



Received: 25-01-2025
Accepted: 05-03-2025

ISSN: 2583-049X

A Study to Assess the Effectiveness of Health Education Programme on Knowledge Regarding Prevention of Diarrhoea among Mother of under Five Children in Selected Area of Selected City

Bagul Tukaram

M. Sc Nursing Tutor, Shree Sai College of Nursing Mhasadi Pimpalner Sakri, Maharashtra, India

Corresponding Author: **Bagul Tukaram**

Abstract

“A Study to Assess the Effectiveness of Health Education Programme on Knowledge Regarding Prevention of Diarrhoea among Mother of Under Five Children in Selected Area of Selected City.”

Objectives

1. To assess the pretest knowledge score on prevention of diarrhoea among the mothers of under five children in selected area of selected city.
2. To assess the post knowledge score on prevention of diarrhoea among the mothers of under five children in selected area of selected city.
3. To evaluate the effectiveness of health education programme on prevention of diarrhoea among the mothers of under five children in selected area of selected city.
4. To find out the association between the pretest knowledge score with their selected demographic variables.

Material and Methods

The research approach adopted in this study is quantitative research approach. Pre experimental research design one group pre test post test design was chosen for the study. The sample were selected non probability conveniently sampling to suit the study Sample size was 50.

Results

The data was analyzed by using inferential and descriptive statistics on the basis of objectives.

Study revealed the distribution of mothers according to their socio demographic variables

- With respect to age 15(30%) belong to age group of 21 to 25 years, 17(34%) are from age group 26 to 28 years, 12(24%) are from age group 29 to 30 years, and 6(12%) are from age of 30 years and above,
- With respect to type of family 18(36%) are from joint family and

32(64%) belongs to nuclear family,

- For occupational status of mother 18 (36%) are house wife, 6(12%) are business women's, 4(8%) are government employee and 22(44%) are private employee,
- With regards to educational status of mother 15(30%) have primary education, 19(38%) have secondary education, 4(8%) had taken degree education, 12(24%) are illiterate,
- With respect to family income 16 54 (32%) had income less than Rs.6000/-, 17 (34%) had income Rs. 6001 to Rs.10000/-, 11 (22%) had income Rs. 10000 to Rs.15000/- 6 (12%) had income above Rs. 15000/-
- Regarding source of water 4(8%) use well water, 34(68%) use tap water, and 12 (24%) use hand pump,
- For methods for solid disposal 8 (16%) use maneuverer pits, 4(8%) use burial method 14(28%) does open field defecation.

Conclusion

- The study reveals that in pretest 27 mothers (54%) have inadequate knowledge, 14 school teachers (28%) have moderate knowledge, 9 school teachers (18%) have adequate knowledge.
- The study reveals that in posttest 6 mothers (12%) have inadequate knowledge, 15 school teachers (30%) have moderate knowledge, 29 school teachers (58%) have adequate knowledge.

The Study reveals the pre test mean was 10.58, standard deviation was 1.71, mean% was 52.9 and post test mean was 14.94, standard deviation was 1.39, mean % was 74.7 the calculated 't' value is 22.31 which showed high statistical significance at level of 0.05.

Keywords: Diarrhoea, Health Education, India

Introduction

“There are many women with children under five who want to work and who lack affordable, high-quality child care.”

Harriet Harman

Diarrhoeal disease is the second leading Causes of death in under five children. It is both preventable and treatable. Globally there are nearby 1.7 billion causes of diarrhoea disease every year. Globally four billion episode of diarrhoea were estimated to occur each year with >90% occurring in developing Countries. Diarrhoeal disease is an important public health problems among. Under five children in developing countries. Total diarrhoeal deaths in India among children aged 0-6 years were

estimated to be 158, 209 and proportionate mortality due to diarrhea in this age group was 9.1% The Average estimated incidence of diarrhoea in children aged 0-6 years was 1.71 and 1.09 episodes/person/years in rural and urban area.

Diarrhea is one of the most common manifestations of illness in infants and children. It is characterized by an increased in fluidity, frequency, volume as well as possible changes in colour of faces in comparison with the usual stool pattern of the individual. The usual stool pattern of breast-fed infants may be several stools a day, whereas formula fed infants may be one stool every other day. Diarrhea is a symptom of variety of conditions, and it constitutes one of the main causes of morbidity and mortality among infants and children throughout the world. Diarrhea is usually defined as passage of 3 or looser watery stool in a 24-hour period, loose stool being one that would take the shape of a container. Diarrhea is one of the most common ailments in young children. A recent change in the consistency or character of stool is more important than the number of stools.

Voluntary Health Association of India (2007) reported that diarrhea is more common and more dangerous in young children, especially between 6 months to years and especially in those who are poorly nourished. About 60.70% of children die of acute gastro entries because they do not have water left in their body.

