



## Effect of Mother to Mother Approach on Knowledge Regarding Home Management of Fever among Mothers of Under Five Children

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## ABSTRACT

Fever in the first five years of life is the common clinical indicators of a child's illness. Improperly managed fever leads to many complications which reveal the importance of mothers in home management of fever since they are the primary caregivers of a child. Mother to mother approach offers one of the most cost effective strategies to approach communities and families. Hence, the study was undertaken to assess the effect of mother to mother approach on knowledge regarding home management of fever among mothers of under five children in a selected community, Thrissur. The other objectives of the study were to assess the pre test knowledge among mothers of children under five and to find out the association between the level of knowledge and selected demographic variables of mothers regarding home management of fever. The design of the study was quasi experimental one group pretest posttest design conducted over 30 mothers of under five children. Samples are selected by using simple random sampling method and 6 change agents were selected on the basis of evaluation of the pre set criteria from 3 anganwadis'. Pretest was done using structured knowledge questionnaire. The investigator rendered health education on home management of fever to the change agents followed the same by the change agents to their respective groups. Posttest was done after 7 days and the analysis shows that there is a significant increase in knowledge score of mothers regarding home management off ever ( $t = 63.49, p = 0.000$ ). Thus the study concludes that mother to mother approach was effective.

## KEYWORDS

*Effect; Mother to Mother approach; Knowledge; Fever; Mothers of under five children; Change agent*

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## INTRODUCTION

### Background of the problem

Children are one of the most precious gifts of God. Biologically a child is generally a human between the stages of birth and puberty. The legal definition of "child" "generally refers to a minor, otherwise known as a person younger than the age of majority. Around 32% of the Indian population constitutes children. Children below 5 years of age represent the category of under five children and they belong to the vulnerable group. Approximately 10% of the total Indian population belongs to under five agegroup<sup>1</sup>. Among the common

problems that are faced by children such as fever, diarrhea, malnutrition, fever is the most important as it is the beginning to all diseases and requires utmost care right from the start. Around 65% of the total visit to pediatrician by parents is due to fever or due to other associated complications. In India, fever accounts for 70% of the illness in children, 30- 40% of outpatient children visit at health facilities, 25% for hospital admissions.<sup>2</sup> Since under five children are having immature immunity and brain development, they are more prone to get infectious diseases.



Fever is the frequently reported cause of under five children's care takers visit to health care facilities and it is the common clinical indicators of a child's illness.<sup>3</sup>

### **Need and significance of the study**

Fever is a common childhood problem and is one of the commonest reasons parents bring their children for medical attention. It is estimated to be the primary complaint for as many as one third of all Pediatric consultations in general practice. In the United States, febrile illness accounted for 20% of children seen in one Pediatric emergency department and 19% of visits to a sick child clinic. Children in the age group of 3 to 36 months have approximately six febrile episodes per year, representing the highest incidence of fever during childhood. Studies report that parents have false beliefs and limited knowledge regarding fever, its management, and its role in illness. Parents, especially mothers are the primary care taker of a child. So they are the first person who felt their child's fever. Since majority of fevers subsides without antibiotics or before consultation with the pediatrician, proper home management of fever by the mothers prevent the child in the development of complications due to fever. Mother to mother approach has now become an international program and

concept is now extended for it to be called as mother to child, mother to family and mother to community program. Thus when a mother become a teacher for spreading the health messages, it encourages other mothers also for concern themselves with the health and general development of their children and family and improves their knowledge in promotion and preventive aspects of various health ailments. Ultimately the community will be benefitted with the same.

### **MATERIALS AND METHODS**

The investigator adopted an evaluative approach for the study to evaluate the effect of mother to mother approach on knowledge regarding home management of fever among mothers of under five children through a quantitative research approach and a Quasi experimental one group pre-test post-test design was adopted for the study. The setting used in this study was 3 anganwadis of Nadathara grama panchayath. The sampling technique used was simple random sampling to select 30 samples and the 6 change agents were selected according to their educational status and communication skills. The tool used in this study consists of, Section A: Socio demographic variables of mother, section B: Structured knowledge questionnaire on home management of



fever and section C: Health education on home management of fever. During the first phase of data collection, the investigator obtained permission from the Medical Officer of Primary health Centre, Nadathara, to conduct study. In the next phase the investigator selected the samples and change agents from each anganwadis. In the third phase, the investigator administered health education to all the change agents regarding home management of fever with appropriate AV aids. On the next day , the investigator

conducted pretest with the samples . After the pre test, the change agents administered health education regarding home management of fever to the assigned group with same AV aids in the presence of the investigator. In the final phase, post test of the samples were conducted using the same questionnaire. The whole mothers of each anganwadi have been given with health education on the same topic after conducting the post test.

