

EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON MANAGEMENT OF DIARRHOEA AMONG THE MOTHERS OF UNDER FIVE CHILDREN IN ANANTNAG

Mir Uzma Ashraf, Mr Tariq Ahmad Dev

Institute of nursing University of Kashmir South campus Anantnag Kashmir.

A Nation's wealth depends upon its healthy citizens of all age groups. A healthy adult emerges from healthy infant. The health of children has vital importance to all societies because children are basic resources for the future of mankind. In a vast biological stretch, infancy is the most critical period and thus high incidence of mortality and morbidity occur in that period. In India diarrhoeal disease is a major health problem among children under the age of five years. Voluntary Health Association of India reported that diarrhoea is more common problem and more dangerous in young children between 6 months to 2 years and especially in those who are poorly nourished. About 60-70% of children die of acute gastro enteritis because they do not have water left in their body.⁽¹⁾

Diarrhoea is responsible for 1.5 billion episodes and 1.5 - 2.5 million deaths estimated to occur annually in children under 5 years. In the last two decades, the Mortality due to Diarrhoea in children under 5 years has reduced. This reduction may be due to correct case management as per Standard treatment guidelines recommended by WHO and use of oral rehydration therapy as a keystone in the management.⁽¹²⁾

Objectives of the study

1. To assess the pre-test knowledge score regarding management of diarrhoea among mothers of under 5 children in selected hospital of Anantnag Kashmir.
2. To assess the post-test knowledge score regarding management of diarrhoea among mothers of under 5 children in selected hospital of Anantnag Kashmir.
3. To compare pre-test and post-test knowledge scores regarding management of diarrhoea among mothers of under 5 children in selected hospital of Anantnag Kashmir.
4. To determine the association of pre-test knowledge scores regarding management of diarrhoea among mothers of under 5 children in selected hospital of Anantnag Kashmir with their demographic variables i.e., Age, Education, Occupation, Family income, Type of family, source of water and disposal of human excreta.

1.3 Hypothesis:

➤ **H1:** There is significant difference between pre-test knowledge and post-test knowledge scores regarding management of diarrhoea among mothers of under 5 children at ≤ 0.05 level of significance. **H2:** There is significant association between pre-test knowledge scores with selected demographic variables that is Age, Education, Occupation, Family income and Type of family, source of water and disposal of human excreta at ≤ 0.05 level of significance.

➤ **RESEARCH METHODOLOGY: Research approach** -Quantitative research approach was used. **Research Design**-one group pre-test post- test design **Research setting** -Paediatric wards of Maternity hospital Anantnag. **Sample size & technique**-60 mothers of under 5 children who were admitted in selected wards of Maternity hospital Anantnag by Purposive sampling technique. **Method of data collection and tool**- Self structured Interview schedule. **Results:** The planned Teaching Program was found effective. in pre-test majority 42 (70%) were having inadequate knowledge, 14(23.33%) moderate & 4 (6.66%) were having adequate knowledge regarding management and prevention of common cold. in post test 33(55%) were having moderate knowledge , 17 (28.33%) were having inadequate knowledge and 10(16.66%) were having adequate knowledge regarding management of diarrhoea after planned teaching programme. The results of the study revealed that there was significant association between pre-test knowledge score of mothers of Under 5 children with selected demographic variable i.e Monthly family income, Mothers Education, and Mothers Occupation evidenced that there was statistically association at $p \leq 0.05$ level. No significant association was found with Age, and Type of family,source of water and disposal of excreta. **Conclusion:** The findings of the study concluded that the planned teaching programme on management of diarrhoea was effective in improving the knowledge level of the mothers of under 5 children.

Keywords: Effectiveness, planned teaching programme, diarrhoea, management, and Mothers of under 5 children.

