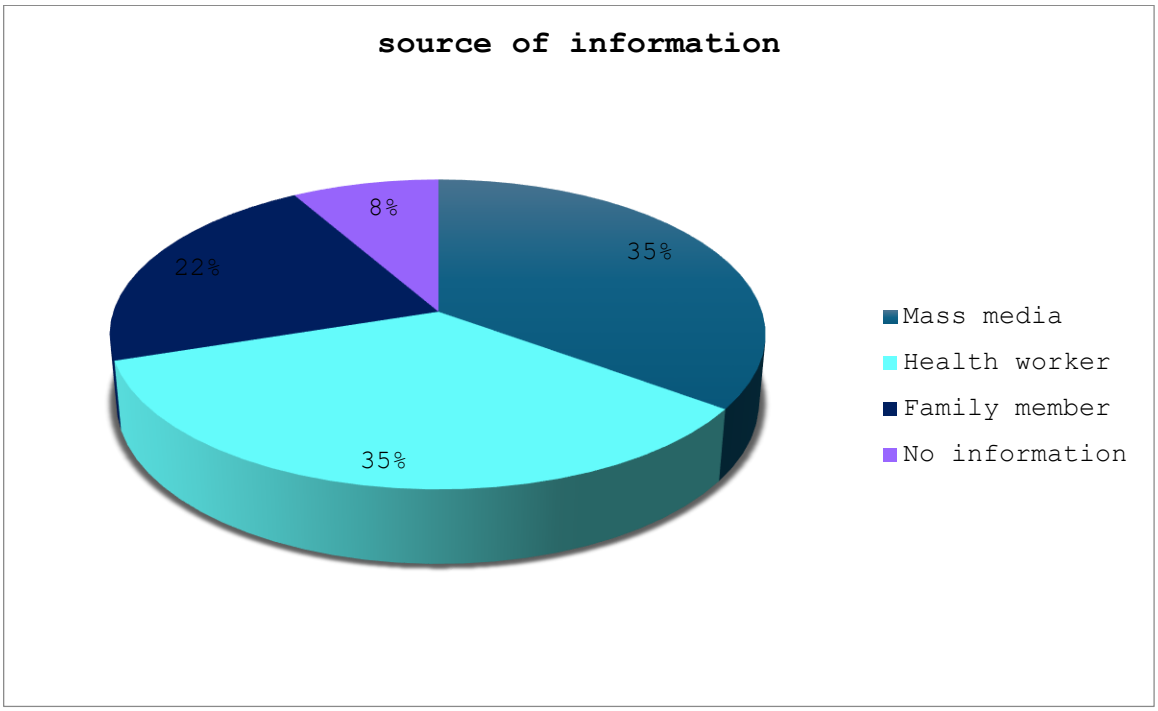

Figure 11: 3D pie chart distribution by source of information

SECTION 2

ANALYSIS OF THE KNOWLEDGE AMONG THE MOTHERS OF UNDER FIVE CHILDREN REGARDING DEHYDRATION.

Table no.12: Pretest knowledge score of respondents.

Aspect	Range	Mean	Median	Standard deviation	Mean percentage
Knowledge of mothers of under five children regarding dehydration	**16 – 5**	**10.05**	**10**	**2.8718**	**33.5%**

The data table 12 shows that the pretest knowledge score ranged from 16 – 5 ,mean 10.05 , the mean percentage of pretest knowledge score was 33.5 % with standard deviation 2.8718 , it indicates that the subject were having average knowledge regards dehydration.

Table no. 12: Post test knowledge score of respondents.

Aspect	Range	Mean	Median	Standard deviation	Mean percentage
Knowledge of mothers of under five children regarding dehydration	**29 – 15**	**23.05**	**23.5**	**3.6305**	**76.83%**

The data table 13 shows that the post test knowledge score ranged from 29 – 15 ,mean 23.05 , the mean percentage of post test knowledge score was 76.83 % with standard deviation 3.6305 , it indicates that the subject were having good knowledge regards dehydration after teaching programe.

SECTION 3

ANALYSIS TO COMPARE PRETEST AND POST TEST SCORING

Table no 13 : Comparison of pretest and post test score of respondents

N = 60

Grade	Pretest		Post test	
	frequency	percentage	frequency	Percentage
Good knowledge	–	–	48	80 %
Average knowledge	33	55%	12	20 %
Poor knowledge	27	45 %	–	–

Data in the table no 13 shows that most of the subjects (55 %) Average knowledge regarding dehydration in pretest .

