

**EFFECTIVENESS OF PLANNED TEACHING PROGRAMME (PTP) FOR MOTHERS,
REGARDING HOME-BASED CHILD-SURVIVAL INTERVENTIONS ON UPPER
RESPIRATORY TRACT INFECTIONS (URTI) IN SELECTED COMMUNITIES AT
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ABSTRACT

The present study was conducted among mothers of under five children regarding effectiveness of planned teaching programme regarding home-based child-survival interventions on upper respiratory tract infections. The objective of the study was to assess the knowledge level of mothers on home-based child-survival interventions regarding upper respiratory tract infections by a structured interview schedule and find the association between pre-test knowledge scores of mothers and selected baseline variables. Descriptive study design was used for the study. The samples comprised of 50 mothers in the age group of 20-40 years, who have children between 3-5 years, attending the Anganwadi of Mullerkad, Mangalore. Non-probability purposive sampling technique was used to select the sample by hand-picking the sample members. Their socio-demographic data and data about knowledge were collected. Descriptive and inferential statistics was used to analyse the data. In this present study, majority (88%) of the children was immunized for date and only 12% were partially immunized. In post-test, poor knowledge was found in maximum samples (60%) and (34%) with average knowledge in the pre-test. However in the post-test the knowledge is good in 54%, excellent in 42%, and only 4% of them showed average knowledge and none of them showed poor score. On comparing the pre-test with post-test scores, it was found that all of the mothers scored higher in the post-test than the pre-test. The result shows that there was no significant association between pre-test knowledge and the selected variables of mothers.

KEYWORDS: Planned teaching programme, child-survival interventions, upper respiratory tract infections.**INTRODUCTION**

Every child has the right to grow up in a healthy home. Respiratory tract infections have been a significant cause of morbidity and mortality among paediatric population around the world and in India. WHO, in 2002 estimated that respiratory tract infections cause 9, 87,000 deaths in India of which 10,000 deaths were due to upper respiratory tract infections. So there is a need of assessing the knowledge of mothers regarding respiratory tract infections. Education enables mothers to acquire greater knowledge and learn better child care practices. Mothers need to acquire knowledge in order to perform highly complex care-taking skills that ensure survival of their children.

Identification of mothers' knowledge will help to go deeper into these challenging problems of children and their survival. This will enable us to plan the specialized services and help mothers understand the common childhood diseases that will make a significant difference in the prevalence of these diseases.

The teaching programme for the mothers is aimed at reduction of risk factors that contribute to the health problems. If the mothers are educated they can act as resource persons to impart the knowledge to their children, family and to the community as a whole.

Child survival and safe motherhood (CSSM) programme [1992] had in its objectives, to improve the knowledge of mothers regarding the home management of cough and cold, and the recognition for seeking appropriate medical care to decrease mortality and morbidity rate.

Studies tell that out of 10 to 15 under-five paediatric OPD cases in PHC, 6% were found to be suffering from URTI. Approximately 13% of patient deaths were due to upper respiratory tract infections.

The proportion of death due to upper respiratory tract infection is much higher, as many children die at home as they are either not brought to the hospital or brought too late. It is believed that mother is the first nurse who meets the primary needs of children during illness. These reasons make the investigator to assess the knowledge of

mothers of under-five children, regarding home-based child survival interventions, on upper respiratory tract infections.

Statement of the problem

“Effectiveness of planned teaching programme(PTP) for mothers regarding home-based child survival interventions on upper respiratory tract infections (URTI) in selected communities at Mangalore”

Objectives of the study

1. To assess the knowledge level of mothers on home-based child-survival interventions regarding upper respiratory tract infections by a structured interview schedule
2. To evaluate the effectiveness of planned teaching programme in terms of gain in knowledge scores with a post-test.
3. To find the association between pre-test knowledge scores of mothers and selected baseline variables.

Hypothesis

Hypothesis will be tested at 0.05 level of significance

H1:The mean post-test knowledge score of mothers of children on selected home-based child survival interventions on URTI will be significantly higher than the mean pre-test knowledge scores.