1. INTRODUCTION

Acute gastroenteritis is a common cause of morbidity and mortality worldwide accounting an estimated 2.4-2.8 million deaths each year in children under 5 years, despite the availability of simple effective treatment. In Egypt, the WHO death records reported that gastroenteritis killed around 3364 child per year in the last 5 years⁽²⁾. Most of these children die from extreme dehydration

(abnormally low levels of body water) resulting from a combination of severe diarrhea, vomiting and not drinking enough fluids. Even in the well developed countries, millions of episodes of gastroenteritis occur each year, especially in young children. It is a common reason for hospital admission in previously healthy children during the first years of life⁽³⁾. Although gastroenteritis is considered one of the chief killers of children, it is self-limited. Treatment of acute episode is primarily directed toward preventing or treating dehydration. When possible, age-appropriate diet and fluids should be continued. ORS solution is used as supplemental fluid to those at increased risk of dehydration. Breastfeeding should not be discontinued, even during the rehydration phase. Giving fruit juices and carbonated drinks should be avoided until the diarrhoea stops. Diet should be increased as soon as it is tolerated to compensate for lost caloric intake during acute illness. Lactose restriction is usually not necessary, although it might be helpful in cases of chronic malnutrition or in children with severe enteropathy; changes in formula are usually unnecessary. Full-strength formula is typically well tolerated and allows for a more rapid return to full energy intake. Anti-diarrheal medications are generally not indicated and may contribute to complications. In addition, the use of antibiotics remains controversial⁽⁴⁻⁶⁾. In the past, a number of laboratory studies such as stool microbiology were used to evaluate children with acute vomiting and/or diarrhea. Since oral rehydration therapy has become the preferred method of treating dehydration, routine laboratory testing is no longer necessary. However, it may be beneficial for individual patients, when oral replacement therapy was unsuccessful or for patients who are receiving parenteral hydration⁽⁵⁾.

One of every ten children born in developing countries dies of acute gastro enteritis before reaching the age of five. Approximately 15% of children die of acute gastro enteritis before 3 years of age in developing countries. The infection is transmitted through fecooral route either water borne, food borne (or) direct transmission through contaminated hands, fingers, 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, poorly thirst and drink egarly, sunken eyes and loss of skin turgor⁽⁷⁾

Rehydration project reports that thousands of death could be averted through combined prevention and treatment strategies, intervention such as oral rehydration therapy, appropriate drug therapy, optimal breast feeding practice, improved nutrition, increasing access to clean water, sanitation facilities, improved personal hygiene including food and water. Complications are uncommon but consult the doctor if your child has the following symptoms of passing little urine, dry mouth and tongue, unresponsiveness, drowsiness, blood in the stool. If the child's symptom is severe (or) complication developed, sometime an intravenous fluid therapy might be needed if dehydration occur⁽⁸⁾

1.2 NEED FOR THE STUDY

Diarrhoea continues to plague the developing world resulting in more than 3 million deaths annually⁽⁹⁾ Diarrhoeal infections are the fifth leading cause of death worldwide and continue to take a high toll on child health. The Government of India through its National CDD Program (Diarrheal Diseases Control Program) planned to reduce the infant mortality rate from 95 to 50 and pre-school mortality from 41.2 to 10 per 1000 by the year 2000 A.D. In India, National diarrhoea control program (CDD) was implemented from 1980 as a part of Sixth Five Year Plan (1980-85) with the primary thrust of improving the knowledge and practices of appropriate case management among caretakers and health care providers and primary objective of preventing deaths due to dehydration. This program was integrated within Child Survival and Safe Motherhood (CSSM) program⁽¹⁰⁾ Mushrooming of slums due to continuous urbanization has made diarrhoea one of the biggest public-health challenges also in cities in India. In India mortality of under- five children due to diarrhoeal diseases 18% as per WHO report 2006⁽¹¹⁾ Malnutrition increases the risk of diarrhoea and associated mortality. Moderate to severe malnutrition increases the odds of diarrhoea associated mortality 1.6 to 4.6 folds. The risks are particularly higher with micronutrient malnutrition in children with vitamin A deficiency, the risk of dying from diarrhoea, measles and malaria is increased by 24%. Zinc deficiency is estimated to increase the risk of mortality from diarrhoea, pneumonia and malaria by 21%.⁽¹³⁾

According to WHO Guidelines for the management of diarrhoea; anti-diarrhoea, anti-amoebic and antibacterial have little role to play. Community Health education is the utmost importance for the effective case management, since it has potential to establish productive contact between the health services and the community to increase capability of families to recognize the danger sign of diarrhoea in children and to encourage appropriate and early case seeking behaviors. Effective Health education can only be provided on the basis of an accurate understanding of prevailing knowledge, attitude and practices (KAP) of the community. Therefore, it is necessary to have a relevant information concerning KAP of mothers about Diarrhoea for successful implementation of control activities⁽¹⁴⁾ Exclusive breast feeding by majority of mothers in this period protects infants.