In the post test most of the subjects had (80 %) good knowledge regarding dehydration.This indicates that a teaching method was effective in increasing the knowledge of subjects regarding dehydration.

Table 14 :Effectiveness of planed teaching program of prevention and management of dehydration

Mean knowledge score		Mean difference	Median		Standard deviation difference	t value
Pretest	Post test		pretest	Post test		
10.05	23.05	13.0	10	23.5	0.7587	19.38

It is evident from the data presented in table 14 that calculated 't ' value(19.38) was greater than the table value (t_{59} = 2.01) Have research hypothesis was accepted at 0.05 level of significance .The mean difference between pretest and post test knowledge score was a true difference. This indicate that the teaching method was significantly effective in increasing the knowledge of subject regarding dehydration among the mothers of under five children

SECTION 4

ASSOCIATION BETWEEN PRETEST AND POSTTEST KNOWLEDGE SCORE WITH SELECTED DEMOGRAPHIC CHARACTERISTICS OF SUBJECT.

Sl. No	variables	Pretest				Posttest			
		Below median	Above median	df	X^2	Below median	Above median	df	X^2
1	Age of child								
	0-1 year	3	6	4	0.907	2	7	4	3.034
	1-3 years	7	6			2	11		
	3-5 years	17	21			15	23		
	Total	27	33			19	41		
2	Number of under five children								
	One	7	8	6	1.72	4	11	6	3.8254
	Two	13	19			8	24		
	Three	4	5			5	4		
	Four	3	1			2	2		
	Total	27	33			19	41		

3	Gender of the child								
	Male	8	8	2	0.2204	5	11	2	0.0018
	Female	19	25			14	30		
	Total	27	33			19	41		
4	Type of diet								
	vegetarian	16	11	2	4.0329	9	18	2	0.063
	Non vegetarian	11	22			10	23		
	Total	27	33			19	41		
5	Age of mother								
	21-25 years	2	10	4	4.8934	2	10	4	2.362
	26-30 years	19	17			14	22		
	Above 30 years	6	6			3	9		
	Total	27	33			19	41		
6	Education of mother								
	No formal education	3	7	8	3.2997	4	6	8	2.1374
	Primary education	5	10			5	10		
	secondary	8	8			3	13		
	Graduate	9	6			6	9		
	Post graduate	2	2			1	3		
	Total	27	33			19	41		
7	Religion								
	hindu	17	15	6	2.4351	12	20	6	7.8782

	christian	6	8			1	13		
	muslim	3	7			3	7		
	others	1	3			3	1		
	Total	27	33			19	41		
8	Type of family								
	nuclear	11	12	4	1.3823	7	16	4	0.1792
	joint	15	17			10	22		
	extended	1	4			2	3		
	Total	27	33			19	41		
9	Source of water supply								
	Municipal water supply	5	10	6	2.2447	5	10	6	0.8729
	Bore water	8	10			5	13		
	Kaveri water supply	9	6			4	11		
	others	5	7			5	7		
	Total	27	33			19	41		
10	Source of information								
	Mass media	12	9	6	2.9252	6	15	6	4.4698
	Health worker	8	13			10	11		
	Family members	6	7			2	11		
	No information	1	4			1	4		
	total	27	33			19	41		

6. Discussion

In the present study the demographic characteristics of the samples reveal that the majority of the children (63.33%) were in the age group of 3–5 years. More than half of the respondents (53.33%) had two children under five years of age, and 73.33% had a female child. A total of 55% were non-vegetarians, 60% were between 26–30 years of age, and the highest proportion (26.67%) had secondary education. About half of the subjects (53.33%) were Hindu, and 53.33% of them were living in joint families. A majority of the subjects (30%) reported bore well as their source of water supply. With regard to sources of health information, mass media (35%) and health workers (35%) were the major sources reported by the respondents.

In the pretest most of the respondents most of the subjects 33 (55 %) had average knowledge and 27(45%) regarding dehydration. In the post-test most of the subjects had 48 (80 %) good knowledge regarding dehydration. This indicates that a teaching method was effective in increasing the knowledge of subjects regarding dehydration.

