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Research Paper

Medical Science

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Effectiveness of Planned Teaching Programme on Home Management of Diarrhoea

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ABSTRACT

Background of the study: *Acute watery diarrhoea is a self limiting disease lasting for 3-7 days, over 90% of the cases can be successfully treated with ORT(oral rehydration treatment) and continue feeding without anti-diarrhoeal drugs among mortality and morbidity in acute infectious diarrhoea have dramatically reduce due to ORT and early remission. The aim of the study is to "assess the effectiveness of planned teaching programme on home management of diarrhoea and preparation of ORS on the knowledge and practice of mothers having under five children in the selected rural area of Dehradun, Uttarakhand."*

Methods: *A community based cross-sectional study. Setting- Listrabad, Dehradun (Uttarakhand). Sample- 35 mothers having under five children. Tool- Self structured questionnaire to assess the knowledge regarding home management of diarrhoea and ORS preparation. Intervention- Planned teaching programme and ORS demonstration on home management of diarrhoea.*

Results: *Effective planned teaching programme on mothers knowledge showed that Mean±SD of pre-test was 8.14±2.33 and Mean±SD of post-test was 13.8±3.43. The mean difference between pretest and post test was 5.66, the finding of the study revealed that post test knowledge score was significantly higher than post test knowledge score. The difference between pre test and post test shows difference at the level of $p<0.005$.*

Conclusion: *Study shows there was significant increase in the knowledge after implementing planned teaching programme and preparation of ORS on home management of diarrhoea among mothers having under five children.*

INTRODUCTION

Diarrhoea is one of the leading causes of death among children under five globally. More than one in ten children deaths, about 800000 each year, is due to diarrhoea. An estimate 2.5 billion case of diarrhoea occur among children under five years of age, each year (WHO, 2009). An estimate suggests that the overall incidence of diarrhoea has become stable over the past two decades.[1] The prevalence of Acute illness in Uttarakhand for the year (2007-2009) was 8448 per lakh population i.e around 8.4%. Diarrhoea/ Dysentery had prevalence of 0.68%, higher in rural areas (0.77%) as compared to urban areas (0.45%).[2] Acute diarrhoea remains a major cause of morbidity and mortality in children. Since the introduction of oral rehydration salts (ORS) mortality has dropped to less than 50% worldwide. Low osmolarity ORS improved the outcomes and reduced the hospitalization further. Zinc deficiency has been found to be associated with severe episodes of acute diarrhoea. Zinc supplement in developing countries did reduce the incidence and prevalence of diarrhoea. In addition zinc supplement significantly reduced the severity of diarrhoea and duration of the episode.[3] The most severe threat post by diarrhoea is dehydration, which may lead to death especially in children (WHO,2009). During a diarrhoeal episode water and electrolytes (sodium, chloride, potassium and bicarbonate) are lost by liquid stools, vomit, sweat, urine and breathing , dehydration occur when these loses are not replaced.[4] Nearly nine million children under five years of age die each year(UNICEF, 2009). Diarrhoea is the second only to pneumonia as the cause of these deaths. Reducing these deaths depends largely on delivering life saving treatment of low osmolarity oral rehydration salts and zinc tablets to all children in need. According to latest available figures, an estimated 2.5 billion people do not have access to safe drinking water. These unsanitary environments allow diarrhoea causing pathogen to spread more easily.[1] The study aims to assess the effectiveness of planned teaching programme on home management of diarrhoea and preparation of ORS on the knowledge of mothers having under five children in selected rural area of Dehradun, Uttarakhand.

METHODOLOGY

The study was community based cross sectional study conducted in rural community area (Listrabad) of Dehradun, Uttarakhand. Population were mothers having under five children and who have given their informed consent. Independent variable-planned teaching programme on home management of diarrhoea and ORS preparation. Dependent variable-level of knowledge among mothers having under five children regarding home management of diarrhoea and ORS preparation. Inclusion criteria for sample was mothers who were having under five children, willing to participate in the study and given their written consent, available during the time of the study and able to understand Hindi/English. Mothers who were having any chronic illness were excluded from the study. Convenient sampling technique (Non probability) was adopted for this study. Considering the constraints of the study sample size of 35 mothers having under five children was taken those who were residing in rural community of Dehradun, Uttarakhand. A structured knowledge questionnaire and observation checklist was developed. The maximum score on knowledge questionnaire was 20 with score 1 for each correct answer and maximum score of practice checklist was 10 with score 1mark for each correct steps. Data analysis was done by descriptive statistics (mean, medium, standard deviation, frequency and percentage) and inferential statistics (paired t-test),using Microsoft excel 2010 SPSS version 20. Ethical clearance was done from ethical committee, HIHT University.

