

Effectiveness of Structured Teaching Programme on Knowledge and Practices Regarding Prevention of Pneumonia among Mothers of Under Five Children at Selected Rural Community

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Abstract

A Quasi Experimental Design was used for the present study & 50 Mothers of under Five Children were selected using purposive sampling technique. A structured questionnaire was used to assess the knowledge & practices. Descriptive and inferential statistics were used to analyze the data. The analysis and the data were based on the objective and hypothesis. Both descriptive and inferential statistics were used for data analysis. The assessment of post- test knowledge score of the mother of under five children regarding prevention of pneumonia shows that, majority of mothers 29(58%) had good knowledge, 21(42%) having the average knowledge. And The assessment of post- test practice score of the mother of under five children regarding prevention of pneumonia shows that, majority of mothers 50(100%) had good practices. after implementation of STP on knowledge & practices of the mothers of under five children on prevention of pneumonia as compare to pre-test it shows that STP was effective educational strategies to create awareness.

Keywords: Effectiveness, Structured teaching programme, mothers of under five children, pneumonia.

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INTRODUCTION

"Pneumonia is an inflammation with consolidation of the parenchyma of the lungs." Approximately 150 million new cases of pneumonia occur annually among children younger than five years worldwide, accounting for approximately 10-20 million hospitalizations. In India an estimated 25 million babies born annually and of these 24% (6 million) succumb to death. 7 out of every 10 of these are die due to acute respiratory infections. The incidence of clinical pneumonia in developing countries range between 20-30%. Millenium Development Goal (MDG) (1990-2015) increasing focus on the reduction of under-five mortality rate by two thirds. Edwin S G et al., [1] conducted a study regarding the effectiveness of planned teaching programme (PTP) on knowledge, attitude and knowledge on practice of acute respiratory infections among mothers and found that there was a gross inadequacy (100%) of knowledge regarding ARIs among the mothers & PTP was found to be Effective. HaryCambell et al., [2] conducted a study on epidemiology and etiology of childhood pneumonia on 15 countries stated that the estimated incidence is 0.37 episodes per child per year in India. Bulletin of WHO

[3] estimated that the incidence of childhood pneumonia among the under five children are about 156 million new episodes each year worldwide, of which 151 million episodes are in the developing world & in India it is about 43 million. Park et al., [4], approximately 2 million death occurs due to pneumonia among the under-five children.

Pneumonia has been identified as the major killer of children. Pneumonia kills more children than any other illness, more than AIDS, malaria and measles combined over two million children die from pneumonia each year.

India is a vast country where 25 million babies are born every year with world's second largest population. Pneumonia among under five children continues to remain a major public health concern in India, where most mothers have little or no knowledge regarding care of respiratory tract illness in children and existing health care facilities remain grossly underutilized. The 21st century offers a bright vision for better health for all; it holds the prophecy not merely of longer life, but super quality of life with less disability and disease.

Every year more than 70% of the 1.9 million children die even before reaching their fifth birthday. Sadly these deaths are attributed to pneumonia. Pneumonia is known as the silent killer disease among under five children but it is preventable. Prevention efforts include many well-known child survival interventions such as expanding vaccine coverage, provision of adequate nutrition and reducing indoor air pollution. But once a child develops pneumonia, a caregiver must recognize the symptoms and seek appropriate care immediately.

Several risk factors for acquiring respiratory infections in developing countries such as low parental education, low birth weight and lack of breast feeding have been described. Nutritional factors also influence the risk of developing disease, family size and crowding have been linked to the risk of developing pneumonia, parent's smoking habits, bad weather in winter and sanitation influences many health outcomes and might affect the risk of developing pneumonia directly or indirectly. Over the past two decades, there have been several attempts to investigate the relationship between socio demographic risk factors and severe pneumonia in young children, but few reports have proven whether this relationship actually exists. The lack of epidemiological studies from developing countries makes it difficult to develop effective intervention strategies that may help to reduce the overall burden of this disease.