Bhave.H explained that diarrhoea is a biggest single killer disease of children below five years of age due to dehydration. In the modern world, it is one of the major causes of nutritional loss and poor growth. Oral rehydration therapy is an appropriate intervention for dehydrated children⁽¹⁵⁾

Most of the mothers do not have adequate knowledge and practice towards management of diarrhoea. Though many teaching programme were conducted by the government related to diarrhoea but mothers still have lack of knowledge in home management, hence it is essential to assess the knowledge on management of diarrhea. So the investigator feels the necessity for a study in this aspect.

1.2 Objectives

- 1.To assess the pre-test knowledge score regarding management of diarrhoea among mothers of under 5 children in Selected hospital of Anantnag Kashmir.
- 2.To assess the post-test knowledge score regarding management of diarrhoea among mothers of under 5 children in selected hospital of Anantnag Kashmir.

3.To compare pre-test and post-test knowledge scores regarding management of diarrhoea among mothers of under 5 children in selected hospital of Anantnag Kashmir.

4.To determine the association of pre-test knowledge scores regarding management of diarrhoea among mothers of under 5 children in selected hospital of Anantnag Kashmir with their demographic variables i.e., Age, Education, Occupation, Family income, Type of family,source of water and methods of disposal of human excreta.

1.3 Hypothesis:

- **H1:** There is significant difference between pre-test knowledge and post-test knowledge scores regarding management of diarrhea among mothers of under 5 children at ≤ 0.05 level of significance.
- **H2 :** There is significant association between pre-test knowledge scores with selected demographic variables that is Age , Education , Occupation , Family income and Type of family ,source of water and methods of disposal of human excreta at ≤ 0.05 level of significance.

1.4 OPERATIONAL DEFINITIONS

I.Effectiveness : It refers to the extent to which teaching programme was achieved the desired result indented to measure in terms of difference between pretest and post test score.

II.Planned Teaching Programme : It is systematic and planned teaching programme on management of diarrhoea which include definition, causes, transmission, signs and symptoms, management of diarrhea with help of audio visual aids.

III .Diarrhoea : The augmented water content in the stools above the normal value of approx 10 ml /kg /day in the infant and young child

IV.Under 5 children: In this study it refers to children who are in the age group of 0-5 years and are admitted in pediatric wards.

V. Mother: In this study it refers to the women having children of age group 0-5 years

1.5 CONCEPTUAL FRAMEWORK: The study is based on modified penders Health promotion model (1984) .The study seeks to increase on individual level of well being. The model focus on aspects to individual cognitive perceptual factors, modifying factors and participation on health promoting behaviours. The model also identified factors that influence health promotion activities

2 . REVIEW OF LITERATURE

The literature review of this study is presented under following divisions.

- 2.1 : Studies related to incidence of diarrhoea.
- 2.2 : Studies related to predisposing factors and causes of diarrhoea.
- 2.3 : Studies related to management of diarrhoea.

3. METHODOLOGY

Research methodology is a way to systematically solve the research problem. Research methods are the techniques used by the researcher to structure a study, gather & analyze the information relevant to the research questions.

3.1 Research approach

In view of the nature of the problem under study and to accomplish the objectives of the study, quantitative approach was found to be appropriate.

3.2 Research Design

Pre Experimental One Group Pre Test Post Test Design.

3.3 Sample size & technique

60 mothers of under 5 children who were admitted in selected wards of Maternity hospital of Anantnag by Purposive sampling technique.

3.4 Method of data collection and tool

Self-structured Interview schedule.

4. Data Analysis

The data was analyzed by descriptive and inferential statistics

5. RESULT

5.1 Description of demographic variables of study subjects.

5.2 Assess the knowledge of study subjects regarding management of diarrhoea.

1. Comparison of pre & post test mean knowledge scores of study subjects regarding management of diarrhoea.
 2. Comparison of pre & post test level of knowledge score (inadequate, moderate, adequate) of study subjects regarding management of diarrhoea.
 3. Area-wise enhancement of mean % age knowledge scores of study subjects regarding management of diarrhoea.
 4. Comparison of correct responses as per the items in pre test and post test knowledge scores of study subjects regarding management of diarrhoea.
- 5.3 Association between pre test knowledge scores of study subjects with selected demographic variables.