The Infection is transmitted through feco-oral route either water born, food borne (or) direct transmission through contaminated hands, finger, nails and fomites. More severe (or) prolonged illness can result in dehydration with significant morbidity and mortality. The signs and symptoms of diarrhea are restlessness, irritability, lethargy, not able to drink, poor thirst and drink eagerly, sunken eyes and loss of skin turgor (WHO - 2001)

Review of Literature

Paul D.K. et al., (2009) conducted a study on efficacy of high dose Lactobacillus rhamnosus GG in controlling acute watery diarrhea in Indian children, randomized controlled trials, was used to evaluate the effective dose of

lactobacillus rhamnosus GG as probiotic in acute watery diarrhea in children. This study concluded that both the doses of LGG 10(10) and 10(12) were equally effective to decrease the frequency and duration of diarrhea and reduction in hospital stay in patients of AWD.

Narayanappa D et al., (2008) conducted a study on randomized double blinded controlled trial to evaluate the efficacy and safety of Bifilac in patient with acute viral diarrhea. This study evaluates the efficacy and safety of Bifilac on reducing the episodes (frequency) and duration of diarrhea induced by rotaviral infection and to evaluate the efficacy of Bifilac to ameliorate the associated symptoms like dehydration and duration of rotaviral shedding in feces. So samples are selected and are divided in two groups. One group received standard therapy + placebo, other group received standard therapy + Bifilac (probiotic). This study concluded that symbiotic, bifilac appears to be a safe and very effective adjuvant in the management of acute rotaviral diarrhea.

Viswanathan V.K. et al., (2009) conducted a study on enteric infection meets intestinal function, how bacterial pathogens cause diarrhea infectious diarrhea is a significant contributor to morbidity and mortality worldwide. In bacterium induced diarrhea, rapid loss of fluids and electrolytes results from inhibition of normal absorption function of the intestine as well as activation of secretory processes. This review explores the various mechanism that contribute to loss of fluids and electrolytes following bacterial infections and attempts to link these events to specific virulence factors and toxins.

Results

The data was analyzed by using inferential and descriptive statistics on the basis of objectives.

- **Section A:** In this section the description of socio demographic characteristics of the subject was drawn and its percentage analysis has shown.

Section: A Description of Socio Demographic Characteristics.

N=50

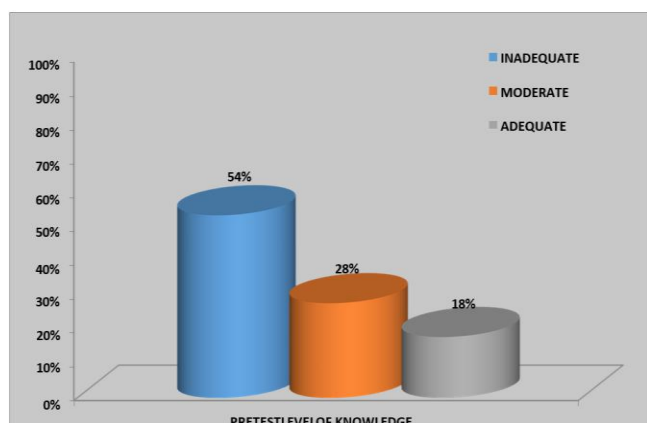
Demographic variables	Category	Noofsubjects (N)	Percentage%
Age	21-25	15	30
	26-28	17	34
	29-30	12	24
	30AndAbove	6	12
Type of family	Joint	18	36
	Nuclear	32	64
Occupational Status of Mother	Housewife	18	36
	Business	6	12
	Govt employee	4	8
	Private Employee	22	44
Educational Status of Mother	Primary Education	15	30
	Secondary Eduation	19	38
	Degree	4	8
	Illiterate	12	24
Family Income	Less than Rs.6000/-	16	32
	Rs.6001 To Rs.10000/-	17	34
	Rs.10000ToRs.15000/-	11	22
	Above Rs.15000/-	6	12
Source of Water	Well Water	4	8
	Tap Water	34	68
	Handpump	12	24
Methods Used for Solid Disposal	Waste Bin	24	48
	Manuerepits	8	16
	Burrial	4	8
	Open Field	14	28
Method of Disposal of Humanexcreta	Open Field Defication	6	12
	Rcalatrine	44	88

Section B: Assessment Of pretest Knowledge Score on Prevention of Diarrhea among the Mothers of Under-Five Children’s

Table 1: Pretest knowledge score on prevention of diarrhea among the mothers of under-five children’s

Level of Knowledge	Pretest	
	Frequency	Percentage
Inadequate	27	54%
Moderate	14	28%
Adequate	9	18%

N=50

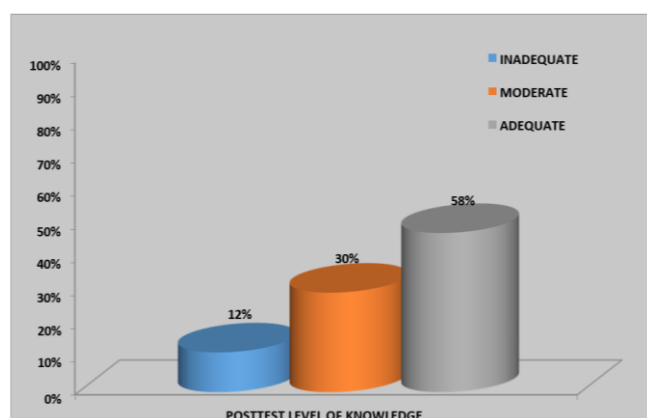


Section C: Assessment of Post-test Knowledge Score on Prevention of Diarrhea among the Mothers of Under-Five Children’s