As prevention is better than cure, the rate of incidence can be reduced by giving adequate knowledge regarding the risk factors, etiology, clinical manifestation, prevention & when to seek medical help.

Mothers are the primary care givers of the child, so they need to be sufficiently aware regarding prevention of pneumonia. Though they have some knowledge regarding home management of cough, they did not practice it correctly. If mothers would possess appropriate knowledge, and maintain a positive attitude with correct practice on the prevention of pneumonia, thereby decreasing the burden of the disease at the community and helps in social reconstruction. The structured teaching programmes with adequate key concepts regarding prevention of pneumonia definitely improve the knowledge and practices to prevent pneumonia.

OBJECTIVES OF THE STUDY

1. To assess the knowledge and practices regarding prevention of pneumonia among mothers of under five children.
2. To evaluate the effectiveness of structured teaching programme on knowledge and practices regarding prevention of pneumonia among mothers of under five children.
3. To find out the association between pre test score of knowledge and practices of mothers

of under five children regarding prevention of pneumonia and selected demographic variables.

OPERATIONAL DEFINITIONS

Effectiveness: It refers to statistical measurement of the difference in level of knowledge and practices on prevention of pneumonia, before and after administration of structured teaching programme.

Structured Teaching Programme: It refers to a systematically organized teaching programme prepared by the investigator on pneumonia, causes, signs and symptoms, treatment and its prevention with the use of A.V. Aids to enhance mothers of under five children awareness about pneumonia and its prevention.

Knowledge: In this study, knowledge refers to the scores obtained by the under-five mothers on the knowledge based items of Structured Interview Schedule regarding questions on knowledge regarding pneumonia.

Practices: In this study, practice refers to the scores obtained by the under-five mothers on the practice based items of Structured Interview Schedule regarding questions on preventive methods used by mothers of under-five children against pneumonia.

Pneumonia: Refers to the inflammatory changes in the lungs due to different types of bacteria and viruses.

Mothers of Under Five Children: Refers to the mothers with children of age below 5 years.

Prevention of pneumonia: It is a measure taken to reduce the incidence and to limit the progression of pneumonia and provide intervention regarding pneumonia.

Preventive Measures: In this study, it refers to the ways and means to be adopted by under-five mothers for prevention of pneumonia.

ASSUMPTION

1. Mother of under five children have less knowledge and practices regarding prevention of pneumonia.
2. Literate mother of under five children have high knowledge on practices than the illiterate mother.

HYPOTHESIS

H₀ – There will be no significant effect of STP on knowledge and practices regarding prevention of pneumonia among mothers of under five children.

H₁ – There will be significant effect of STP on knowledge and practices regarding prevention of pneumonia among mothers of under five children.

H₂ – There will be significant association between pre test knowledge scores with selected demographic variables among mothers of under five children regarding prevention of pneumonia.

DELIMITATION OF STUDY

1. The study will be limited to mother of under five children of selected rural community.
2. Who are not cooperative and willing.
3. Sample size is limited to 50 mothers of under five children.

METHODOLOGY

Research Approach: An evaluative research approach was adopted in this study.

Research design: Quasi-experimental one group pre-test post-test design.

Research Setting: Selected rural areas in Ahmednagar District.

Population: The population of the study were mothers of under five children.

Sample: the mothers of Under Five Children of rural areas in Ahmednagar District.

Sample size: 50 mothers of under five children.

Sampling Technique: Purposive sampling technique was used in this study.

Variables

- **Independent Variable:** Structured teaching programme
- **Dependent Variables:** knowledge and practices questionnaire regarding prevention of pneumonia.

CRITERIA FOR SAMPLE SELECTION

Inclusion Criteria

1. Mothers of under five children's who are willing to participate in the study.
2. Mothers belongs to age group of 0 to 5 years children's.
3. Mothers who can speak and understand Marathi or English.
4. Those Mothers who are available during the time of the study.

Exclusion Criteria

1. Mothers who were sick during the time of data collection.
2. Mothers having children above 5 years of age.
3. Mothers of under five children who do not understand Marathi or English.
4. Mothers who are not willing to participate in the study.