The Post test the mean percentage knowledge score(Mean percentage= 76.83 %, SD= 3.6305) was found higher than pre-test mean knowledge score (Mean percentage= 33.5 %, SD= 2.8718) , it indicates that the subject were having good knowledge regards dehydration after teaching programme.

The calculated 't ' value(19.38) was greater than the table value (t_{59} = 2.01) Have research hypothesis was accepted at 0.05 level of significance. This indicate that the teaching method was significantly effective in increasing the knowledge of subject regarding dehydration among the mothers of under five children.

7. Conclusion

This chapter deals with the conclusion, implications recommendations, and limitations of the study. The present study was done to assess assess the effectiveness of planned teaching program on knowledge regarding management of dehydration among mothers of under-five children . During pre test most of the subjects showed inadequate or moderate (55%) knowledge and maximum number of subjects had good knowledge (80%) in the post test .

IMPLICATIONS

Nursing practice : Nursing is a profession applies its body of knowledge in practical services which are vital to human and social welfare.[28] The study implies that the student nurses can use the planned teaching program in order to have knowledge about dehydration ,its assessment and management .The study enables the nurses to communicate with mothers to obtain and share information about dehydration which can help the mother to deal with the child having problems such as dehydration and diarrhea .

Nursing education : nursing education is the production aspect of nursing manpower development .[29]The nurses can use planned teaching program to teach the mothers during the community postings to deliver the information to the mothers of under five children . The nurses can also give education to the mothers attending anganwadis ,PHCs ,daycare centres , pediatric clinics etc.

Nursing administration : nursing administrators are important in all fields of nursing ,they assume a special significance ,particularly in encouraging and motivating the nurses to improve their knowledge with the changing trends of nursing . The nursing administrators can provide facilities to improve knowledge regarding management of dehydration in under five children such as health education periodic surveys etc.

Nursing research :Nursing research is needed to generate knowledge about nursing education, nursing administration,health services, characteristics of nurses, and nursing roles the findings from this studies indirectly influence nursing practice and thus add to nursing's body of knowledge..[30]The findings of the study serve as the basis for student nurses to conduct the future research on knowledge of mothers of under five children regarding management of dehydration.

LIMITATIONS

- The study is limiyed to the mothers of under five children attending anganwadies of Begur PHC
- The limited sample size will limits on the generalization of the study findings.
- Non probability purposive sampling technique adopted in the study may limit the generalization of the study findings.
- Study limited to specific geographic area may limit the generalization.
- In this study the Teaching Programme was used for only to assess the enhancement of knowledge but not practice which could not be evaluated for lack of time.
- Respondent who knew kannada English and hindi where only included in the study.

RECOMMENDATIONS

- A similar study can be replicated on a larger samples .
- A similar study can be done in PHC's or under five clinics.
- An experimental study can be done by control and experimental

8. Summary

The primary aim of the study was an experimental study to assess the effectiveness of structured teaching programme on management of Dehydration among under five children mothers in selected areas of Doddakammanahalli Bangalore.

OBJECTIVES OF THE STUDY

1.To assess the knowledge of mothers regarding of under-five children Dehydration.

2.To find the effectiveness of planned teaching program on dehydration among mother of under-five children.

3.To find the association of knowledge scores with demographic variables.

ASSUMPTIONS

Mother having inadequate knowledge about the management of dehydration.

The planned teaching programme will improve the knowledge level of mothers.

HYPOTHESIS

* H1: There will be significant difference between mean pre- test and Post test knowledge regarding dehydration among mothers of under five children.

* H2 : There will be significant association between the pre test knowledge regarding the dehydration among mothers of under five children.

The review of literature is discussed under 3 sections, dehydration in children, assessment of knowledge regarding to management of dehydration., effectiveness of planned teaching programme and management of dehydration in under five children.

The conceptual framework of the present study is based on the management of dehydration. The research approach for this study was an evaluative approach. The research design adopt for this study was a quasi experimental one group pre test post test design. There were 60 samples. Samples were selected using non probability purposive sampling. The knowledge were assessed by using structured questionnaire. The content validity of the tool was done by HOD,s of all department. The obtained data was analyzed in terms of objectives and hypothesis using descriptive and inferential statistics.

- The mean percentage of overall pre test knowledge score is 10.0 (33.33 percent)
- Post test knowledge score of respondents is 21.5 (71.67 percent)
- Paired ‘t’ test was used for area wise comparison between pretest and post test know
- ledge score.

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