Results

Table 1- personal profile characteristics of mothers having under five children

CHRACTERISTICS	FREQUENCY (n=35)	PERCENTAGE (%)
Age in years		
21-25	13	37.14%
26-30	15	42.86%
31-35	6	17.14%
36-40	6	2.86%
Education		
Illiterate	0	0
Primary education	7	20%
High school	7	20%
Intermediate	10	28.57%
Graduation	11	31.43%
Occupation		
House wife	35	100%
Working	0	0

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Monthly Income		
1000-5000	9	25.71%
5001-10000	15	42.85%
10000-15000	6	17.14%
15001-20000	1	2.85%
20001-25000	2	5.71%
25001-30000	1	2.85%
30001-35000	1	2.85%
No. Of under five children		
1	27	77.14%
2	8	22.86%
Age of under five children		
1day-12months	6	13.95%
12months-24months	12	27.90%
25months-36months	9	20.93%
37months-48months	5	11.63%
49months-60months	11	25.58%

A total of 35 mothers were studied out of them majority (42.86%) of the mothers were in the age group of 26-30yrs ,majority (31.43%) were graduates, all the mothers (100%) were housewives, maximum of them had monthly income in range between 5001-10000, 77.14% mothers had only one under five child. Majority (27.90%) of children were in the age group of 13-24 months. Pre test results showed 17.14% of the mothers had good knowledge, 71.43% had average knowledge and 11.43% of the mothers had poor knowledge. Post test result showed 37.14% of the mothers had excellent knowledge, 40% of the mothers had good knowledge and 22.86% of the mothers had average knowledge. Pre test knowledge score related to diarrhoea and ORS was 46.28% and 35.14% respectively. Post test knowledge score related to diarrhoea and ORS was 66.85% and 69.42% respectively. Observational checklist showed 57.14% of the mothers had good practice of making of ORS and remaining 42.86% had fair level of practice of making of ORS.

Table 2- Effectiveness of planned teaching programme

Knowledge Score	Mean	SD	Mean Difference	t	P Value
Pre test	8.14	2.33			
Post test	13.8	3.43	5.66	10.26	<0.05

Mean±SD of pre test was 8.14±2.33 and Mean ±SD of post test was 13.8±3.43. Mean difference between pre test and post test is 5.66.Calculated t value was 10.26 and table t value for df=34 at P<0.05 level was 1.69,which shows significant difference between pre test and post test knowledge scores.

Discussion:

This study demonstrated that most of mothers(71.43 %) had less knowledge about the home management of diarrhoea and ORS preparation which was improved by the introduction of planned teaching programme, resulted in 37.14% with excellent knowledge and 40% with good knowledge. These findings were supported by the study conducted by Mangala S et al in 2011. Study showed that after the intervention , there was significant improvement on knowledge of mothers on diarrhoea, signs of dehydration, awareness of ORS, correct preparation of ORS, shelf life of ORS, seeking health care and rational health therapy.[5] This study also revealed that 57.14% of the mothers had good practice of making ORS as all the mothers were literate, maximum of the mothers were graduate. Similar findings were noted in the study conducted by Dhadve MM et al in 2012 at Gulbarga to determine diarrhoea related practices and awareness of ORS among mothers having under five children. The result of the study showed that literacy status and occupation of the mother were found to be significantly associated with the awareness of the ORS.[6]

Conclusion:

Study showed that there was significant increase in the knowledge after implementing planned teaching programme on home management of diarrhoea among mothers having under five children in rural community area of Dehradun. Hence, planned teaching programme was effective in improving knowledge about home management of diarrhoea. This can be done by more intensive and comprehensive IEC campaign by ICDS and health care workers regarding ORT in field.

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