A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE & PRACTICES OF THE MOTHERS OF UNDER-FIVE CHILDREN REGARDING HOME REMEDIES USED FOR MANAGEMENT OF UPPER RESPIRATORY TRACT INFECTIONS IN SELECTED RURAL AREA OF BARDOLI TEHSIL, SURAT, GUJARAT.

Krinal Patel*	Assistant Professor, Vibrant Nursing College, Masma, Surat, Gujarat.*Corresponding Author
Dr. Rani Shetty	Principal, Maniba Bhula Nursing College, Bardoli, Surat, Gujarat.

ABSTRACT **Introduction:** Acute respiratory tract infection contributes to one-fifth of all under-five deaths in developing countries which is around 12 million every year. According to WHO about 20% of deaths among children due to acute respiratory Infections could be reduced by seeking prompt and appropriate care. **Material and Methods:** A Pre-experimental, one group pre-test post-test design with a quantitative research approach was utilized to test the proposed hypotheses. 60 mothers of under-five children were selected by non-probability convenience sampling technique. Data was collected by structured knowledge questionnaire and Inventory checklist to assess the knowledge & Practices of mothers of under-five children regarding home remedies used for management of upper respiratory tract infections. The data were analyzed and hypotheses were tested using descriptive and inferential statistics. **Result:** In pre-test, 75 percent of the mothers of under-five children had good knowledge score, 23 percent of them had very good knowledge score, and 2 percent of them had excellent knowledge score. And 43 percent of them had good and very good practice score, 14 percent of them had excellent practice score. In post-test, 52 percent of the mothers of under-five children had very good knowledge score, 48 percent of them had excellent knowledge score. And 58 percent of them had very good practice score, 42 percent of them had excellent practice score. **Conclusion:** Structured teaching programme was an effective method of teaching the mothers of under-five children regarding uses of home remedies for management of URTIs.

INTRODUCTION & BACKGROUND OF THE STUDY

Children are the promise and the future of every nation. Investing in children health and development means investing in the future of a nation. Children are a vulnerable group whose needs and rights must be protected, including the right to health and development.[1]

Respiratory tract infections are one of the leading causes of morbidity and mortality in children. This major threat to the life of under-five children can be managed at home with easy managing strategies in the initial stages. The child can be saved by the mothers with their adequate knowledge, prompt response, and quick care during danger signs of ARI.[2]

The home remedies for upper respiratory tract infections included cinnamon, ginger, tulsi, clove, cardamom, honey, lemon, garlic, onion, turmeric, licorice, eucalyptus, ghee, black pepper, mustard powder and many others.[3] The Medicines and Healthcare products Regulatory Agency (MHRA) advises children less than 6 years old should not be treated with over the counter cough and cold medication. The World Health Organization identifies honey as a potential demulcent treatment for cough. According to the journal "Evidence-Based Complementary and Alternative Medicine," Ginger is a well-established antioxidant compounds may help alleviate inflammatory effects of viral infections, which could make it useful in controlling cough.[4] In Ayurvedic medicine, Turmeric is a well-documented treatment for various respiratory conditions e.g., asthma, bronchial hyperactivity, allergy, runny nose, cough, and sinusitis.[5] Tulsi is used in Ayurvedic medicine for common cold, headache and many respiratory disorders. Steam inhalation has since become a simple and effective home remedy for cold and cough. It is an effective natural expectorant.[6]

During the community field experience, the researcher had come across under-five children suffering from upper respiratory tract infections and their mothers having inadequate knowledge regarding treatment. Hence, the researcher was motivated to take up this study in the community area. In this study, a structured teaching programme used to improve the knowledge and practices regarding home remedies used for the management of upper respiratory tract infections.

Objectives

- To assess the knowledge of the mothers of under-five children regarding home remedies used for management of upper respiratory tract infections before and after the structured teaching programme.
- To assess the practices of the mothers of under-five children regarding home remedies used for management of upper respiratory tract infections before and after the structured teaching programme.
- To compare the pre-test and post-test knowledge and practices score of the mothers of under-five children regarding home remedies used for management of upper respiratory tract infections.
- To correlate the pre-test and post-test knowledge and practices score of the mothers of under-five children regarding home remedies used for management of upper respiratory tract infections.
- To find out the association between the effects of a structured teaching programme with selected socio-demographic variables of the mothers of under-five children.

Hypothesis:

H1: The mean post-test score of knowledge regarding home remedies used for the management of upper respiratory infections will be significantly higher than the mean pre-test score among the mothers of under-five children.

H2: The mean post-test score of practices regarding home remedies used for the management of upper respiratory infections will be significantly higher than the mean pre-test score among the mothers of under-five children.

