ASSESSMENT OF KNOWLEDGE REGARDING PREVENTION OF FEBRILE SEIZURE

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ABSTRACT

Febrile seizure is a seizure associated with a febrile illness in the absence of a central nervous system infection in children older than one month of age without prior neonatal or unprovoked seizures and not meeting the criteria of other acute seizures. Febrile seizures are one of the most common neurological conditions of childhood, affecting approximately 4% of children. Most febrile seizures occur after 6 months of age and before age 5 years, with the average age of onset at 18 months. Up to 50% of cases will show recurrence if the first febrile seizure occurred when under 1 year of age. 75% reoccur within 12 months of first febrile seizure. It has been reported that 1 in every 25 children in the world population is experiencing at least one febrile seizure during their childhood therefore, every mother should have an awareness to control fever without looking into pathological cause of fever. The purpose of the study was to assess the knowledge regarding prevention of febrile seizures among mothers of under five children. A quantitative non-experimental approach was used for the study. A sample of one hundred and fifty mothers was selected using convenience sampling. The knowledge on prevention of febrile seizure was assessed using a self-structured questionnaire. The present study revealed that there was a good and moderate and poor level of knowledge, the study concluded that awareness programme must be conducted for mothers to promote right information and practice for identifying and managing febrile seizure in children under five years of age. The study reported that there was a significant association between the knowledge scores and demographic variables ($\chi^2 = 13.955$ and $\chi^2 = 15.0431$ at $p<0.05$). The study revealed that majority of the mothers had good knowledge (64.67%) whereas 30.67% had moderate knowledge and 4.66% had poor knowledge.

Keywords: Assess; knowledge; febrile seizures; mothers; pediatric department.

INTRODUCTION

BACKGROUND OF THE PROBLEM

The early years of a child’s life are very important for later health and development. One of the main reasons is how fast the brain grows starting before birth and continuing into early childhood. Birth weight is the best
known index of brain growth. The weight of the brain of the neonate is about 300-500 grams. The brain more than doubles in size by 1 year of age, at which time its weight is two thirds that of the adult. During infancy and early childhood, when the brain grows rapidly, the sulci of the lobes of cortex deepen, increase in number and become more prominent. Febrile seizure is a common type of acute seizure occurred in children within one episode of high fever. It usually happens when the body temperature is above 38°C. According to American Academy of Pediatrics, 1996 febrile is a short generalized seizure, of a duration of <15 minute, not recurring within 24 hours, occurring during a febrile episode not caused by an acute disease of the nervous system, in a child aged 6 months to five years, with no neurological deficits.

STATEMENT OF THE PROBLEM

A study to assess the knowledge regarding prevention of febrile seizure among mothers of under five children attending pediatric departments of selected hospitals, Pathanamthitta district.

OBJECTIVES

The objectives of the study are:

- Assess the knowledge regarding prevention of febrile seizure among the mothers of under five children
- Find out the association between the knowledge of fever control measures to prevent febrile seizures among mothers with the selected demographic variables.

OPERATIONAL DEFINITIONS

1) Assess: In this study, assess refers to an art of making a judgement about something.
2) Knowledge: In this study, knowledge refers to available information of mothers about fever control measures to prevent febrile seizures among under five children.
3) Febrile seizure: A short generalized seizure, of a duration of <15 minute, not recurring within 24 hours, occurring during a febrile episode not caused by an acute disease of the nervous system, in a child aged 6 months to five years, with no neurological deficits.

4) Mothers: In this study, mothers refers to those who have children of age group 0-5 years.
5) Pediatric department: It refers to the pediatric OPDs, wards and PICU.

ASSUMPTIONS

1) Health is the priority for most of the people.
2) Mother operate on the basic of cognitive information.

RESEARCH APPROACH

Research approach involves the description of the plan to investigate the phenomenon under the study.
The research approach used in this study was **Quantitative Research Approach**.

**RESEARCH DESIGN**

The research design used in the study was **Descriptive Design**.