5.1 Description of demographic variables of study subjects.

TABLE 1: Frequency and percentage distribution of Study subjects according to their demographic variables.

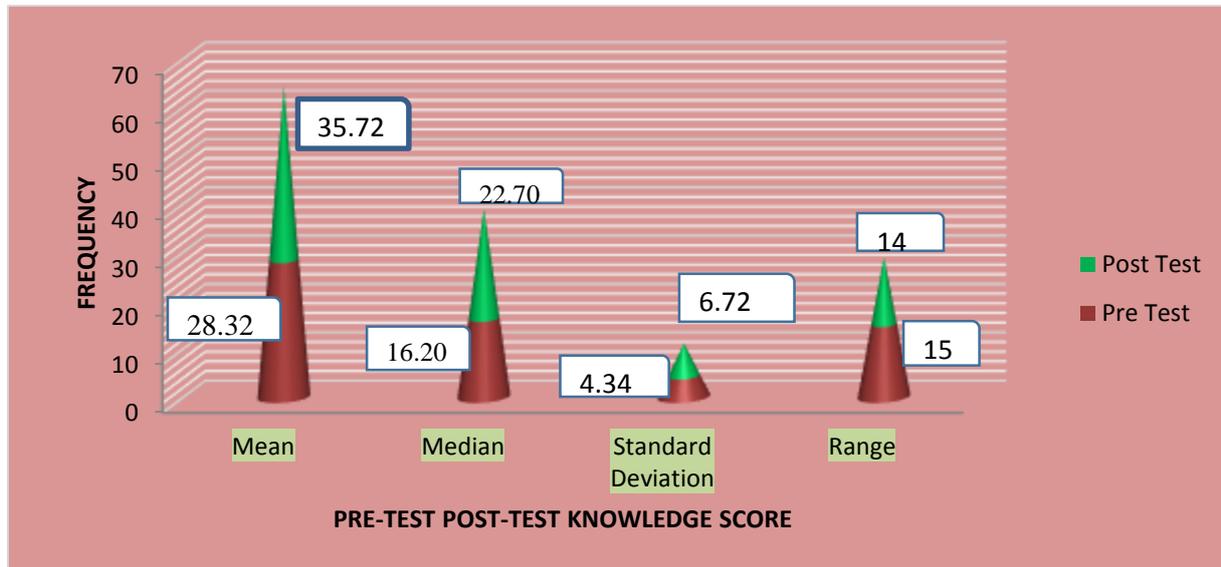
N=60

DEMOGRAPHIC VARIABLES	CATEGORY	Frequency	Percentage
Age	21-25	08	13.33
	26-30	14	23.33
	31-35	12	20
	36-40	18	30
	Above 40	08	13.33
Mothers Education	Illiterate	09	15
	Middle Pass	11	18.33
	Secondary	16	26.66
	Higher Secondary	19	31.66
	Graduate	05	8.33
Monthly family income	< 10,000	17	28.33
	10000-15000	28	46.66
	> 150000	15	25
Type of family	Nuclear	36	60
	Joint	24	40
Mothers Occupation	House wife	39	65
	Government employee	13	21.66
	Private employee	08	13.33
Source of water	Well water	0	0
	Tap water	41	68.33
	Hand pump water	19	31.66
Method of disposal of human excreta	Open field	06	10
	Sanitary disposal	54	90

5.2 Analysis And Interpretation Of Knowledge Of Study Subjects Regarding Management Of Diarrhoea Among Mothers Of Under 5 Children.