H3: There will be a significant relationship between pre-test and post-test knowledge and practices score of the mothers of under-five children regarding the use of home remedies for the management of upper respiratory tract infections.

H4: There will be a significant association between post-test knowledge score with their selected demographic variables among the mothers of under-five children.

Material and methods

In the present study, a Pre-experimental, one group pre-test post-test design with a quantitative research approach was utilized to test the proposed hypotheses. The study sample consisted of 60 mothers of the under-five children residing in rural area of Bardoli. The research setting was Bhuvashan, Nizar and Pathradiya villages of Bardoli Tehsil, Surat, Gujarat. The Non Probability; convenience sampling technique was used for the study. The study was conducted in the month of April, 2019. 30 Structured knowledge questionnaires was prepared to determine the level of Knowledge and inventory checklist was prepared to determine the level of practice among mothers of under-five children before and after STP. Inventory checklist included 16 'Yes' or 'No 'questions. For Structured teaching programme, lesson

plan was prepared regarding uses of home remedies for management of URTI. The data were analysed and hypothesis were tested using descriptive and inferential statistics.

Ethical Considerations
Ethical clearance permission was obtained from the ethical committee of Maniba Bhula Nursing College, Bardoli. Study setting permission was obtained from the medical officer of the Sarbhan PHC, Bardoli. And from the Sarpanch of Bhuvasan, Patharadiya and Nizar villages of Bardoli. Also the mothers of under-five children were explained about the purpose of the study and written consent was taken from them for their participation in study. The mother of under-five children were assured that the information given by them will be kept as confidential and will be used for research purpose.
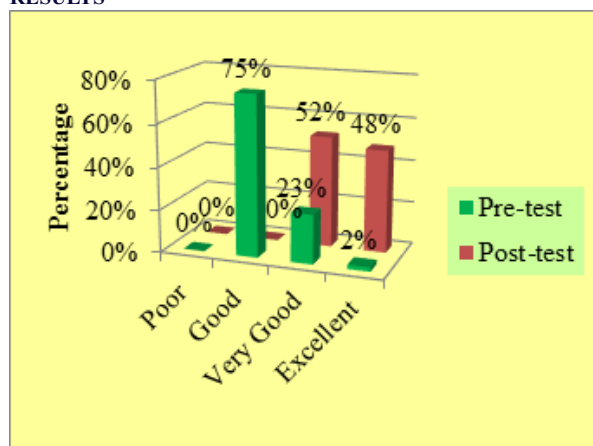
RESULTS

Figure 1: Overall knowledge scores wise distribution of the mothers of under-five children (n=60)

The above graph show overall distribution of knowledge scores of the mothers of under-five children. 75 percent were having good knowledge during pre-test. 23 percent were having very good knowledge and two percent of them were having excellent knowledge. During post-test 52 percent of them were having very good knowledge and 48 per cent of them were having excellent knowledge.
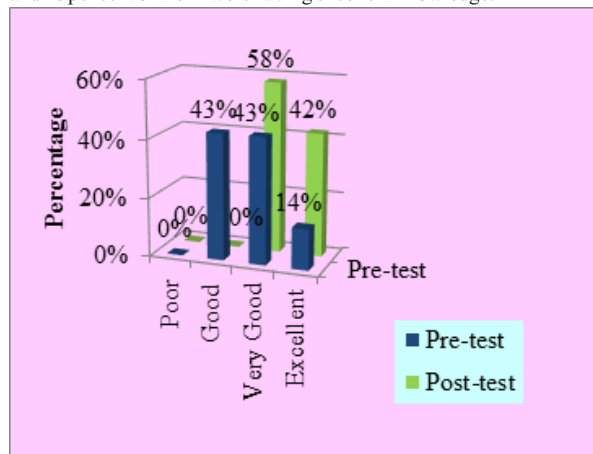

Figure 2: Overall practice scores wise distribution of the mothers of under-five (n=60)

The above graph show grading of overall practices of the mothers of under-five children. During pre-test, 43 percent of the mothers of under-five children were having good practices, 43 percent were having very good practices and 14 percent of them having excellent practices. During post-test 58 percent of them having very good practices and 42 percent having excellent practices.

Pre-test mean knowledge score of the mothers of under-five children was 13.51 and post-test mean knowledge scores of the mothers of under-five children was 21.71, with a mean difference of 8.2. The calculated value of t, 36.29 was greater than tabulated value of t, 2.00 at

df 59 and 0.05 level of significance.

Pre-test practice score of the mothers of under-five children was 8.75 and post-test practice scores of the mothers of under-five children were 11.68, with a mean difference of 2.93. The calculated value of t, 11.51 was greater than tabulated value of t, 2.00 at df 59 and 0.05 level of significance.

