

ORIGINAL RESEARCH

# Addressing Health Challenges: Family Support and Management Strategies for Chronic Endogenous Infections in Children with Hyperthermia

Hu Di, MM; Xu Rong, BD; Peng Yan, BD; Zou Yuling, BD; Lei Feng, BD; Jin Youtian, MM

## ABSTRACT

**Objective** • This study aimed to investigate the disease characteristics of children admitted to the hospital with high fever on an emergency basis and assess the health needs of their family members. Additionally, it aimed to analyze nursing strategies focusing on the management of chronic internal infections.

**Method** • A total of 526 children with high fever admitted between December 2020 and December 2022 were included in the study. Among them, 368 (69.96%) were aged younger than six years, and the remaining 158 were aged between (6~18 years). The main health needs of family members were assessed using a questionnaire. The children were randomly assigned to control and observation groups, each comprising 263 cases. The control group received routine emergency nursing, while the observation group received advanced chronic nursing strategies focusing on internal infections. The study compared the time taken for temperature normalization, management of depression in children, the occurrence of negative emotions among family members and nurse-

patient disputes, nursing quality scores, satisfaction levels, health knowledge mastery rates, and nursing processing ability scores of family members between the two groups.

**Results** • The observation group exhibited significantly shorter time to temperature normalization and better depression management compared to the control group. Additionally, the observation group showed lower occurrences of negative emotions among family members and nurse-patient disputes, higher nursing quality scores and satisfaction levels, and better health knowledge mastery rates and nursing processing ability scores of family members ( $P < .05$ ).

**Conclusions** • Considering the rapid progression of conditions in emergently hospitalized children with high fever and the susceptibility of family members to various negative emotions, tailored chronic nursing strategies centered on internal infections can significantly enhance clinical diagnosis, reduce nurse-patient disputes, improve nursing quality, and elevate family nursing standards. (*Altern Ther Health Med.* [E-pub ahead of print.]

Hu Di, MM; Xu Rong, BD; Peng Yan, BD; Zou Yuling, BD; Lei Feng, BD; Jin Youtian, MM; First People's Hospital of Longquanyi District, Sichuan, Chengdu, P.R. China.

Corresponding author: Jin Youtian, MM  
E-mail: [qukkern667@126.com](mailto:qukkern667@126.com)

## INTRODUCTION

Hyperthermia, characterized by elevated body temperature, is a common clinical symptom in infants and children, often signaling the onset of various underlying illnesses.<sup>1</sup> Febrile seizures, a concerning complication, are particularly prevalent in this vulnerable population.<sup>1,2</sup> The inadequate understanding of the disease and the challenges in managing high fever often result in family members experiencing heightened worry, anxiety, and tension.<sup>2</sup> Upon admission to the emergency department, they urgently seek experienced healthcare professionals to address the situation.

Prompt measures are required to immediately normalize body temperature and minimize the need for invasive procedures such as venipuncture, infusion, blood draws, and imaging examinations.<sup>3</sup> Families of patients have high expectations for medical care. Failure to address these requirements adequately may lead to significant doctor-patient or nurse-patient disputes, thereby affecting clinical treatment.<sup>2,3</sup> However, in most general hospitals in China, emergency nursing faces challenges such as inadequate medical staffing, noisy healthcare environments, and numerous sources of infection. Consequently, medical treatment times are shortened, with excessive emphasis placed on treating the disease itself while overlooking the medical needs and physical well-being of children and their families.<sup>3</sup>

Traditional methods of temperature reduction for children admitted with high fever often lack efficacy, prompting the consideration of intravenous infusion as a safer alternative.<sup>4</sup> Considering this, the present study aimed

to investigate and analyze the disease characteristics of children with high fever admitted to the emergency department, as well as the healthcare needs of their families. Furthermore, the study examined the effectiveness of a main nursing strategy centered on intravenous infusion. The objective was to offer insights into enhancing the quality of emergency nursing and overall medical satisfaction.

## DATA AND METHODS

### Study Design

A cross-sectional survey study design was employed that involved the selection of 526 children presenting with high fever and admitted to the emergency department between December 2020 and December 2022. These children were then randomly assigned to either the control group or the observation group, with 263 cases allocated to each group based on the order of admission. This study obtained informed consent from family members, along with medical ethics approval from the ethical committee of our hospital.

### Baseline Characteristics of Participants

Among the 526 children included in the study, 368 (69.96%) were younger than 6 years old, and 158 (39.95%) were aged 6-18 years. Febrile seizures were reported in 147 cases (39.95%), and the admission temperature ranged from 38.5 to 43.5, with an average of ( $39.6 \pm 1.8$ ). The cohort comprised 280 boys and 246 girls. The causes of high fever were varied, with 120 cases classified as pure high fever, 46 cases as pneumonia, 300 cases as upper respiratory tract infections, 30 cases as viral encephalitis, and 25 cases as maculopapular rash.

### Baseline Characteristics of Family Members

In both the control and observation groups, the baseline data regarding family members were comparable ( $P > .05$ ). In the control group, the average number of family members per child was ( $2.4 \pm 1.1$ ), with 183 cases predominantly comprising parents, 80 cases comprising grandparents, and 140 cases with a college degree or above. Similarly, in the observation group, the average number of family members per child was ( $2.3 \pm 1.2$ ), with 173 cases predominantly comprising parents, 90 cases comprising grandparents, and 130 cases with a college degree or above. The baseline characteristics of family members in both groups did not differ significantly ( $P > .05$ ).

