

Knowledge and Home Management Practices Regarding Febrile Seizures among Parents of Children Aged 6 Months–5 Years in Selected Hospitals of Faridkot, Punjab

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ABSTRACT

Background: Febrile seizures are among the most common seizure disorders in young children and are often frightening for parents. Appropriate parental knowledge and safe home management are essential to reduce anxiety, prevent harmful practices, and promote timely healthcare seeking.

Objectives: To assess the knowledge and home management practices of parents of children aged 6 months–5 years with a history of febrile seizures and to determine their association with selected demographic variables.

Methods: A quantitative descriptive cross-sectional study was conducted among 70 parents of children aged 6 months–5 years with a history of febrile seizures who were admitted to pediatric wards or attended pediatric outpatient departments of selected hospitals in Faridkot, Punjab. Participants were selected using convenience sampling. Data were collected using a socio-demographic proforma, a 20-item self-structured knowledge questionnaire, and a 15-item self-structured home management practice checklist. Descriptive and inferential statistics, including the chi-square test, were used for analysis.

Results: The mean knowledge score was 13.46 ± 2.43 out of 20, with a mean percentage of 67.3%. Most parents (65.7%) had excellent knowledge and 34.3% had good knowledge; none had poor knowledge. The mean home management practice score was 10.70 ± 1.70 out of 15, with a mean percentage of 71.3%. Excellent practices were observed among 51.4% of parents and good practices among 48.6%; none had poor practices. Maternal education ($\chi^2=12.640$, $p=0.005$) and paternal education ($\chi^2=12.311$, $p=0.006$) were significantly associated with knowledge. Paternal education was significantly associated with home management practices ($\chi^2=14.707$, $p=0.002$).

Conclusion: Parents demonstrated generally good knowledge and home management practices regarding febrile seizures; however, important misconceptions and practice gaps persisted. Structured, practical, and culturally appropriate parental education should be incorporated into routine pediatric care, with particular attention to families with lower educational attainment.

Keywords: febrile seizures; parental knowledge; home management practices; children; pediatric nursing

INTRODUCTION

Febrile seizures are common neurological events in early childhood and typically occur in association with fever in otherwise neurologically healthy children. Although many febrile seizures are self-limiting, witnessing a seizure can cause intense fear and anxiety among parents. Inadequate knowledge may contribute to panic, delayed or inappropriate actions, and unsafe home practices. The thesis underpinning this article emphasizes that parents are often the first responders during a seizure episode; therefore, their ability to recognize the event, protect the child from injury, observe seizure characteristics, and seek timely medical care is important for safe management.

The available literature reviewed in the study indicates substantial variation in parental knowledge and first-aid practices across settings. While some parents demonstrate awareness of fever and safe positioning, misconceptions and harmful practices continue to be reported. Educational interventions have also been shown to improve parental knowledge and practical responses. These observations support the need to assess parental preparedness within the local context of Faridkot, Punjab.

The present study was therefore undertaken to assess knowledge and home management practices among parents of children aged 6 months–5 years with a history of febrile seizures attending selected hospitals in Faridkot, Punjab.

OBJECTIVES

1. To assess the knowledge of parents of children (6 months-5 years) with history of febrile seizures admitted in pediatric wards or attending pediatric OPD of selected hospitals, Faridkot, Punjab.
2. To assess the home management practices of parents of children (6 months-5 years) with history of febrile seizures admitted in pediatric wards or attending pediatric OPD of selected hospitals, Faridkot, Punjab.
3. To find out the association between the knowledge and home management practices with selected demographic variables.

MATERIALS AND METHODS

Research design and approach: A quantitative descriptive cross-sectional design was used.

Setting and participants: The study was conducted in the pediatric wards and pediatric outpatient departments of Guru Gobind Singh Medical College and Hospital (GGSMCH) and Civil Hospital, Faridkot, Punjab. The sample comprised parents of children aged 6 months–5 years with a history of febrile seizures.

Sample size and sampling: Seventy parents fulfilling the inclusion criteria were recruited using convenience sampling. Parents who did not consent and children with convulsions due to causes other than febrile seizures were excluded.

Tools: Tool I was a socio-demographic proforma covering child and family characteristics. Tool II was a 20-item self-structured questionnaire assessing knowledge; each correct response scored 1 and an incorrect response scored 0. Tool III was a 15-item self-structured checklist assessing home management practices, with 1 mark for each appropriate practice and 0 for an inappropriate response.

Validity and reliability: Content validity was established through review by nursing, pediatric medical, and language experts. Test–retest reliability coefficients were 0.98 for the knowledge tool and 0.97 for the home management practice tool.

Pilot study and data collection: A pilot study was conducted among 7 participants (10% of the sample), and the study was found feasible. Data for the main study were collected personally by the investigator from February to March using a paper-and-pencil method after obtaining informed written consent.

Ethical considerations: Ethical approval was obtained from the Institutional Research and Ethical Clearance Committee of Baba Farid University of Health Sciences, Faridkot. Administrative permissions were obtained from the relevant institutions. Written informed consent was obtained, and confidentiality and privacy were maintained.

Statistical analysis: Data were analyzed using SPSS version 18.0. Frequency, percentage, mean, standard deviation, and chi-square tests were used. Statistical significance was considered at $p < 0.05$.