**Table 1** Assessment of effectiveness of mother to mother approach by paired ‘t’ test  
N = 30

	N	Mean	SD	Mean Difference	‘t’ value	P value
Pre test	30	13.9	2.5			
Post test	30	38.77	1.1	24.87	63.49**	0.000

\*\*Significant at 0.01 level

## RESULTS AND DISCUSSION

### Section A: Description of demographic profile of mother

- With respect to age, majority of the samples 21 (70%) belong to the age group 24-29 yrs, 7 (23.3%) samples were in the age group 30-35 yrs and only 2 (6.7%) belong to the age group 18-23 yrs.
- In relation to type of family, out of 30 samples, 17 (56.7%) were from a joint family, 12 (40%) were from nuclear family and only 1 (3.3%) was from an extended family.
- With respect to religion, majority of the samples 23 (76.7%) were Hindus and

the remaining 7 (23.3%) belongs to Christian community.

- Regarding the number of children, 18 (60.0%) of the samples have 2 children, 9 (30.0%) of the samples have only one child and 3 (10.0%) of the samples have three children.
- Considering the number of under five children they have, majority of the samples 22 (73.3%) have only one under five child and the remaining samples 8 (26.7%) have two under five children.

According to the education, majority of the samples 21 (70.0%) were graduates, 5 (16.7%) were diploma holders and the remaining 4 (13.3%) had only secondary level education. **Table 2** Percentage share of component knowledge to overall knowledge

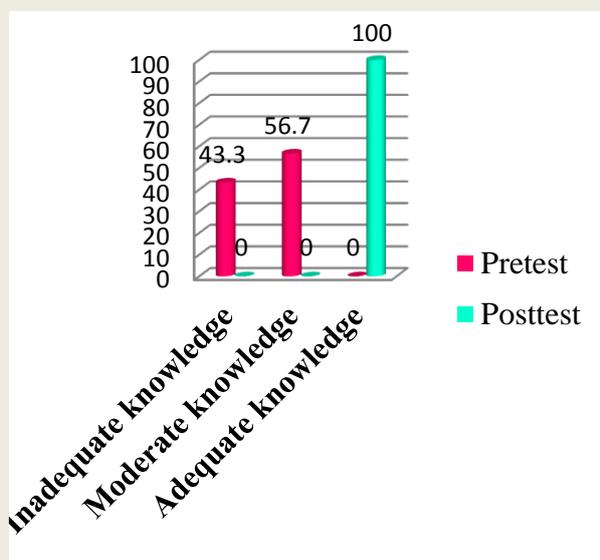


N = 30

Component knowledge	Test	Mean	SD	%	Mean difference	Paired t	p
General aspects and assessment of fever	Pre	4.6	1.0	33.2	5.20	27.64**	0.000
	Post	9.8	0.6	25.3			
Non pharmacological management of fever	Pre	2.9	1.0	21.2	6.73	36.34**	0.000
	Post	9.7	0.6	25.1			
Pharmacological management	Pre	3.2	1.1	23.1	6.30	27.92**	0.000
	Post	9.5	0.6	24.5			
Complications of fever	Pre	3.1	0.8	22.6	6.57	41.9**	0.000
	Post	9.7	0.6	25.1			

\*\* Significant at 0.01 level

**Fig.1** Comparison of pretest and posttest knowledge score of mothers regarding home management of fever



- With regard to the family monthly income in which majority of the mothers 25 (83.3%) have a family monthly income between ₹10001- 25000, 3 (10.0%) have income between ₹25001-50000 and only 2(6.7%) have an income of ₹ ≤10000.
- While considering the regular visit to the pediatrician, it reveals that majority of the mothers 28 (93.3%) had regular visit to pediatrician and only 2 (6.7%) mothers won't have the same.
- With respect to the source of previous knowledge regarding home management of

fever, almost all the mothers 29 (96.7%) has got information from their family members and for only one mother (3.3%), the source of information was friends. Surprisingly, the result shows that none of the mass media and health professionals have influenced the mother's knowledge regarding home management of fever.

- With respect to the mode of home management of child with fever , 19 (63.3%) of mothers manage their child's fever with antipyretics for 2-3 days and the remaining 11 (36.7%) immediately consult pediatrician for their child's fever. None of the samples practices any traditional methods for managing their child's fever.