H2:There will be a significant association between mean pre-test knowledge score of mothers regarding home-based child survival interventions on URTI and selected baseline variables such as age, religion, education, occupation, income, type of family, birth order of children, and sources of knowledge.

4. Research Methodology

Research approach

Quantitative approach was adopted for this study
Research design

The research design selected for the present study was Pre-experimental, one-group, pre-test post-test design
Setting of the study

In the study, setting refers to Father Muller Medical College Hospital's Urban Health Centre, Mullerkad, Mangalore, at Shanthinagar and Gandhinagar Anganwadi with 60 children. These Anganwadi have the facilities of ICDS programme for the nutritional improvement and immunization services of under-five children.

Sample and Sampling technique

Here in this study, Purposive sampling technique is a method of the samples for this study comprised of 50 mothers in the age group of 20-40years, who have children between 3-5 years, attending the Anganwadi of Mullerkad, Mangalore. Non-probability purposive

sampling technique was used to select the sample by hand-picking the sample members.

Tool and Techniques

In this study data was collected using the following tool:

In this study the data collection instruments used are

Tool I-Baseline Proforma of the mothers of Anganwadi children

Tool II- Structured Interview Schedule regarding knowledge on home-based child survival interventions on URTI.

Methods

Informed consent from the mothers was obtained prior to the data collection process. The formal administrative approval from the authorities and ethical clearance from the ethical committee was obtained to conduct the main study. The purpose of the study was clearly explained and confidentiality of the data was assured to the samples.

Main study was conducted at Shanthinagar and Gandhinagar Anganwadies of Mullerkad, Urban Health Centre (UHC), at Mangalore on 28th October 2009 from 10am to 12.30pm. The sample consisted of 50 mothers of Anganwadi children selected by purposive sampling technique. The data were collected by administering a structured interview schedule prepared by the investigator before and after the PTP. The evaluatory approach with Pre-experimental, one-group, pre-test post-test design was adopted for this study.

A self-developed structured planned teaching programme was given regarding of the parts of the upper respiratory tract (URT), Meaning of URTI, Disorders of URT, Causes, Signs and symptoms of URTI, Mode of transmission, Risk factors, Danger signals, Nutrition, Home-based child survival interventions on URTI, Home remedies, Home management, Prevention, and Complications of URTI to the 50 mothers of Anganwadi children with the help of an expert health educator. The average time taken was 30 minutes. Post-test was administered on the 7th day. The data were analysed using descriptive and inferential statistics (paired 't' test and chi square test).

Data analysis

The data obtained from 50 samples were organized, tabulated, and analysed based on the objective of the study using descriptive and inferential statistics. Descriptive analysis was done by using frequency and percentage. Quantitative data were analysed by using paired 't' test, to find out whether there is any significant difference between the scores of the pre-test and post-test signifying the effect of structured teaching programme regarding home-based child survival interventions on upper respiratory tract infections. Chi-square test was

used to find out the association of pre-test knowledge scores with selected demographic variables. Descriptive analysis was done by using frequency, percentage distribution, mean and standard deviation. Inferential statistics analysed by using paired t test, to find out whether there is any significant difference between the scores of the pre-test and post-test signifying the effect of structured teaching programme Regarding home-based child survival interventions on URTI. Chi-square test was used to find out the association of pre-test level of knowledge with socio demographic variables.

RESULTS

In this present study, majority (88%) of the children was immunized for date and only 12% were partially immunized. In post-test, poor knowledge was found in maximum samples (60%) and (34%) with average knowledge in the pre-test. However in the post-test the knowledge is good in 54%, excellent in 42%, and only 4% of them showed average knowledge and none of them showed poor score.

None of the subjects had the scores below 41, most of them (30%) scored between 66-71%. On comparing the pre-test with post-test scores, it was found that all of the mothers scored higher in the post-test than the pre-test. Most of the mothers achieved higher score in the post-test.

