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EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION AND MANAGEMENT OF ROTAVIRUS INFECTION AMONG MOTHERS OF UNDER-FIVE CHILDREN IN SELECTED RURAL AREAS

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ABSTRACT

Back ground of the study: Rotavirus is a virus that infects the bowels. It is the most common cause of severe diarrhea among infants and children throughout the world and causes the death of about 6,00,000 children worldwide annually. The name rotavirus comes from the characteristic wheel-like appearance of the virus when viewed by electron microscopy (the name rotavirus is derived from the Latin Rota, meaning "wheel").
Material and methods:"one group pre-test, post-test design" was selected.The sample comprised of 100 mothers of under five children living in selected rural areas at keerapakkam village. Technique was used inPurposive sampling technique.
Result: The mean pretest knowledge score was 15.62, post test knowledge score was 29.62 at 0.05 level of significance. Standard deviation of pretest is 3.03, post test is 1.95 which indicates that the STP was effective in increasing knowledge of mothers of under-five children regarding prevention and management of rotavirus infection.

KEYWORDS : Rota Virus ,Knowledge,Under-Five Children

Worldwide, rotaviruses are the commonest cause of community-acquired gastroenteritis in children, with a worldwide mortality of approximately 5,00,000/year. Most deaths occur in developing countries; death from rotavirus infection is very rare in the developed world where there is ready access to oral and parenteral rehydration.

Rotavirus is a virus that causes gastroenteritis (inflammation of the stomach and intestines). The rotavirus disease causes severe watery diarrhea, often with vomiting, fever, and abdominal pain. In babies and young children, it can lead to dehydration (loss of body fluids). Rotavirus is the leading cause of severe diarrhea in infants and young children worldwide. Globally it causes more than a half a million deaths each year in children younger than 5 years of age.

Rotavirus was also the leading cause of severe diarrhea in U.S. infants and young children before rotavirus vaccine was introduced for U.S. infants in 2006. Prior to that, almost all under-five children in the United States were infected with rotavirus. Each year in the United States in the pre-vaccine period, rotavirus was responsible for more than 4,00,000 doctor visits; more than 2,00,000 emergency room visits; 55,000 to 70,000 hospitalizations; and 20 to 60 deaths in children younger than 5 years of age.

India led the world in rota-virus infection which caused deaths of close to 1,00,000 children below the age of five who died of diarrhoea in 2008, This accounted for 22 percent of the total deaths reported globally Diarrhoea related with the rotavirus infection resulted in 4,53, 000 deaths worldwide in 2008 among children younger than five years--37 per cent of deaths attributable to diarrhoea. Five countries accounted for more than half of all deaths attributable to such infection: Democratic Republic of Congo, Ethiopia, India, Nigeria and Pakistan

Rotavirus is the most common cause of severe diarrhea among infants and young children and is one of several viruses that cause infections often called stomach flu, despite having no relation to influenza. It is a genus of double-stranded RNA virus in the family Reoviridae. By the age of five, nearly every child in the world has been infected with rotavirus at least once. However, with each infection, immunity develops, and subsequent infections are less severe; adults are rarely affected. There are five species of this virus, referred to as A, B, C, D, and E. Rotavirus A, the most common, causes more than 90% of infections in humans.

The virus is transmitted by the fecal-oral route. It infects and damages the cells that line the small intestine and causes gastroenteritis. Although rotavirus was discovered in 1973and accounts for up to 50% of hospitalizations for severe diarrhea in infants and children,its importance is still not widely known within the public health community, particularly in developing countries. In addition to its impact on human health, rotavirus also infects animals, and is a pathogen of livestock.

Rotavirus is usually an easily managed disease of childhood, but worldwide nearly 5,00,000 children under five years of age still die from rotavirus infection each year and almost two million more become severely ill. In the United States, before initiation of the rotavirus vaccination programme, rotavirus caused about 2.7 million cases of severe gastroenteritis in children, almost 60,000 hospitalizations, and around 37 deaths each year. Public health campaigns to combat rotavirus focus on providing oral rehydration therapy for infected children and vaccination to prevent the disease .

"Effectiveness Of Structured Teaching Programme On Knowledge Regarding Prevention And Management Of Rotavirus Infection Among Mothers Of Under-Five Children In Selected Rural Areas."

OBJECTIVES OF THE STUDY
Research objective is a clear, concise, declarative statement expressed to direct a study and focuses on identifying and describing variables and relationships among variables. Research objectives suggest the manner in which the investigators seek to solve the problem or the state of knowledge on the topic.

1. To assess the existing knowledge among mothers of under-five children regarding prevention and manage me nt of Rotavirus infection.
2. To assess the post test knowledge score regarding prevention and management of Rota virus infection.
3. To find out significant difference between pre and post test knowledge scores.

RESEARCH METHODOLOGY
RESEARCH APPROACH
The approach adopted for this study is **Evaluative research.**

Evaluative research is an applied form of research that involves finding out how well a programme, practice, procedure or policy is working effectively. The main goal is to assess or evaluate the success of the programme.