**Section B:Description on assessment of pretest and posttest knowledge score of mothers regarding home management of fever.**

In the analysis of pre test knowledge score of mothers, it is evident that 43.3% of samples were having inadequate knowledge, 56.7% of samples were having moderate knowledge and none of the samples were having adequate knowledge



regarding home management of fever. The overall pretest knowledge score of mothers regarding home management of fever was 34.75%.

In the analysis of post test knowledge score, it is evident that 100% were having adequate knowledge showing that the mother to mother approach was effective. The overall post test knowledge score of mothers regarding home management of fever was 96.7%.

### **Section C: Description on component wise distribution of knowledge score of mothers regarding home management of fever.**

This section describes the component/area wise distribution of pretest and post test knowledge scores. The different components include general aspects and assessment of fever, non pharmacological management of fever, pharmacological management of fever and complications of fever.

- The mean pre test score of general aspects and assessment of fever was  $4.6 \pm 1.0$  and the mean post test score was  $9.8 \pm 0.6$ . Since the 'p' value is less than 0.01, there is significant improvement in the knowledge of mothers regarding general aspects and assessment of fever after mother to mother approach.
- The mean pre test score of non pharmacological management of fever was

$2.9 \pm 1.0$  and the mean post test score was  $9.7 \pm 0.6$ . Since the 'p' value is less than 0.01, there is significant improvement in the knowledge of mothers regarding non pharmacological management of fever after mother to mother approach.

- The mean pre test score of pharmacological management of fever was  $3.2 \pm 1.1$  and the mean post test score was  $9.5 \pm 0.6$ . Since the 'p' value is less than 0.01, there is significant improvement in the knowledge of mothers regarding pharmacological management of fever after mother to mother approach.
- The mean pre test score complications of fever was  $3.1 \pm 0.8$  and the mean post test score was  $9.7 \pm 0.6$ . Since the 'p' value is less than 0.01, there is significant improvement in the knowledge of mothers regarding home management of fever after mother to mother approach.

### **Section D: Description on assessment of effectiveness of mother to mother approach on knowledge regarding home management of fever.**

The mean pretest score on home management of fever was 13.9 and after rendering teaching through mother to mother approach it has been raised to 38.77. To assess the significance of mother to mother approach on knowledge score of mothers, the paired 't' test was applied. The calculated 't' value for



knowledge about home management of fever was found to be 63.49 and P value 0.000 which is highly significant at 0.001 level. So the null hypothesis was rejected and research hypothesis was accepted. This implies that the mother to mother approach was effective.

### **Section E: Description on association of pretest knowledge score of mothers regarding home management of fever with selected demographic variables.**

This section describes the association between knowledge of mothers with selected demographic variables such as age, type of family, number of under five children, education, and mode of home management of fever.

- On analyzing the association between knowledge of mothers regarding home management of fever with age of the mother, it was found that there is no association between level of knowledge and age. ( $\chi^2 = 0.81$ , which is not significant at 0.05 level).
- On analyzing the association between knowledge of mothers regarding home management of fever with type of family, it was found that there is no association between level of knowledge and type of family. ( $\chi^2 = 0.02$ , which is not significant at 0.05 level).
- On analyzing the association between knowledge of mothers regarding

home management of fever with number of under five children, it was found that there is no association between level of knowledge and number of under five children. ( $\chi^2 = 0.15$ , which is not significant at 0.05 level).

- On analyzing the association between knowledge of mothers regarding home management of fever with education of the mother, it was found that there is no association between level of knowledge and education. ( $\chi^2 = 0.68$ , which is not significant at 0.05 level).
- On analyzing the association between knowledge of mothers regarding home management of fever with mode of home management of child with fever, it was found that there is no association between level of knowledge and mode of home management. ( $\chi^2 = 0.34$ , which is not significant at 0.05 level).

## **CONCLUSION**

Children are the gift of this world, it is our responsibility to nurture and care them. Sometimes a small negligence towards their health may lead to complications. Parents have greater role in it. Special and continuing health education of mothers like mother to mother approach improves their knowledge. From this study, it is clearly evident that the mother to mother approach regarding home management of fever



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helped the mothers to improve their knowledge. Thus it is concluded that innovative approaches in teaching or health education can be adopted in the community in order to impart an effective way to approach mothers for having healthy child. The researcher felt deep sense of satisfaction and fulfillment for having undertaken the study.



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