**POPULATION**

In this study, population consist of mothers of under 5 children who attends Pediatric department of selected hospital at Pathanamthitta district.

**SAMPLE AND SAMPLING TECHNIQUE**

Sample : Mothers of children less than 5 years who attended the Pediatric department.

Sample size: 150 mothers of children less than 5 years.

Sampling technique: Convenient sampling technique.

**DESCRIPTION OF THE TOOL**

Section A consist of demographic variables including age of mother, age of child, education of mother, occupation of mother, occupation of father, family income, residence, frequency of fever, history of febrile seizure, use of healthcare facilities.

Section B consists of 30 questions related to prevention of febrile seizure.

For Section B, score 1 was awarded for all the correct responses and score 0 was given for the wrong responses. The maximum score was 30.

**CONTENT VALIDITY**

Content validity may be defined as the extent to which an instrument’s content adequately captures the construct that is whether an instrument has an appropriate sample of items for the construct being measured. To establish content validity the tool along with objectives, operational definitions and criteria checklist was submitted to five experts from nursing education (Mental Health Department, Community Health Department, Child Health Department, Medical Surgical Department and Obstetrics and Gynecology Department). Suggestions and recommendations given by experts were accepted and necessary modifications were done. The research tool was finalized according to the expert’s opinion.

**DATA COLLECTION PROCESS**

Data collection is gathering the address of a research problem. The data was collected from MGM Muthoot Hospitals Kozhencherry. After obtaining a formal permission from the concerned authority from the hospital, pediatric OPDs and wards were selected as setting for data collection. Mother of under five children were selected on the basis of inclusion and exclusion criteria by convenience sampling technique. The study was conducted among mothers of under five children. The purpose of the study was explained. Data was collected using structured knowledge questionnaires. Written informed consent from the participants were obtained after explaining the need of the study. The confidentiality of the information was maintained. Demographic variables along with the questionnaire were administered by the investigator.

**PLAN FOR DATA ANALYSIS**
Data analysis is the technique used to reduce, organize, and give meaning to the data. Data analysis is planned based on the objectives of the study. After data collection, data were organized, tabulated and summarized by preparing master data sheet and using descriptive and inferential statistics manually using MS Excel, 2007 version. Frequency and percentage were used to define baseline data and knowledge scores. As the knowledge was in the ordinal data, non parametric test was adopted for the association of the knowledge scores with demographic variables Chi–square test was completed.

**FINDINGS OF THE STUDY**

Data analysis is condensed under the following heading

**SECTION A - Distribution of samples according to socio demographic data**

In the present study, the distribution of mothers of selected hospitals according to age revealed that 8% mothers were in the age group of 18-24, 62.6% mothers were the age group of 25-32, 22% mothers were in the age group of 33-40 and 7.33% mothers were in the age group of 41-48. Distribution of mother according to the age of child, 19.4% of children were in the age group of 0-1 year, 28% of children were in the age group of 1-3 years, 24% of children were the age group of 3-4 years and 28.6% of children were in the age group of 4-5. Distribution of mothers with reference of educational status, 17.4% were professionals, 57.3% were graduate, 24% were have high school certificate and 1.3% were have middle school certificate. Distribution of mothers according to occupational status, 1.4% of mothers were legislators, senior officials and managers, 17.4% of mothers were professionals, 2.6% of mothers were technicians, 2% of mothers were clerk, 0.6% of mothers were skilled workers, 2% of mothers were plant and machine operators and 74% of mothers were unemployed. Distribution of mothers according to occupational status of child father, 8.6% of fathers were legislators, senior officials and managers, 32.6% of fathers were professionals, 23.33% of fathers were technicians, 3.33% of fathers were clerk, 18% of fathers were skilled workers, 6% of fathers were craft and related trade workers, 2.66% of fathers were plant and machine operators, 2.66% of fathers were elementary occupation and 2.66% of fathers were unemployed. Distribution of mothers according to their residence, 25.4% were residing in urban areas, 30.6% were residing in semi urban areas, 27.4% were residing in rural area and 16.4% were residing in city. Distribution of the mothers according to their family income, 19.3% were having < 5000 rupees, 38% were having 5000-10000 rupees, 30.7% were having 10000-5000 rupees and 12% were having >50000 rupees. Distribution of mothers according to frequency of child fever, 17.4% of children were get fever very often, 18% of children were get fever often, 51.3% of children were get fever sometimes and 13.3% of children get fever rarely. Distribution of mothers according to the history of febrile seizures of their children, 13.3% of children were had febrile seizure and 86.7% of children were had febrile seizure. Distribution of mothers according to use of healthcare facilities, 6% of children were used Ayurveda, 24.66% of children were used Homeopathy, 68.66% of children were used Allopathy and 0.68% of children were consult other healthcare facilities.

