

"A Pre Experimental Study To Assess The Effectiveness Of Information Booklet Regarding Febrile Seizures Among Mothers In Selected Hospital Of Pune City"

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ABSTRACT

Febrile seizure or febrile convulsion are commonly seen in children age between 6 months to 5 years are correlated with fever. It is also a common benign condition. According to WHO it is subdivided into 2 – simple febrile seizure and complex febrile seizure. Simple seizures are generalized, it lasts less than 15 min and occurs once in 24 hrs. Complex seizures are prolonged over 15 min or are focal within 24 hrs. Globally, febrile seizures affected 2-5% in children. The prevalence significantly varied by region with higher rates reported in Japan and India (14%). In India, the prevalence is reported to be around 3-4% among children under five years.[1].

Background

Febrile seizures are common childhood seizures associated with fever and are a significant paediatric health concern. In India, about 3-4% of children under five years' experience at least one febrile seizure.

Objectives

1. To assess the level of knowledge regarding febrile seizures among mothers before and after intervention. 2. To assess the effectiveness of the information booklet regarding febrile seizures among mothers. 3. To determine the association between knowledge of mothers with selected demographic variables.

Methods

A quantitative pre-experimental design was used. 100 mothers were selected using purposive sampling. A structured questionnaire assessed knowledge. The sample consist of under5 mother's in selected area of Pune city who had fulfilled the inclusion criteria of the study in order to assess the knowledge regarding febrile Seizures among mother's. Variables include age, education, Occupation, family, no: of children, monthly income.

Results

Pre-test showed 45% poor and 55% average knowledge. Post-test showed 71% good knowledge.

Conclusion

Information booklet was effective in improving knowledge and reducing anxiety. Therefore, health education is important in helping mothers to manage febrile seizures at home and improving the health of children.

Keywords: Assess, Effectiveness, Febrile seizures, Information booklet, Mothers.

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Reference: [1] Prevalence data as per WHO and regional studies on febrile seizures.

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INTRODUCTION

Febrile seizures are common childhood seizures associated with fever and are a significant paediatric health concern. In India, about 3–4% of children under five years' experience at least one febrile seizure, leading to frequent paediatric emergency visits and hospital admissions. These episodes often cause considerable anxiety among mothers, who are the primary caregivers. An information booklet is a simple and effective educational tool that can improve awareness, reduce fear, and promote appropriate care practices. Therefore, this study

aims to assess the effectiveness of an information booklet among mothers in selected hospitals of Pune city. [2]

Febrile seizures contribute significantly to pediatric emergency department visits and hospital admissions. It is estimated that approximately one in every twenty-five children experiences at least one febrile seizure, making it a frequent cause of childhood emergency care. Recurrence of febrile seizures is relatively common, with more than one-third of affected children experiencing repeated episodes before they outgrow the condition.

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Recurrent episodes increase parental anxiety and contribute to repeated hospital visits and financial burden.

Parental knowledge and awareness are essential for effective management of febrile seizures. Mothers, as primary caregivers, are often the first to witness seizure episodes and initiate immediate care, making their knowledge and preparedness critically important. [3]

Several studies conducted in India have revealed inadequate knowledge among mothers regarding febrile seizures. Many mothers lack awareness about the causes, warning signs, first-aid management, and preventive measures related to febrile seizures.

Misconceptions and cultural beliefs surrounding febrile seizures continue to persist in many communities. Unsafe practices such as restraining the child, inserting objects into the mouth, or using traditional remedies are still prevalent and pose serious risks to the child's safety. Lack of correct information often leads to fear and misunderstanding among caregivers. Many mothers believe that febrile seizures cause brain damage, epilepsy, or death, which further increases emotional distress and anxiety.

NEED OF STUDY

Febrile seizures are among the most common paediatric Condition, yet the studies consistently show that inadequate knowledge and improper practices among mothers regarding their causes, management, and prevention. Research conducted in India and other countries such as Iraq, Jordan, Indonesia, and Karnataka has revealed widespread misconceptions, high parental anxiety, lack of first-aid measures, and unsafe home practices during febrile seizure episodes. Many parents panic and rush children to hospitals without providing appropriate initial care, increasing unnecessary emergency visits and healthcare burden.

