



QUASI EXPERIMENTAL STUDY ON THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING PROGRAMME ON KNOWLEDGE REGARDING GENERAL DANGER SIGNS AS PER IMNCI GUIDELINES AMONG THE MOTHERS OF UNDER FIVE CHILDREN IN SELECTED RURAL AREAS, TRIPURA.

Nursing

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ABSTRACT

Children are our future and our most precious resources. The under five children, the mortality and morbidity rates are comparatively higher. The common illness of under five children globally are acute respiratory infection (mostly pneumonia), diarrhoea, measles, malaria, malnutrition etc. According to IMNCI, adequate knowledge about danger signs by caregivers is a vital parental tool. **Aim:** This study aimed at knowledge among the mothers of under five children regarding general danger signs of diarrhea, acute respiratory infections and malnutrition as per IMNCI guidelines in selected rural areas, Tripura. **Method:** A quantitative approach quasi- experimental pre test post test control group research design was used in this study. The study was conducted at Madhupur, rural area under Sepahijala district, Tripura. Total 60 mothers of under five children was selected through purposive sampling technique. Data was collected through structured knowledge questionnaire. **Results:** The results showed that in experimental group the mean and SD of pre test knowledge score of mother's of under five children was 14.27 ± 3.10 . Whereas in control group the mean and SD of pre test knowledge score of mother's of under five children was 14.31 ± 4.39 . Comparison of statistical significance of post- test level of knowledge among mothers of under five children in experimental and control group has been done by individual 't' test which denoted that the Mean and Standard deviation of post test knowledge score of experimental group was 18.3 ± 2.22 and in control group was 14.43 ± 4.19 and the mean difference is 3.87. Whereas individual 't' test showed that the calculated value (4.44) is greater than the tabulated value (2.0001) and P-value is <0.05 , which indicates statistical significance. **Conclusion:** The study concluded that the video assisted teaching program on knowledge regarding general danger signs as per IMNCI guideline was effective for mothers of under five children in experimental group.

KEYWORDS

General danger signs, IMNCI guidelines, mother's of under five children.

INTRODUCTION

The Integrated Management of Neonatal and Childhood Illness (IMNCI) is a globally recognized strategy for reducing childhood mortality and morbidity. The IMNCI guidelines provide a comprehensive approach to managing common childhood illnesses, including the identification of general danger signs that require urgent medical attention. In rural areas of developing countries like India, where access to healthcare is limited, it is crucial for mothers to have knowledge about these danger signs to seek prompt medical care for their children.

Video-assisted teaching programmes have been proven effective in improving knowledge and skills among healthcare providers in various studies. However, there is limited evidence on the effectiveness of such programmes in improving knowledge among mothers, especially in rural areas. Therefore, this quasi-experimental study aims to evaluate the effectiveness of a video-assisted teaching programme on knowledge regarding general danger signs as per IMNCI guidelines among mothers of under-five children in selected rural areas of Tripura.

Maternal and child health is a crucial aspect of public health, especially in rural areas where access to healthcare resources may be limited. The Integrated Management of Neonatal and Childhood Illnesses (IMNCI) guidelines play a pivotal role in promoting the well-being of under-five children. However, ensuring that mothers in rural areas are equipped with adequate knowledge regarding general danger signs outlined in these guidelines remains a persistent challenge.

OBJECTIVES OF THE STUDY

1. To assess the pre test and post test level of knowledge regarding general danger signs as per IMNCI guidelines among the mothers of under five children.
2. To evaluate the effectiveness of video assisted teaching programme regarding general danger signs as per IMNCI guidelines among the mothers of under five children.
3. To find out the association between pre test knowledge score regarding general danger signs as per IMNCI guidelines among mothers of under five children with their socio demographic variables.

HYPOTHESIS

H₁ – The mean post test knowledge score is significantly higher than the mean pre test knowledge score regarding general danger signs as per IMNCI guideline among mother's of under five children.

H₂. There is significant association between the pre –test level of knowledge with their selected demographic variables.

METHODOLOGY

Research Design:

In this study, a quasi-experimental research design (nonrandomized control group design) was chosen. This design involved selecting experimental and control groups without randomization. Both groups underwent pre-test observations of dependent variables, followed by the experimental group receiving a video-assisted teaching program. Post-test observations were then conducted after seven days to assess the program's impact.

Variables of the Study:

The study focuses on the video-assisted teaching program for mothers of under-five children, aiming to enhance knowledge regarding general danger signs according to IMNCI guidelines.

Setting of the Study:

The study was conducted in selected rural areas of Tripura. The rural areas included Chakraborty Para, Dhainchuri, Brajendranagar, and Daspara in Madhupur, Sepahijala District, Tripura.

Sample and Sampling Technique:

The population comprised mothers of under-five children in selected rural areas of Madhupur. The sample size was 60 mothers, with a non-probability purposive sampling technique employed for selection.

Selection and Development of Tool:

A structured knowledge questionnaire was utilized to collect data, consisting of socio-demographic data and knowledge-related questions. The tool was developed based on study objectives, literature review, and expert validation.

Content validity was established through expert suggestions, and reliability was assessed using the test-retest method with a reliability coefficient of 0.88, indicating high reliability.

