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Original Research Paper

Nursing

AN EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE AND PRACTICE REGARDING ORAL REHYDRATION SOLUTION AMONG MOTHERS OF UNDER FIVE CHILDREN IN SELECTED RURAL AREAS OF THE CITY.

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ABSTRACT

Background: Diarrhoea is one of the major health problem encountered in childhood. Diarrhoea is dangerous because of the dehydration. The mortality and morbidity due to diarrheal diseases can be prevent through the effective introduction of oral rehydration therapy. **Methods:** An experimental study was done among mothers who had children under 5 years of age. study area was rural areas of the city.60 mothers were selected for the study by non probability convenient sampling technique. A pre test and post test research design was used, pre test questionnaire and checklist was used to get the relevant information. **Results:** The post-test knowledge score of mothers of under five children was higher than pre-test. It shows that 53(88.33%) of mothers of under five children in post-test had good level of knowledge score and 7(11.67%) had very good level of knowledge score. The mean and standard deviation of the result reveals that mean score is 5.15 and SD is 1.14 in pre-test and mean score is10.65 and SD is 1.42 in post-test. The post-test practice score of mothers of under five children was higher than pre-test. It shows that 48(80%) of mothers of under five children in post-test had very good level of practice score and 9(15%) had good level of practice score and 3(5%) had excellent level of practice score. The mean and standard deviation SD of the result reveals that mean score is 3.05 and SD is 0.69 in pre-test and mean score is 7.75 and SD is 1.09 in post-test. **Conclusions:** The study was concluded that planned teaching programme on knowledge and practice regarding Oral Rehydration Solution among mothers of under five children in selected rural areas of the city was found to be effective as a teaching strategy. Hence, based on the above findings, it was concluded undoubtedly that the educational intervention by the investigator in the form of planned teaching programme helped the mothers of under five children to increase knowledge and practice regarding Oral Rehydration Solution.

KEYWORDS : Oral Rehydration Solution, Mothers, Under Five Children, Diarrhoea

INTRODUCTION

Oral Rehydration Therapy is the giving of fluid by mouth to prevent and/or correct the dehydration that is a result of diarrhoea. As soon as diarrhoea begins, treatment using home remedies to prevent dehydration must be started. If adults or children have not been given extra drinks, or if in spite of this dehydration does occur, they must be treated with a special drink made with oral rehydration salts (Oral rehydration therapy (ORT), using a simple, inexpensive, glucose and electrolyte solution promoted by the World Health Organization (WHO) has reduced the number of deaths from dehydration due to diarrhoea by about a million per year. In spite of its efficacy, ORT has not been used extensively in developed countries. Recent research, summarized in this report, suggests that the use of oral rehydration solutions have advantages over conventional therapy. In an effort to encourage the use of ORT, a simple approach to rehydration is outlined. ORS).

Diarrhoea is one of the commonest causes of morbidity among young children in developing countries as well as low income countries. Young children are most vulnerable especially under 5 years of age group. Annually 1.4 to 2.5 million deaths occur in children under the age of 5 years. Diarrhoea can be managed at both primary and secondary prevention levels. The former consist of improvement in sanitation and water quality. The latter consists of early recognition of dehydration due to that these solutions greatly reduce vomiting, volume loss from diarrhoea, and the duration of the illness

The present study has been done with an objective to determine the knowledge and practice about ORS among mothers of under five children and the factors associated with it.

OBJECTIVES

1. To assess the pre test knowledge and practice score regarding Oral Rehydration Solution among mothers of under five children
2. To assess the post test knowledge and practice score regarding Oral Rehydration Solution among mothers of under five children
3. To evaluate the effectiveness of planned teaching programme on knowledge and practice score regarding Oral Rehydration Solution among mothers of under five children
4. To associate the knowledge and practice score with selected demographic variables.

HYPOTHESIS

In this study, hypothesis tested at 0.05 level of significance

H_0: There is no significant difference between pre and post test level of knowledge and practice score regarding Oral Rehydration Solution among mothers of under five children.

H_1: There is significant difference between pre and post test level of knowledge and practice score regarding Oral Rehydration Solution among mothers of under five children.

METHODS

An experimental study was conducted from 4-11-2019 to 23-11-2019. Study area was rural areas of the city. study population includes mothers who had children under 5 years of age mothers. Sample size and sampling technique consist 60 mothers were selected for the study by non probability convenient sampling technique.