They are a major source of anxiety for mothers and one of the most common causes of acute childhood emergencies. Despite the fact that the majority of febrile seizures are benign, many mothers and caregivers have misunderstanding and insufficient knowledge about them. Thus, awareness and knowledge regarding febrile seizures can be enhanced by using pre-tests and post-tests to gauge comprehension and then distributing an information booklet. Mothers have lack of knowledge and follow unsafe practice. The Correct knowledge regarding febrile seizure or convulsion is essential for safety of the child. An information booklet is an effective way, easy to understand, low-cost and user friendly Method to improve mother's awareness.

Evidence from intervention-based studies demonstrates that educational strategies, especially information booklets, significantly improve maternal knowledge and reduce fear and anxiety. Since mothers are usually the first caregivers during febrile seizures, improving their awareness is crucial

for safe and effective home management. Despite available healthcare services, persistent knowledge gaps remain, and limited experimental studies have evaluated the effectiveness of information booklets in hospital settings. Therefore, the present study is undertaken to assess the effectiveness of an information booklet in improving awareness among mothers regarding febrile seizures and to strengthen evidence-based nursing practice.

A cross-sectional study conducted by Sajadi and Shamsi (2011) in healthcare centers revealed that a majority of mothers had insufficient knowledge about febrile seizures and their immediate management. The authors emphasized the urgent need for structured educational programs to improve maternal awareness, thereby justifying the need for educational interventions. [4]

AIM OF THE STUDY

The aim of the study was to assess the effectiveness of information booklet regarding febrile seizures among mothers in selected hospital of Pune City.

RESEARCH METHODOLOGY

The objectives of the study are to assess the effectiveness of information booklet knowledge regarding febrile Seizures among mothers in selected area of Pune City. And to find an association between knowledge of under 5 children of mother's with selected demographic variables in the study. The study used quantitative research approach. The non-probability Purposive sampling technique was used. The sample consist of 100 under5 mother's in selected area of Pune city who had fulfilled the inclusion criteria of the study in order to assess the knowledge regarding febrile Seizures among mother's. variables includes age, education, Occupation, family, no: of children, monthly income.

Self – structured Questionnaire containing 20 sets of questions was formulated to assess the knowledge regarding febrile Seizures among mothers. Content validity of the questionnaires was done, and we conducted the Reliability demonstrated a high relevance of 0.96. The pilot study was conducted on 1/10th of the Study sample, and hence, it is feasible.

RESULT

Section – I Analysis of Demographic Profile

In Demographic profile Majority of participants i.e.45% are from age **group 21-25 years**, 29% participants are from **30-35 years**, 26% from 26-29 yrs. Majority of 32 % participants where secondary school ,28 were HSC, 22% were graduated and 18 % were primary school. Majority 55% participants were nuclear family, 35% were joint family and 10% were extended family. Majority of 42% having one child, 38% having two child and 20% having three and above child.

Section – II Findings related to comparison between pre-test and post-test knowledge score.

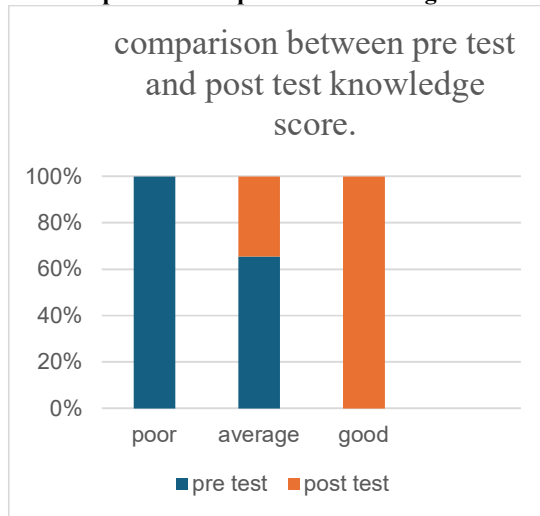


Fig No 1: comparison of pre-test and post-test knowledge score

In this Fig 1, it shows that post test was effective as compared with the pretest, it revealed that information booklet was highly effective.