Ethical Consideration:

Ethical considerations were addressed, including obtaining approval from the ethical committee, written permission from Gram Pradhan, informed written consent from participants, and assurance of voluntary participation.

RESULTS:

The demographic characteristics of participants in the experimental and control groups were analyzed across various variables. In terms of maternal age, the majority in both groups fell within the 18-24 years range (66.7% in experimental, 60% in control). The age distribution of under-five children varied, with the experimental group having higher percentages in the 4-year to 5-year range (33.3%, $f=10$) compared to the control group (30%, $f=9$). The religious affiliation was predominantly Hindu in both groups, while nuclear families were more prevalent than joint or extended families. Financially, a significant proportion had a monthly family income below Rs. 10001. Maternal education revealed a higher percentage of those with matriculation or lower qualifications in the experimental group, whereas the control group had a higher proportion of mothers with graduate and above qualifications. Occupation-wise, most mothers were housewives in both groups, and the number of under-five children was predominantly one child in both groups. A notable proportion of mothers in both groups did not receive prior information about childcare, and while the majority underwent regular child check-ups, all children in both groups were immunized according to schedule.

Table: 1 Analysis of pre-test and post test knowledge

Level of Knowledge	Experimental group				Control group			
	Pre test		Post test		Pre test		Post test	
	(f)	(%)	(f)	(%)	(f)	(%)	(f)	(%)
Adequate (20-25)	07	23.3	24	80	10	33.3	12	40
Moderately (14-19)	22	73.3	06	20	17	56.7	18	60
Inadequate (1-13)	01	3.3	00	00	03	10	00	00

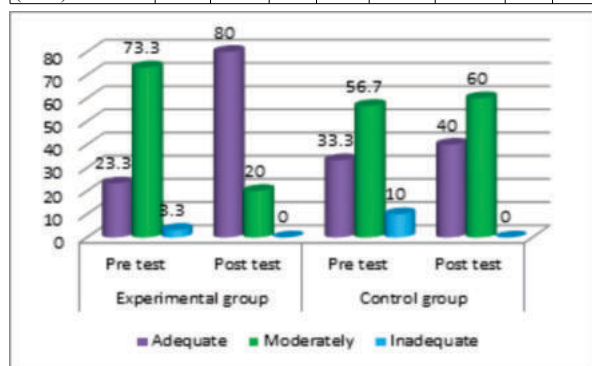


Figure: 1 Level of knowledge in experimental group and control group

Table: 2 Analysis of significant difference between pre-test and post test level of knowledge score among respondent in experimental group and control group.

Exp. group	Area	Mean	Mean Diff	SD	Paired T test	P- Value
	Pre test	14.27	4.03	3.10	6.51	00 P<0.05
	Post test	18.3		0.41		(S)
Control group	Pre test	14.31	0.12	4.39	0.06	0.09 P > 0.05
	Post test	14.43		4.28		(NS)

The mean improvement score of knowledge was 4.03. The paired t-test was employed to assess statistical significance, revealing that in the experimental group, the calculated 't' value (6.51) surpasses the tabulated value (2.05), and the P-value is <0.05. This outcome indicates a significant difference between the pretest knowledge score and post-test knowledge score among mothers of under-five children in the experimental group.

The study examined the association between the pre-test knowledge scores of the experimental group and various demographic variables. The demographic categories included age of the mother (18-24, 25-32, 33-45), age of the child (2 months to 1 year, 1 year 1 day to 2 years, 2 years 1 day to 3 years, 3 years 1 day to 4 years, 4 years 1 day to 5 years), religion (Hindu, Muslim, Christian, Others), type of family (Nuclear, Joint, Extended), monthly family income (Rs. Less than 10001, Rs. 10002 – 29972, Rs. 29973 – 49961, Rs. 49962 – 74754, Rs. 74755 or above), qualification of mother (Matriculation or less, Higher secondary, Graduate and above), occupation of mother (Housewife,

Private job, Government job, Business), number of under-five children (One, Two, Three or more), previous information (Yes, No), and periodic check-up of the child (Yes, No). The analysis revealed non-significant associations ($p > 0.05$) for all the demographic variables, indicating that the pre-test knowledge scores of the experimental group were not significantly influenced by the mentioned factors. This suggests that the initial knowledge levels within the experimental group were comparable across different demographic categories, allowing for a more controlled assessment of the experimental intervention.

CONCLUSION

This research revealed that there is significant difference in level of knowledge of mothers of under five children regarding general danger signs as per IMNCI guidelines after video assisted teaching programme. The study statistically proved that there is no association between pre test level of knowledge and selected socio-demographic variables of mothers of under five children.

The study's demographic findings reveal significant patterns among mothers of under-five children in both the experimental and control groups. In the experimental group, a majority of mothers fall within the 18-24 age group (66.7%), while in the control group, 60% of mothers belong to the same age category. Similarly, the majority of children in the experimental group, ranging from 2 months to 5 years, show distinct percentages in different age brackets. Religion, family type, monthly family income, and maternal education also exhibit notable variations between the groups. The occupation, number of children, prior information, and periodic check-ups display substantial differences, emphasizing the unique characteristics of each group. Additionally, the study highlights the effectiveness of a video-assisted teaching program in significantly improving knowledge scores among mothers in the experimental group compared to the control group. The association between pre-test knowledge scores and various socio-demographic variables was found to be non-significant in both groups.

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