In Correlation of pre-test and post-test knowledge and practice score by using of Karl Pearson's correlation coefficient formula, Pre-test r was 0.77 and for post-test r was 0.43.

Table 1: Association between post-test knowledge score with selected socio-demographic variable

Socio-demographic variable	Post-test Knowledge scores				Total	Chi square test
	Excellent		Very good			
	f	%	f	%		
Socio-demographic variable of mothers (n=60)						
Age						
19-28 years	7	12%	17	28%	24	x^2=6.3293
29-38 years	12	20%	6	10%	18	df=2
39-48 years	10	17%	8	52%	18	(S)
Education Status:						
No formal education	5	8%	5	8%	10	x^2=0.077 df=4
Primary education	9	15%	10	17%	19	(NS)
Secondary education	5	8%	5	8%	10	
High School	5	8%	6	10%	11	
Graduation & Above	5	8%	5	8%	10	
Type of House						
Kachha	19	32%	6	10%	25	x^2=
Semi Pakka	5	8%	20	33%	25	15.7108
Pakka	5	8%	5	8%	10	df=2 (S)
Type of Family						
Nuclear	5	8%	15	25%	20	x^2=8.1424
Joint	14	23%	6	10%	20	df=2
Extended	10	17%	10	17%	20	(S)

NS= not significant, S= significant

The post-test knowledge score was associated with the selected socio-demographic variables like age, education status, type of house and type of family. In the association between post-test knowledge score with age of mothers of under-five children chi-square value was found 6.32 at p<0.05, df=2 was significant. The age of mothers of under-five children was an influence on knowledge.

Table 2: Association between post-test knowledge score with selected socio-demographic variable

Socio-demographic variable	Post-test practice scores				Total	Chi square test
	Excellent		Very good			
	f	%	f	%		
Socio-demographic variable of mothers (n=60)						
Age						
19-28 years	8	13%	16	27%	24	x^2=6.7429
29-38 years	5	8%	13	22%	18	df=2
39-48 years	12	20%	6	10%	18	(S)
Type of House						
Kachha	10	17%	15	25%	25	x^2= 8.5714
Semi Pakka	20	33%	5	8%	25	df=2
Pakka	5	8%	5	8%	10	(S)
Type of Family						
Nuclear	5	8%	15	25%	20	x^2= 10.0114
Joint	14	23%	6	10%	20	df=2
Extended	6	10%	14	23%	20	(S)

NS= not significant, S= significant

The post-test practice score was associated with the selected socio-demographic variables like age, type of house and type of family. In the association between post-test knowledge score with age of mothers of

under-five children chi-square value was found 6.74 at p<0.05, df=2 was significant. The age of mothers of under-five children was an influence on practice.

DISCUSSION

Study finding show that, in assessing the pre-test level of knowledge, 75 percent of the mothers of under-five children were having good knowledge, 23 percent of them were having very good knowledge, two percent of them were having excellent knowledge and none of them were having poor knowledge. In the post-test level of knowledge, 52 percent of the mothers of under-five children were having very good knowledge, 48 percent of them were having excellent knowledge and none of them were having poor and good knowledge In assessing the pre-test level of practice, 43 percent of the mothers of under-five children were having good practices, 43 percent of them were having very good practices, 14 percent of them were having excellent practices and none of them were having poor practice.

The pre-test mean knowledge score of the mothers of under-five children was 13.51 and post-test mean knowledge score was 21.71, with mean difference 8.2. The calculated value of t, 36.29 was greater than the tabulated value of t, 2.00 at df 59 and 0.05 level of significance. Hence, the obtained difference is a true difference and not by chance. Therefore, H0 is rejected and H1 is accepted. STP was effective in improving the knowledge of samples statistically.

Correlation of pre-test and post-test knowledge and practice score calculated by using of Karl Pearson's correlation coefficient formula. For pre-test r was 0.77 and for post-test r was 0.43. Because of $0 < r < 1$ moderately positive correlation was found in pre-test and post-test, Increase in knowledge had a moderately positive influence on improvement in practice

In the association between post-test knowledge score with age of mothers of under-five children chi-square value was found 6.32 at p<0.05, df=2 was significant. And In the association between post-test practice score with age of mothers of under-five children chi-square value was found 6.74 at p<0.05, df=2 was significant. The age of mothers of under-five children was an influence on knowledge and practice.

CONCLUSION

The overall pre-test knowledge and practice score were less than the post-test score. The post-test results showed that there was a significant improvement in the level of knowledge and practices of the mothers of under-five children. Hence it was concluded that the structured teaching programme was an effective method of teaching for the mothers of under-five children regarding the use of home remedies for the management of URTIs.

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CONFLICT OF INTEREST – Nil

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