MAJOR FINDINGS OF THE STUDY

SECTION 1: Deals with Analysis of Demographic Data of the Mothers of Under Five Children at Selected Rural Community in Terms of Frequency and Percentage

1. **Age of the Mother:** Majority 25 (50%) mothers of under five children were in the age group of 21-25 years, 18 (36%) of them were in the age group of 26-30years, 4 (8%) of them were below 20 years and 3(6%) were in the age group of 31 and above.
1. **Religion:** Majority 42 (84%) of the mothers of under five children were belongs to Hindu religion, 6(12%) of them were belongs to Islam religion, 2(4%) of them were belongs to Christian religion and no any other religions mother are present.
2. **Type of family:** Majority of 41 (82%) mother were from the joint family, 7(14%) mother were from the nuclear family, and 1(2%) mother were the extended family.
3. **Occupation status :** Majority of 39(78%) mother were self-employed, 7(14%) mother were working in the Agriculture area. No one belongs to House maid, daily wages/ coolie and private employee.
4. **Family monthly income:** Majority of 42(84%) of the mothers had a family income of 3001-5000per month and 8(16%) were having income of 5001 and above.
5. **Educational status of mothers of under-five children :** Majority of 21 (42%) mother were the Higher school education, 16(32%) mother were the Higher primary school education, 12(24%) mother were the HSC, 1(2%) mother were the Primary school education and no one were illiterate & having education degree and above.
6. **Number of the under five children in the family :** Majority of 34(68%) mothers were having two child, 10(20%) mothers having three child, 6(12%) mothers having only one child.
7. **Source of health information:** Majority of 14(28%) mother got the knowledge from friends /neighbors, 12(24%) from relatives / family members, 10(20%) from television, 6(12%) from radio, 5(10%) from newspaper/magazines/journals/Books, 3(6%) from health personnel.

SECTION 2: Deals with Analysis of Data Related to Assessment of The Knowledge & Practices Regarding Prevention of Pneumonia Among Mothers of Under Five Children

- **Pre test level of knowledge of mothers of under five children about prevention of pneumonia**
Majority of mothers 33 (66%) having poor knowledge with the mean (7.09±1.01) followed by 17(34%) having average knowledge with the mean (10.3±1.16).

- **Aspect wise pre test level of knowledge of mothers of under five children about prevention of pneumonia.**

Aspect wise pre test level of knowledge of mothers of under five children about prevention and management of pneumonia as per general information, causes, sign & symptoms, management and prevention were (1.34±0.56), (1.26±0.49) (1.98±0.59), (1.92±0.70) & 2.2±0.73 respectively

- **Pre test level of practices of mothers of under five children about prevention of pneumonia**

The assessment of overall pre-test practices of the mothers of under five children regarding prevention of pneumonia shows that, majority 50 (100%) of mothers having Average practices (27.68±2.45).

SECTION 3: Deals With Analysis of Data Related to The Effectiveness of Structured Teaching Programme Knowledge & Practices Regarding Prevention of Pneumonia Among Mothers of Under Five Children at Selected Rural Community.

- **Effectiveness of STP on Knowledge of mothers of under five children about prevention of pneumonia in pre and post test**

The assessment of overall pre-test knowledge level of the mother of under five children regarding prevention of pneumonia shows that, majority of mothers 33 (66%) having poor knowledge (7.09±1.01) followed by 17(34%) having average knowledge (10.3±1.16).Whereas overall post- test knowledge score of the mother of under five children regarding prevention of pneumonia shows that, majority of mothers 29(58%) had good knowledge (19.27±1.19) and followed by 21(42%) having the average knowledge (15.95±1.16).It implies that , majority of mothers having good and average knowledge in post test score after implementation of structured teaching programme on knowledge of mothers of under five children about prevention of pneumonia as compare to pre-test it shows that structured teaching programme was effective educational strategies to create awareness.