RESULTS

Socio-demographic characteristics

Among the 70 children represented in the study, 60% were male. The largest age group was 49–60 months (34%). Most participants belonged to the Sikh religion (53%). Secondary education was the most common educational level among mothers (51%) and fathers (40%). Most families had two children (66%), and 39% reported a monthly family income of Rs. 18,859–31,436. The first febrile seizure occurred at 0–12 months in 56% of children, 26% reported a family history of seizures, and health personnel were the main source of information for 66% of parents.

Characteristic	Category	n (%)
Child age	49–60 months	24 (34.0)
Child gender	Male	42 (60.0)
Religion	Sikh	37 (52.9)
Mother's education	Secondary	36 (51.4)
Father's education	Secondary	28 (40.0)
Number of children	Two	46 (65.7)
Age at first seizure	0–12 months	39 (55.7)
Family history of seizures	Yes	18 (25.7)
Main information source	Health personnel	46 (65.7)

Knowledge regarding febrile seizures

The mean knowledge score was 13.46 ± 2.43 out of a maximum of 20, corresponding to a mean percentage score of 67.3%. Most parents had excellent knowledge, while the remainder had good knowledge; no parent was categorized as having poor knowledge.

Knowledge level	Score range	n	%
Excellent	13–20	46	65.7
Good	7–12	24	34.3
Poor	0–6	0	0.0

Home management practices

The mean home management practice score was 10.70 ± 1.70 out of a maximum of 15, with a mean percentage score of 71.3%. Excellent practices were observed among 51.4% of parents and good practices among 48.6%; none demonstrated poor practices.

Practice level	Score range	n	%
Excellent	11–15	36	51.4
Good	6–10	34	48.6
Poor	0–5	0	0.0

Important positive practices included keeping a record of the child's temperature during illness (88.6%), placing the child on a smooth and safe surface during a seizure (75.7%), and encouraging rest after the episode (85.7%). Areas requiring further attention included avoiding overheating during fever (51.4%) and educating other caregivers about seizure management (61.4%).

Association with demographic variables

Maternal education ($\chi^2=12.640$, $p=0.005$) and paternal education ($\chi^2=12.311$, $p=0.006$) were significantly associated with knowledge scores. Paternal education was also significantly associated with home management practices ($\chi^2=14.707$, $p=0.002$). Other assessed demographic variables did not show statistically significant associations with knowledge or practices at the 0.05 level.

Outcome	Significant demographic variable	χ^2	p value
Knowledge	Mother's educational status	12.640	0.005
Knowledge	Father's educational status	12.311	0.006
Home management practices	Father's educational status	14.707	0.002

DISCUSSION

The study found that most parents had excellent or good knowledge regarding febrile seizures. The relatively favorable knowledge level may be related to the fact that health personnel were the primary information source for approximately two-thirds of participants. Nevertheless, the item-wise findings identified persistent misconceptions, indicating that overall knowledge scores alone may not capture specific areas requiring education.

The findings regarding home management practices were also generally favorable. Most parents reported practices that promote child safety, including temperature monitoring and safe positioning. However, gaps remained in fever management and preparedness of other caregivers. These findings are important because safe responses during a seizure depend not only on general awareness but also on the ability to apply appropriate first-aid measures under stressful circumstances.

Parental education was an important factor in the present study. Both maternal and paternal education were significantly associated with knowledge, while paternal education was significantly associated with home management practices. These findings support the need for educational strategies that involve both parents rather than focusing only on mothers. Hospital-based counseling should therefore be practical, understandable, and adapted for families with different educational backgrounds.

The findings are broadly consistent with the studies reviewed in the thesis, which describe variation in parental knowledge and practices and support structured educational interventions. The persistence of

misconceptions despite generally favorable overall scores highlights the value of targeted education on specific first-aid actions, safe positioning, fever management, harmful practices to avoid, and indications for seeking emergency care.

CONCLUSION

Parents of children aged 6 months–5 years with a history of febrile seizures in selected hospitals of Faridkot demonstrated generally good knowledge and home management practices. Most participants were categorized as having excellent or good knowledge and practices, and no participant fell into the poor category. However, specific misconceptions and gaps in preparedness were identified. Parental educational status, particularly paternal education, was significantly associated with important study outcomes. Structured and practical education should therefore remain an integral component of pediatric care to strengthen safe and consistent home management of febrile seizures.

IMPLICATIONS FOR NURSING PRACTICE

1. Nurses should provide structured parent education on the recognition and immediate first-aid management of febrile seizures.
2. Counseling should specifically address misconceptions and potentially harmful practices.
3. Parents should receive practical guidance on safe positioning, injury prevention, observation of seizure duration, fever management, and when to seek emergency care.
4. Education should involve both mothers and fathers and should be adapted to the family's educational and language needs.

LIMITATIONS

1. The study was conducted among a relatively small sample of 70 parents.
2. The study was confined to selected hospitals in Faridkot, Punjab, limiting generalizability.
3. Convenience sampling may have introduced selection bias.
4. The study did not include qualitative methods that could have explored parental emotions, cultural beliefs, and fears in greater depth.

RECOMMENDATIONS

1. Develop structured education sessions in pediatric wards and outpatient departments.
2. Provide educational materials in locally understandable languages, including Punjabi and Hindi.
3. Use demonstrations and checklists to reinforce correct seizure first-aid practices.
4. Conduct larger multi-centre studies using probability sampling.
5. Evaluate the effectiveness of educational interventions through follow-up studies.

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