Section III: Findings related to effectiveness of information booklet regarding febrile seizures among mothers.

Parameters	P r e t e s t	P o s t t e s t	M e a n d i f f	Impr ove ment %	t- va l u e	d f	P v a l u e	inter pre ta tion
Know le d g e	8 0 8	1 5 1	7. 7 3	95.6 7%	- 25 .8 73	9	<0 .00 01	High ly signi fican t

Table shows that mean score of post - test is 15.81 more than pre-test mean 8.05 and pre- test SD is 2.75 less than post- test SD is 2.50. Calculated value of paired t test was -25.873 with P value <0.0001 so P value is less than 0.05 level of significance which means null hypothesis rejected and there is effectiveness of information booklet regarding febrile seizures among mothers.

DISCUSSION

The findings of the study were discussed in relation to the objectives. The study revealed that mothers of under-five children had inadequate knowledge regarding febrile seizures, of irrespective of age, education, occupation, income, family type, indicating a general lack of awareness. Pre-test results showed poor knowledge among mothers, highlighting the need for health education on febrile seizures. The study confirmed that febrile seizures contribute significantly to paediatric emergencies, as

none of the mothers had good knowledge in the pre-test. A significant improvement in post-test scores demonstrated the effectiveness of the structured information booklet. It proves that information booklet can improve mother’s understanding, reduce fear, and support timely care during febrile seizures. These findings are consistent with previous research cited in the synopsis Bushra Mashtaq at all in 2021, A study to assess the knowledge regarding management of febrile convulsions among mothers of under five children conducted among 100 mothers of under-five children in rural Ganderbal, Kashmir[6]. In this study it is find that 20%, were having inadequate, 57% were having moderate & 23% were having adequate knowledge regarding management of febrile convulsions. Similar findings from a Jordanian study showed poor maternal knowledge with high anxiety levels, emphasizing the need for health education and awareness programs.

A descriptive cross-sectional study conducted on Nepal (2025) among 126 mothers assessed knowledge of febrile convulsions. The results showed that more than half of the mothers had moderate knowledge, while a smaller proportion had high knowledge. The study highlighted the need for targeted awareness programs to address knowledge gaps. [5]

In this research result revealed that significant improvement in post-test scores highlights the effectiveness of structured educational tools, especially in populations with limited access to reliable information. The information booklet, being simple, pictorial, and tailor-made, proved to be an effective medium to enhance understanding. It aligns with the principle that health literacy can be improved through structured, low-cost interventions, especially in homemakers and lower-income groups, who constituted the majority of the sample. This finding also supports the theoretical assumptions in the synopsis that health education plays a pivotal role in empowering mothers to provide timely care during febrile seizures, preventing complications and reducing anxiety.

CONCLUSION

Based on the findings of the present study, it can be concluded that febrile seizures are a common and alarming condition in early childhood, often causing significant anxiety among mothers. The study found that planned health education, such as an information booklet, was effective in improving mothers’ knowledge about febrile seizures. Increased awareness enabled mothers to respond more confidently and appropriately during febrile seizure. Increased knowledge also encouraged timely use of health-care services and to preventive measures. Therefore, health education is important in helping mothers to manage febrile seizures at home and improving the health of children.

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Based on these findings, it can be inferred that most adults initially possessed only average knowledge about febrile seizure. However, after receiving the information booklet, a notable improvement was seen, with mothers achieving higher knowledge scores.

The study concludes that the information booklet is a highly effective educational tool that significantly improves the knowledge of mothers regarding febrile seizures, irrespective of their demographic characteristics. Structured health education should therefore be prioritized in paediatric care settings to empower mothers and enhance child health outcomes.

CONFLICT OF INTEREST

We, the researchers, understand that conflict of interest refers to situations in which financial or other personal considerations may compromise our judgment in evaluating, conducting, or reporting research. We hereby declare that we do not have any personal or financial conflict of interest that may arise from the conduct and submission of this research study titled “

FUNDING SOURCE

“There is no funding source for this study.”

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