The mean post-test knowledge scores of the mothers $X_2 = 57.48$ were higher than the mean pre-test knowledge scores $X_1 = 30.62$. There was a significant increase in the post-test mean % of knowledge than pre-test mean%. The maximum gain in knowledge was found in terms of disease aspects of URTI (38.67 to 76.00). There was a significant increase in the post-test mean% of knowledge than pre-test mean%. The maximum gain in knowledge was found in terms of home management of URTI (51.33 to 96.44).

The ' t ' value computed ($t(49) = 19.81$, $P < 0.05$) showed significant difference between the pre-test and the post-

test knowledge score suggesting that PTP was effective in increasing the knowledge of the mothers regarding URTI in children. There is significant association between the pre-test knowledge level and the selected variables i.e. smoking habits of family members and respiratory tract infection of children.

The data in table 12 reveal that Chi-square test value computed between pre-test knowledge score and selected variables such as age ($\chi^2 = 0.780$), religion ($\chi^2 = 0.015$), education ($\chi^2 = 0.066$), occupation ($\chi^2 = 3.651$), income ($\chi^2 = 0.074$), type of family ($\chi^2 = 0.001$), birth order of children ($\chi^2 = 0.321$), sources of knowledge ($\chi^2 = 1.290$), was lower than the table value ($\chi^2 = 3.84$, $P < 0.05$). Hence null hypothesis is accepted and research hypothesis is rejected for these variables. So it can be concluded that there is no significant association between knowledge level of the mothers and the selected variables.

The mean post-test knowledge scores in all areas was greater than the area-wise pre-test knowledge score. The calculated t' value in all the areas was greater than the table value ($t_{49} = 1.680$, $P < 0.05$). Hence the null hypothesis H_{03} is rejected and the research hypothesis is accepted. This shows that the PTP was effective in increasing the knowledge of the respondents in all the areas.

The findings of the study demonstrated a significant increase in the post-test knowledge score and the mean gain ($t_{49} = 19.81$, $p < 0.05$). This is supported by the findings of other studies which showed a significant difference between the pre-test and the post-test knowledge score of subjects ($t(28) = 6.190$, $P < 0.05$) in the experimental group. Significant difference was seen in the total health status scores of patients after receiving health education between 1st day to 90th day ($t(28) = 5.91$, 6.627 , $P < 0.05$). This revealed the effectiveness of intensive teaching program in increasing the knowledge of the participants.

Table 3: Distribution of the subjects according to the grading of pre-test and post-test knowledge level N = 50.

Range of score	Range of percentage	Grading	Pre-test knowledge %	Overall knowledge of post test %
1-30	<40%	Poor	60	-
31-45	41 – 60%	Average	34	4
46-60	61 – 80%	Good	4	54
61-75	81 – 100%	Excellent	2	42
		Total	100	100