DATA COLLECTION

Informed consent was taken from the study participants prior to start the study. A pre-post test design was used. Pre test questionnaire and checklist was used to get the relevant information. It included variables like Age of mother (in years),

Age of child (in years), Education of mother, Occupation, Religion, Types of family, Monthly family income (in rupees), source of information.

DATA ANALYSIS

Data entry was done using Microsoft excel. Data was summarized in percentage and proportions. Statistical associations were done using chi square test wherever necessary with $p<0.05$ considered as statistically significant.

RESULTS

Table1: Table showing percentage wise distribution of mothers according to their demographic characteristics.

n=60

Demographic Variables	No. of mothers	Percentage(%)
Age(yrs) of mother		
19-23 yrs	7	11.7
24-28 yrs	36	60
29-33 yrs	15	25
34-38 yrs	2	3.3
≥39 yrs	0	0
Age(yrs) of youngest child		
0-1 yrs	5	8.3
2-3 yrs	38	63.3
4-5 yrs	17	28.3
Education of mother		
Primary	32	53.3
Secondary	25	41.7
Higher Secondary	3	5
Graduation	0	0
Post Graduate	0	0
Occupation		
Homemaker	48	80
Government Service	1	1.7
Private Service	6	10
Business	5	8.3
Other	0	0
Religion		
Hindu	27	45
Muslim	10	16.7
Christian	0	0
Buddhist	23	38.3
Others	0	0
Type of family		
Nuclear	32	53.3
Joint	28	46.7
Extended	0	0
Monthly family income(Rs)		
<10000 Rs	0	0
10001-15000 Rs	32	53.3
15001-20000 Rs	28	46.7
>20000 Rs	0	0
Knowledge about oral rehydration solution		
Yes	48	80
No	12	20
Source of knowledge		
Mass Media	4	8.3
Health Workers	40	83.3
Relatives	4	8.3
Friends	0	0

KNOWLEDGE AND PRACTICE REGARDING ORAL REHYDRATION SOLUTION AMONG MOTHERS OF UNDER FIVE CHILDREN.

Table No. II(A): Table showing comparison of pre test and post test level of knowledge score

n=60

Level of knowledge score	Pre test		Post test	
Excellent	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
	0	0	0	0
Very Good	0	0	7	11.67
Good	0	0	53	88.33
Average	40	66.67	0	0
Poor	20	33.33	0	0

Table No. II(B): Table showing comparison of pre test and post test level of practice score

n=60

Level of practice score	Pre test		Post test	
Excellent	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
	0	0	3	5
Very Good	0	0	48	80
Good	14	23.33	9	15
Poor	46	76.67	0	0

Table No III(A): Table showing effectiveness of planned teaching programme on knowledge score in pre and post test of mothers of under five children regarding oral rehydration solution

n=60

Test	Mean	SD	Mean Difference	Calculated t-value	df	Table value	p-value
Pre Test	5.15	1.41	5.50±1.49	28.59	59	2.00	0.0001S, p<0.05
Post Test	10.65	1.42					

S-Significant

Table No III(A)depicts the overall mean pre test and post test knowledge scores of mothers of under five children from selected rural areas of the city which reveals that post test mean knowledge score was higher 10.65 with SD of ±1.42 when compared with mean pre test knowledge score which was 5.15 with SD of ±1.41. The statistical Student's paired t test implies that the difference in the pre test and post test knowledge among mothers of under five children from selected rural areas of the city found to be 28.59 which is statistically significant at 0.05% level of significance.

Hence it is statistically interpreted that the Planned Teaching Programme on knowledge regarding oral rehydration solution among mothers of under five children was effective. Thus the H1 is accepted and H0 is rejected.

Table No. III (B): Table showing effectiveness of planned teaching programme on practice scores in pre and post test of mothers of under five children regarding oral rehydration solution

n=60

Test	Mean	SD	Mean Difference	Calculated t-value	df	Table value	p-value
Pre Test	3.05	0.69	4.70±1.33	27.34	59	2.00	0.0001 S,p<0.05
Post Test	7.75	1.09					

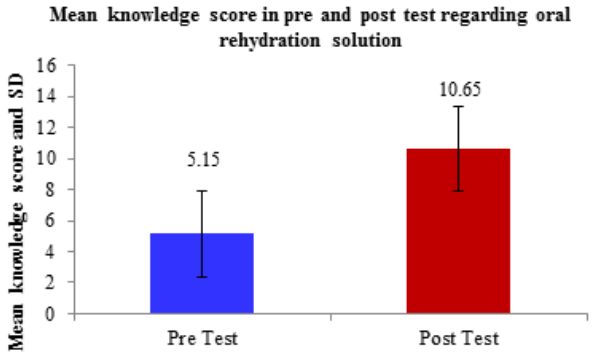
S-Significant

Table No. III (B) depicts the overall mean pre test and post test practice scores of mothers of under five children from selected rural areas of the city which reveals that post test mean practice score was higher 7.75 with SD of ±1.09 when compared with mean pre test practice score which was 3.05 with SD of ±0.69.