- **Aspect wise pre test and post test mean and SD of knowledge of mothers of under five children about prevention of pneumonia.**

Aspect wise pre test level of knowledge of mothers of under five children about prevention and management of pneumonia as per general information, causes, sign & symptoms, management and prevention were (1.34±0.56), (1.26±0.49) (1.98±0.59), (1.92±0.70) & 2.2±0.73 respectively. Whereas overall post- test knowledge scores of mothers of under five children about prevention and management of pneumonia as per general information, causes, sign & symptoms, management and prevention were (2.28±0.50), (2.24±0.58) (4.1±0.84), (4.3±0.81) & 4.96±0.78 respectively. It implies that after implementation of STP on knowledge of the mothers of under five children on prevention of pneumonia as compare to pre-test it

shows that STP was effective educational strategies to create awareness.

- **Effectiveness of STP on knowledge of mothers of under five children about prevention of pneumonia**

Paired t- test calculated value 3.16 was more than Probability 2.95 value at 49 degree of freedom. So accept the research hypothesis (H₁) and reject the null hypothesis (H₀). It shows that structured teaching programme was effective among mothers of under five children on prevention of pneumonia.

- **Practice of mothers of under five children about prevention of pneumonia in pre test and post test.**

The assessment of overall pre-test practice of the mother of under five children regarding prevention of pneumonia shows that, majority of mothers 50 (100%) having Average practice (27.68±2.45) .Whereas overall post- test practice score of the mother of under five children regarding prevention of pneumonia shows that majority of mothers 50(100%) had good practice (43.68±0.9781).

- **Effectiveness of STP on Practice of mothers of under five children about prevention of pneumonia**

Paired t- test calculated value 8.1965 was more than Probability 2.95 value at 49 degree of freedom. So accept the research hypothesis (H₁) and reject the null hypothesis (H₀). It shows that structured teaching programme was effective among mothers of under five children on prevention of pneumonia.

SECTION 4: Deals With Analysis of Data Related to The Association Between Pre Test Knowledge Levels & Practices Among Mothers of Under Five Children at Selected Rural Community With The Demographic Variables.

- **Association between knowledge of mothers of under five children regarding prevention of pneumonia and selected demographic variables.**

The chi square test was used to see the association between the demographic variables with the pre-test knowledge. For all the demographic variables the p value of the association test with knowledge was more than 0.05. That means, the knowledge regarding prevention of pneumonia among mothers of under five children is independent of these demographic variables. Concludes that, there was only one significant association of these demographic variables with the knowledge. The chi square test was used to see the association between the demographic variables with the pre-test knowledge.

- **Association between Practice score of mothers of under five children regarding prevention of pneumonia and selected demographic variables.**

The chi square test was used to see the association between the demographic variables with the pre-test practice. For all the demographic variables the p value of the association test with practice was more than 0.05. That means, the practice regarding prevention of pneumonia among the mothers of under five children is independent of these demographic variables. Concludes that, there was no significant association of these demographic variables with the practice.

CONCLUSION

Findings of the study showed that, majority of mothers 29(58%) had good knowledge, 21(42%) having the average knowledge regarding prevention of pneumonia and majority of mothers 50(100%) had good practices regarding prevention of pneumonia. The study concluded that there is significant increase in the knowledge level and practices among mothers of under five children after structured teaching programme.

RECOMMENDATIONS

On the basis of the finding of the study following recommendations have been made:

1. Similar studies can be done on a larger scale, in urban & rural areas so as to compare children in selected districts.
2. A study can be conducted using other strategies such as manual, computer assisted instruction, self-instruction module, video show, planned teaching program etc.
3. An experimental study can be conducted with control group among the mothers of under five children.
4. An exploratory study can be carried out to identify various factors responsible for deficient in knowledge, attitude and practice of mother regarding prevention of pneumonia among the under five children.
5. A longitudinal study can be done using posttest after 1 month, 6 month and 1 year to see the retention of knowledge and practice.
6. An information booklet can be prepared as a teaching aid in the hospitals and outpatient clinics.

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