RESEARCH DESIGN

In the present study "one group pre-test, post-test design" was selected which is a pre experimental design to measure the effectiveness of structured teaching program on knowledge regarding prevention and management of rotavirus infection.

VARIABLES UNDER STUDY
1.DEPENDENT VARIABLE:

The dependent variable is the condition or the characteristics that appears or disappears as a result of independent variable.

In this study, knowledge of mothers of under-five children regarding prevention and management of rotavirus infection is the dependent variable.

2.INDEPENDENT VARIABLE:

The independent variable is the condition or characteristics Manipulated by the researcher.

In this study independent variable is structured teaching program regarding prevention and management of rotavirus infection.

RESEARCH SETTINGS

Setting is the physical location and condition in which data collection takes place in the study. This study was conducted at rural areas at keerappakam in kancheepuram dt.

POPULATION

"Population is the entire set of individuals having some common characteristics."In the present study population includes mothers of under five children and who were living at the time of data collection in selected settings of the rural areas at keerapakkam village.

SAMPLE

A sample is a subset of population selected to participate in a research study The sample comprised of 100 mothers of under five children living in selected rural areas at keerapa kkam

SAMPLE SIZE

A sample of 100 mothers of under-five children living in selected rural areas at keerapakkam

SAMPLING TECHNIQUE
Purposive sampling technique was considered appropriate for this study.

Sampling technique is the procedure that the researcher adopts in selecting the samples for the study. Purposive sampling technique is a type of non probability sampling which was found appropriate for this study.

DESCRIPTION OF THE TOOL

The Structured knowledge questionnaire consists of two parts.

PART I: Demographic Performa

A Performa for selected personal information was used to collect the sample characteristics.

The characteristics included; age, religion, educational status, family income, occupational status, number of children, Source of information regarding rotavirus infection.

The respondents were asked to give relevant information in the space provided

PART II: Structured knowledge questionnaire.

It consists of 40 items divided into 3 areas They were

Section-A: structured questionnaire on general information, concepts, incidence of rotavirus infection

Section-B: structured questionnaire on etiology, path physiology, and signs and symptoms

section-C: structured questionnaire on prevention and management of rotavirus infection

All the items were multiple-choice questions, which has three alternative responses. A

Score value of (1) was allotted to each correct response. The total knowledge score was 40.

EVALUATE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME BY COMPARING PRE AND POST TEST KNOWLEDGE SCORE
Table 10   n=100

Level of Knowledge	Score	Pre test		Post test	
		No	%	No	%
Inadequate	<50%	80	80	0	0
Moderate	50--75%	20	20	59	59
Adequate	>75%	0	0	41	41

LEVEL OF KNOWLEDGE OF PRE AND POST TEST.

The comparison between pre test and post test scores of mothers is to evaluate the level of knowledge before and after administration of STP. In pre test 80 mothers had inadequate knowledge on prevention and management of rotavirus infection, 20 had moderate level of knowledge and none of them had adequate level of knowledge. But in the post test, none of the mothers are inadequate knowledge, 59 mothers are moderate level of knowledge, 41mothers are adequate level of knowledge regarding prevention and management of rotavirus infection.

Mean, SD, Mean% and paired t Test of enhancement knowledge of mothers on prevention and management of rotavirus infection   n=100

	Pre- test analysis			Post- test analysis			Comparison between two scores		
Domain	Mean	SD	Mean%	Mean	SD	Mean%	Mean	Mean%	Paired t Test
Sec A	5.08	1.43	36.28	10.93	1.12	78.07	5.85	41.79	19.66
Sec B	6.54	1.28	40.87	11.87	1.14	74.18	5.33	33.23	18.21
Sec C	3.98	0.761	39.8	6.73	0.78	67.3	2.75	27.5	20.01
Overall	15.62	3.03	39.05	29.62	1.95	74.05	14	35	40.22

N.S – Not Significant   **Significant at 0.05 level.

The table-11 provides the comparison between the pre-test and post-test scores. The mean score is increased in the post-test. The mean score in the pre test is 15.62 and the mean score in the post test is 29.61. The mean is improved by 14. The calculated value of t is 40.22.which are highly significant. The results undoubtedly confirm that the STP significantly was effective in improving the knowledge on prevention and management of rotavirus infection among mothers.

CONCLUSION

On the basis of the findings of the study " to evaluate the effectiveness of Structured Teaching Program on knowledge regarding prevention and management of rotavirus infection among mothers of under-five children in selected rural areas at keerapakkam." the below said conclusions were drawn. It brings out the limitation of the study in to practice

Recommendations

On the basis of findings of the study the following recommendations were made.

1.   A similar study can be replicated on a larger sample with

different demographic characters.

2. An Experimental study can be under taken with control group.

3. A Study can be undertaken to find out the association between demographic variables and knowledge of mothers of under-five children regarding prevention and management of rotavirus infection.

4. A Similar study can be conducted using other strategies like SIM, booklets and pamphlets.

5. A follow up study need to be conducted to find out the effectiveness terms of retention of knowledge among mothers and to re-in force health promotion teaching services.

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