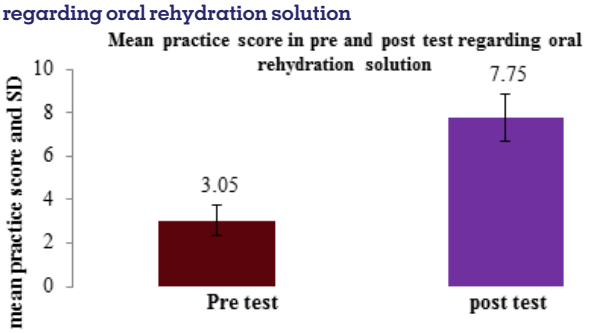
The statistical Student's paired t test implies that the difference in the pre test and post test practice among mothers of under five children from selected rural areas of the city found to be 27.34 which is statistically significant at 0.05%

level of significance.

Hence it is statistically interpreted that the Planned Teaching Programme on practice regarding oral rehydration solution among mothers of under five children was effective. Thus the H_1 is accepted and H0 is rejected.



Bar diagram representing the effectiveness of knowledge scores in pre and post test of mothers of under five children regarding oral rehydration solution



Bar diagram representing the effectiveness of practicescores in pre and post test of mothers of under five children regarding oral rehydration solution.

ASSOCIATION OF LEVEL OF POST TEST KNOWLEDGE AND PRACTICE SCORE REGARDING ORAL REHYDRATION SOLUTION AMONG MOTHERS OF UNDER FIVE CHILDREN

Showing association between selected demographic variables with knowledge regarding oral rehydration solution among mothers of under five children from selected rural areas.

Analysis reveals that there is association of knowledge score with educational level, religion and knowledge about Oral Rehydration Solution and there is no association of knowledge score with age of the mother (in years), age of the youngest child (in years), occupation, type of family, monthly family income, and source of knowledge respectively.

Showing association between selected demographic variables with practice regarding oral rehydration solution among mothers of under five children from selected rural areas.

Analysis reveals that there is association of practice score with age of mother and there is no association of practice score with age of the youngest child (in years), education of mother, occupation, religion, type of family, monthly family income, knowledge about Oral Rehydration Solution and source of knowledge respectively.

DISCUSSION

The study was undertaken with the main purpose of assessing the level of knowledge and practice regarding oral rehydration solution among mothers of under five children in selected rural areas of the city.

In the present study post-test knowledge score of mothers of under five children was higher than pre-test. It shows that 53(88.33%) of mothers of under five children in post-test had good level of knowledge score and 7(11.67%) had very good level of knowledge score. The mean and standard deviation of the result reveals that mean score is 5.15 and SD is 1.14 in pre-test and mean score is10.65 and SD is 1.42 in post-test.

In the present study post-test practice score of mothers of under five children was higher than pre-test. It shows that 48(80%) of mothers of under five children in post-test had very good level of practice score and 9(15%) had good level of practice score and 3(5%) had excellent level of practice score. The mean and standard deviation SD of the result reveals that mean score is 3.05 and SD is 0.69 in pre-test and mean score is 7.75 and SD is 1.09 in post-test.

In 2016,Anjaneyulu Ghatam, Vijay Kumar Maktha, SreenadhVenkataKatiki, *the study was conducted on* Knowledge regarding oral rehydration solution among mothers of under five children from a rural area of Rangareddy district, Study area was rural health and training centre (RHTC), Peddamangalaram, Department of Community Medicine, Bhaskar Medical College, Rangareddy District, Telangana. 100 mothers were selected for the study by convenient sampling technique. A pre designed, pre tested questionnaire was used to get the relevant information. Mean age of the mothers was 24.87±5.8 years with majority belonged to Hindu religion, one fourth were illiterates and two thirds were home makers. About two thirds (62%) were aware about the oral rehydration solution, but only 58% agreed that ORS is useful and only 54% knew the condition where ORS is used. Health workers (ASHA/ANM) were the major sources of information about ORS. The study revealed that, there is a gap between knowledge and practice of administering ORS in diarrhoeal diseases in children.