Maximum score = 75

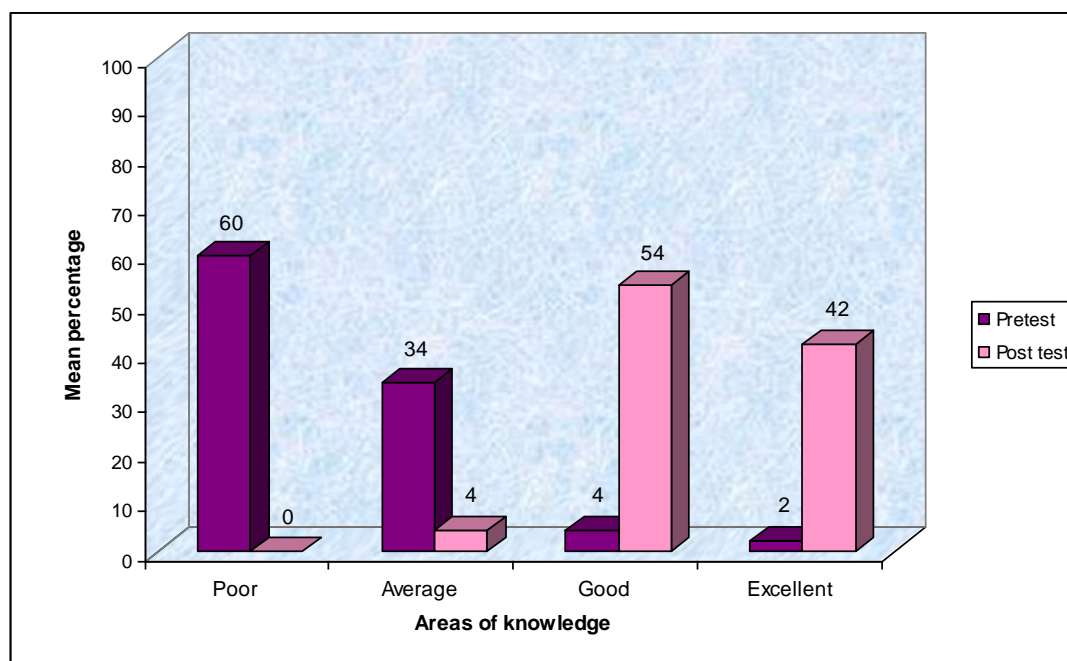


Figure 17: Bar diagram showing the grading of pre-test and post-test knowledge score of mothers on URTI.

Table 9: Mean, Mean difference, SD, SD difference and 't' value of overall Pre and post-test knowledge scores of mothers an home-based child survival interventions on URTI.

Content Area	Mean		Mean of difference	SD		SD of difference	't'
	Pre-test	Post-test		Pre-test	Post-test		
Mothers	18.88	34.69	15.81	6.413	4.510	7.569	14.53*

t₄₉=1.680, P<0.05 *Significant

Section IV: Association between the pre-test knowledge scores and the selected baseline variables

The chi-square test computed between the pre-test knowledge scores and the selected variables showed no association between the pre-test knowledge scores and the selected variables like age ($\chi^2=0.780$), religion ($\chi^2=0.015$), education ($\chi^2=0.066$), occupation

($\chi^2=3.51$), income ($\chi^2=0.074$), type of family ($\chi^2=0.001$), birth order of children ($\chi^2=0.321$), sources of knowledge of the mothers ($\chi^2=1.290$), at 0.05 level of significance. Similar findings were observed in other studies where there was no association between the pre-test knowledge and the selected variables like child's age, sex or mothers education.

Table 12: Association between the pre-test knowledge scores and the selected variables N=50.

Selected variables	df	χ^2	Inference
Age	2	0.780	NS
Religion	1	0.015	NS
Education	2	0.066	NS
Occupation	2	3.651	NS
Income	1	0.074	NS
Type of family	1	0.001	NS
Birth order of children	1	0.321	NS
Sources of Knowledge	1	1.290	NS

$\chi^2 = 3.84$, P<0.05 NS = not significant

CONCLUSION

This present study on "Effectiveness of planned teaching programme(PTP) for mothers regarding home-based child survival interventions on upper respiratory tract infections", the Pre-test findings, showed inadequate knowledge of the mothers regarding URTI in children. This existed in varying degrees among the mothers in all

aspects of the disease. This highest deficit was noted in the area of anatomy and physiology of URTI in children. There was no significant association between the pre-test knowledge scores of the mothers and the selected variables like age, religion education, occupation, income, type of family, birth order of children, sources of knowledge. Therefore it is concluded that the same

PTP can be used to educate all categories of the mothers on URTI. PTP tested in the study was found to be effective in improving the knowledge of the mothers. PTP is an effective teaching method for providing information. It was very much appreciated by the mothers and they expressed their gratitude for providing information on the topic. There was no significant association between the pre-test knowledge scores of the mothers and the selected variables like age, religion education, occupation, income, type of family, birth order of children, sources of knowledge. Therefore it is concluded that the same PTP can be used to educate all categories of the mothers on URTI.

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