**SECTION B - Assessment of the level of knowledge regarding prevention of febrile seizure among the mothers of under five children attending pediatric departments of selected hospitals.**
Description of self structured questionnaire to assess knowledge of mothers of regarding prevention of febrile seizure, 64.67% of mothers were having good level of knowledge, 30.65% of mothers were having moderate level of knowledge and 4.66% of mothers were having poor level of knowledge.

**SECTION C - Association of knowledge of mothers with demographic variables.**

The chi-square value show that there was a significant association between the knowledge scores of mothers in selected hospitals with age of mother and age of child, and has no association with educational status of mother, occupational status of mother, occupational status of father, place of residents, family income, frequency of fever, history of febrile seizure and use of health care facilities.

![Bar diagram showing distribution mothers based on their age.](image)

Figure 1: Bar diagram showing distribution mothers based on their age.

Figure 1 depicts that 8% of mothers belong to the age group of 18-24 years, 62.66% of mothers belong to the age group of 25-32 years, 22% of mothers belong to the age group of 33-40 years and 7.33% of mothers belong to the age group of 41-48 years.
Figure 2: Bar diagram showing distribution of mothers according to the age of child.

Figure 2 depicts that 19.33% of children were in the age group of 0-1 year, 28% were in the age group 1-2 years, 24% were in the age group of 2-3 years, 28.66% were in the age group of 4-5 years.

NURSING IMPLICATIONS

The findings of the present study generate some implications to the health care delivery system. It has implications in nursing practice, nursing administration, nursing education and nursing research.

Nursing practice

1) Nurses can increase the knowledge regarding prevention of febrile seizure among mothers and it help them to take appropriate measures for preventing the occurrence of febrile seizure.
2) Greater understanding of signs and symptoms of febrile seizure may facilitate prompt response and immediate health interventions.
3) Nurses should inform the mothers about the signs and symptoms and management, inorder to make a knowledgeable choice of alternatives.
4) Specific guidelines regarding prevention of febrile seizure should be implemented among the nurses.
5) Health education should be provided to the nurses in clinical area for the management of febrile seizure.

Nursing administration

1) Nurse administrator can encourage the nursing personnel to used most effective nursing.
2) Improve the knowledge level of staff nurses by conducting continuous nursing education programme.
Clinical nurse should prepare effectiveness of learning practices to provide information to the public.

Nursing education

1) The nurse can also act as an educator by educating the mother.
2) Nurse educator should focus on the needs of the patient, along with practice sections regarding the febrile seizures.
3) The knowledge level of student nurses, regarding the febrile seizures should be improved by conducting webinar, orientation programs, quiz competition.

Nursing research

1) The nurse researcher can work towards developing a tool to measure various dimensions in terms of knowledge, attitude and practice towards early identification and treatment of febrile seizures.
2) There is a need for research in this area so that the strategies for educating nurses regarding various aspects of prevention of febrile seizures.

CONCLUSION OF THE STUDY

The aim of present study was to assess the knowledge regarding prevention of febrile seizure among mothers of under five children in selected hospitals, Pathanamthitta. The findings of the study concluded that 97 mothers have good knowledge regarding prevention of febrile seizure. The mothers should be encouraged to enhance their knowledge on prevention and management of febrile.

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