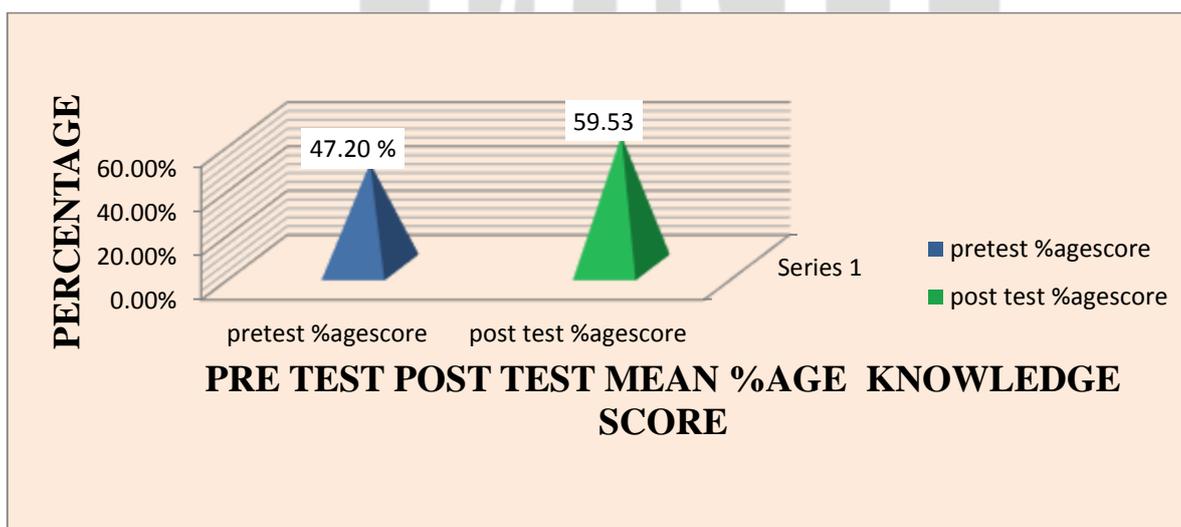
N=60

	PRE TEST SCORE	POST TEST SCORE
Mean	28.32	35.72
Median	16.20	22.70
Mode	28	42
Std. Deviation	4.342	6.728
Range	15	14
Minimum	12	18
Maximum	29	33



Comparison Of Pre And Post Test Mean %Age Knowledge Scores of Study Subjects Regarding Management Of Diarrhoea.

Group	Mean score	Mean score (%)	Standard Deviation	Mean Difference	P Value
Pre test score	28.32	47.20	4.34	7.4	≤0.001
Post test score	35.72	59.53	6.72		



5.3 Association Between Pre –Test Knowledge Scores Of Study Subjects With Selected Demographic Variables.

N=60

Variables	Category	Freq	PRETEST KNOWLEDGE			Df	Chi Sq. Test χ^2	P Value
			Inadequate	Moderate	Adequate			
Age	21-25	08	5	3	0	4	12.213	0.120 NS
	26-30	14	04	08	2			
	31-35	12	06	4	2			
	36-40	18	11	05	02			
	Above 40	08	05	03	0			
Mothers Education	Illiterate	09	7	02	0	12	60.321	0.000 Sig
	Middle Pass	11	5	6	0			
	Secondary	16	12	04	0			
	Higher Secondary	19	12	07	0			
	Graduate	05	01	01	03			
Monthly family income	< 10,000	17	10	05	01	6	12.062	0.040 Sig
	10000-15000	28	20	04	04			
	> 15000	15	04	10	01			
Type of family	Nuclear	36	20	10	06	02	0.621	0.694 NS
	Joint	24	16	06	02			
Mothers Occupation	House wife	39	30	07	02	06	13.844	0.019 Sig
	Government employee	13	03	8	02			
	Private employee	08	04	01	03			
Source of water	Well water	0	0	0	0	08	8.654	0.342 NS
	Tap water	41	34	05	02			
	Hand pump water	19	12	05	02			
Method of disposal of human excreta	Open field	06	05	01	0	14	12.453	0.211 NS
	Sanitary disposal	54	38	12	04			

The data presented in Table revealed that significant association was found between Monthly family income, Mothers Education, and Mothers occupation of study subjects with their pre-test knowledge scores; While as no association was found between Age, Type of family, Source of water and methods of disposal of human excreta of study subjects with their pre-test knowledge scores ($p \geq 0.05$).

6. CONCLUSION

The findings of the study concluded that the planned teaching programme on management of diarrhoea was effective in improving the knowledge level of the mothers of under 5 children.

7. RECOMMENDATIONS: On the basis of the findings of present study the following recommendations have been made:

1. A similar study can be conducted on a large sample in order to draw more definite conclusions and generalizations.
2. A similar study can be replicated on large sample with different demographic characteristics.
3. A quasi-experimental study can be conducted with control group.
4. A similar study can be recommended by using different method of teaching.

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