In 2015 Jamil Aziz, AdibaIsmaeel Ali, the study was conducted on Knowledge and attitude of mothers regarding oral rehydration solution in Sulaimani. The study revealed that 99.5% of mothers were aware about ORS. Only 0.5% (1 mother) was not aware of it. There was significant correlation between both educational level of the mothers and water supply, and persons who gave advice to them on using ORS and drug use. But no significant correlation between mother's knowledge and source of information about ORS. The study Concluded that ORS is a very effective treatment for diarrhoea in children. Mothers knowledge and attitude to be improved about it.

In above study it is shown that planned teaching programme was effective in increasing the knowledge and attitude of mothers. The study revealed that 99.5% of mothers were aware about ORS. Only 0.5% (1 mother) was not aware of it. There was significant correlation between both educational level of the mothers and water supply, and persons who gave advice to them on using ORS and drug use. But no significant correlation between mother's knowledge and source of information about ORS.

In December 2014, V Prasanna Rani, A Cross-sectional study was conducted on Knowledge and Attitude of Mothers about Diarrhoea, ORS and Feeding Practices in Under-Five Children in a Rural Area of Ranga Reddy, Telangana. sample size was 210 mothers. The result showed that Among the under-fives mothers 73.3% know about ORS, 52.8% knew the correct method of preparing ORS.72.3% of mothers continued breast feeding during diarrheal episode,41.4% mothers do not know the cause of diarrhoea, 63.1% think due to mother's dietary habits child can get diarrhoea through breast milk.71.9% are giving some home available fluids during diarrhoea. The study concluded that most of the mothers were familiar with

the term oral rehydration salt, there was a gap in the knowledge and attitude of the mothers regarding diarrhoea and ORS. Their knowledge about correct method and amount of ORS was very poor. There was a need to educate the mothers about causes of diarrhoea and correct method of ORS preparation. The study showed that, Knowledge about ORS Among 210 mothers 154 (73%) were aware of ORS. There was a significant association between knowledge about ORS, mother's education and mother's occupation. Among the 154 only 62 (40%) mothers were aware of correct method of preparation of ORS, 92 (60%) were aware of correct amount of ORS to be given to the child.

In above study it is shown that planned teaching programme was effective in increasing the knowledge and attitude of mothers. There was a significant association between knowledge about ORS, mother's education and mother's occupation. Among the 154 only 62 (40%) mothers were aware of correct method of preparation of ORS, 92 (60%) were aware of correct amount of ORS to be given to the child.

LIMITATION:

The study was conducted only on mothers of under five children of selected rural areas.

The sample size was small to generalize the findings of the study.

The study was limited to measure the knowledge and practice of mothers of under five children in selected rural areas of the city.

The tool for data collection was prepared by investigator herself. Standardized tool was notused.

RECOMMENDATIONS: -

A similar study can be replicated on a larger population for a generalization offindings.

A comparative study can be done to assess the knowledge on oral rehydration therapy among mothers of under five children in rural and urban areas.

A descriptive study can be conducted on the awareness regarding oral rehydration therapy among mothers of under five children.

A similar study can be carried out to evaluate the effectiveness of video assisted teaching programme on oral rehydration therapy.

CONCLUSION: -

After the detailed analysis, this study leads to the following conclusion:

The mothers of under five children have average and poor level of knowledge regarding oral rehydration solution. There was a significant increase in knowledge of mothers of under five children after the introduction of planned teaching programme. and The mothers of under five children have good and poor level of practice regarding oral rehydration solution. There was a significant increase in practice of mothers of under five children after the introduction of planned teaching programme on practice. To find the effectiveness of planned teaching programme paired 't' test was applied and post-test score was significantly higher at 0.05 level of pretest score. The post test knowledge score was finding revealed that majority of 53(88.33%) of mothers of under five children had good level of knowledge score and 7(11.67%) had very good level of knowledge score. The post test practice score was finding revealed that majority of 48(80%) of mothers of under five children had very good level of practice score, 9(15%) had good level of practice score and 3 (5) had excellent level of practice score.

Thus it was concluded that planned teaching programme on knowledge and practice regarding Oral Rehydration Solution among mothers of under five children in selected rural areas of the city was found to be effective as a teaching strategy. Hence, based on the above cited findings, it was concluded undoubtedly that the educational intervention by the investigator in the form of planned teaching programme helped the mothers of under five children to increase knowledge and practice regarding Oral Rehydration Solution.

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