Table 2: Posttest knowledge score on prevention of diarrhea among the mothers of under-five children’s

Level of Knowledge	Posttest	
	Frequency	Percentage
Inadequate	6	12%
Moderate	15	30%
Adequate	29	58%

N=50



Section D: Effectiveness of Health Education Programme on Prevention of Diarrhoea among The Mothers of Under- Five Children’s

Table 3: Frequency and percentage wise distribution of comparison of pretest and post test level of knowledge

Level of Knowledge	Pretest		Posttest	
	Frequency	Percentage	Frequency	Percentage
Inadequate	27	54	6	12
Moderate	14	28	15	30
Adequate	9	18	29	58

N=50

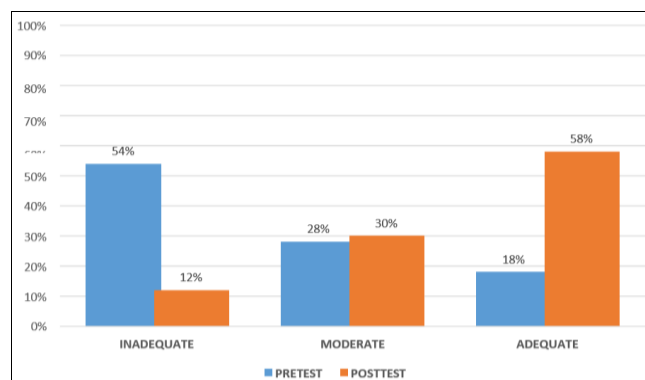


Table 4: Mean,SD And Mean Percentage of PreTest and PostTest Level of Knowledge

Overall	Pretest			Posttest			Mean Difference
	Mean	SD	Mean %	Mean	SD	Mean %	
	10.58	1.17	52.9	14.94	1.39	21.8	

N=50

The above table reveals that the pretest mean score was 10.58, standard deviation was 1.71 and the mean% was 52.9. The post test mean score was 14.94, standard deviation was 1.39 and the mean% was 74.7. The difference in mean% was 21.8.

Table 5: Paired “t”-Test To Assess the Effectiveness of Health education programme

Overall	Pretest		Posttest		t Value	p value
	Mean	SD	Mean	SD		
	10.58	1.17	14.94	1.39		

S:Significantat5% p<0.05

The above table reveals the pre test mean was 10.58, standard deviation was 1.71, mean% was 52.9 and post test mean was 14.94, standard deviation was 1.39, mean % was74.7 the calculated*t*value is22.31 which showed high statistical significanceat level of 0.05.

Section E: Association between the Pretest Knowledge Score with their Selected Demographic Variables

Demographic variables	Category	Table value	df	χ^2	Significance
Age	21-25	7.82	3	6.33	NS
	26-28				
	29-30				
	30AndAbove				
Type of Family	Joint	3.84	1	3.055	NS
	Nuclear				
Occupational Status of Mother	House wife	7.82	3	5.89	NS
	Business				
	Govt Employee				
	Private Employee				
Educational Status of Mother	Primary Education	7.82	3	6.32	NS
	Secondary Education				
	Degree				
	Illiterate				
Family Income	Less Than Rs.6000/-	7.82	3	4.81	NS
	Rs.6001To Rs.10000/-				
	Rs.10000ToRs.15000/-				
	Above Rs.15000/-				
Source of Water	Well Water	5.991	2	0.049	NS
	Tap Water				
	Handpump				
Methods Used for Solid Disposal	Waste Bin	7.82	3	7.01	NS
	Manuerepits				
	Burrial				
	Open Field				
Method of Disposal of Human Excreta	Open Field Defecation	3.84	1	0	NS
	Rcalatrine				

*Significantat0.05 NS:Notsignificant

The above table shows that there was no significant association of pre-test level of knowledge with any of the demographic variables.

References

1. Achar's. Test Book of pediatrics. 6th edition, orent Logman, Chennai, 2000.
2. Aligard MR. Nursing Theorists And Theorists And Their Work. 5th edition, Mosby Publications, 2002.
3. Basawan thappa BT. Community Health Nursing. 1st Edition Jaypee Publishes, 1999.
4. Bhaskara Roaj. Principles of Community Medicine. 3rdedition, Aitbs Publication, 2002.
5. Behrman ER, *et al.* Text Book of Pediatrics. 15thedition, Prism books Pvt. Ltd., Bangalore, 2000.
6. Broadribb's S. Introductory Pediatric Nursing. 6th edition Lippincott publication, Philadelphia, 2003.
7. Christina N, *et al.* Introduction to Maternal & Child Health Nursing. 1st edition, Philadelphia, 1996.
8. Dawn CS. Text Book of Obstetrics Neonatology & Reproductive & Child Health Education. 16th edition, Indian College of Maternal health publication Calcutta, 2003.