### Inclusion and Exclusion Criteria

Inclusion criteria were as follows: (1) Children aged 1-18 years; (2) Onset time of less than 3 days; (3) Absence of serious combined diseases, such as congenital developmental abnormalities and immune function defects; (4) Capability to complete treatment and nursing management according to the grouping requirements; (5) Provided informed consent; (6) Presence of complete clinical data. Exclusion criteria were as follows: (1) Serious illness requiring admission to the intensive care unit; (2) Poor compliance among family

members, leading to requests for transfer to another hospital or department midway.

### Initial Treatment Protocol

Upon admission, the same team of doctors and nursing staff managed the entire diagnostic and treatment process for both groups of children. They promptly conducted thorough examinations, comprehensively assessed the patients' conditions, and initiated appropriate treatment measures.

### Routine Emergency Care for the Control Group

The control group underwent standard emergency care, which primarily involved assisting with various examinations, performing venipuncture, monitoring body temperature, conveying examination results to physicians, adhering to the prescribed infusion treatment, providing guidance on physical methods for reducing body temperature, actively preventing, and managing infant convulsions, and addressing the emotional needs of family members.

### Nursing Strategy for the Observation Group

The observation group implemented a comprehensive nursing strategy centered on intravenous infusion, comprising the following key components:

**Family Needs Assessment.** Utilizing questionnaires to assess the primary health needs of family members. It included evaluating their understanding of the disease, previous experiences with managing high fever at home, ability to identify potential causes of high fever in children, awareness of the benefits and drawbacks of rapid cooling methods, vigilance in monitoring disease progression, levels of anxiety or depression, and expectations regarding the competency of medical staff.

**Targeted Nursing Interventions.** Based on the specific needs of individual patients, tailored nursing interventions were implemented: (1) Management of febrile seizures: children experiencing febrile seizures required immediate attention to stabilize their family's emotions. Providing reassurance that febrile convulsions are typically benign and do not lead to serious neurological complications was essential. Emphasis was placed on symptomatic treatment, with a focus on preventing recurrence post-discharge; (2) Temperature management: different temperature levels warranted specific cooling measures. For temperatures above 38.5°C, methods such as undressing were employed to dissipate heat. Warm water baths were utilized for temperatures above 32.5°C, while temperatures exceeding 39°C necessitated the use of ice or cold water bags in addition to medication for temperature reduction.

(3) Comfort measures: attention was given to maintaining comfort during episodes of shivering, ensuring warmth to the feet, and promptly replacing damp clothing and bedding post-fever reduction and sweating; (4) Emotional support: efforts were made to soothe children's emotions and minimize crying episodes, providing a calm and reassuring environment; (5) Nutritional guidance: correct breastfeeding techniques were

emphasized for infants, while older individuals were advised to consume light, easily digestible foods.

**Management of Convulsions.** When a convulsion occurs, specific interventions were employed to ensure the safety and well-being of the individual: (1) Positioning and airway management: The person experiencing the convulsion was placed in a supine position, with the collar loosened to facilitate breathing. Additionally, the head was gently turned to one side to prevent airway obstruction and any oral secretions were cleared to maintain airway patency.

(2) Protection from tongue bite: to prevent injury from tongue biting during the convulsion, a clean cloth strip was wrapped around chopsticks and placed between the upper and lower teeth of the child; (3) Observation and support: convulsions typically subsided within seconds or minutes. Following remission, close observation was maintained to monitor for any unconsciousness or related complications. However, targeted interventions were not typically necessary beyond this point.

**Intravenous Infusion Management.** Management of intravenous infusion involved several key steps to ensure safety and efficacy: (1) Assessment for infection risk: white blood cell count, neutrophil count and percentage, and lymphocyte count and percentage in the blood routine were evaluated to assess the risk of bacterial or viral infection. If necessary, appropriate anti-infective or antiviral treatment was initiated. Drugs with minimal toxicity, proven efficacy, and short treatment courses were selected, with consideration given to any history of allergies. Skin testing was conducted to mitigate the risk of severe drug allergic reactions.

(2) Selection of venipuncture site: a suitable venipuncture site, such as the scalp vein or dorsalis pedis vein, was identified to facilitate intravenous access. Family members were instructed to provide close care to prevent dislodgement or displacement of the puncture needle, which could increase the difficulty of re-puncture and cause discomfort to the child; (3) Training in intravenous care: family members were guided in mastering nursing skills related to intravenous indwelling needles. This strategy included instructions on avoiding friction and soaking, performing regular disinfection, and preventing the occurrence of local dermatitis to ensure the integrity and functionality of intravenous access.

**Health Education.** Health education played a crucial role in equipping family members with the necessary knowledge and skills to manage emergency high fever situations effectively: (1) Visual instruction: information regarding the treatment process for high fever emergencies was conveyed to family members through easily understandable and diverse formats such as videos and pictures. These visual aids aimed to enhance trust and understanding among family members. Each aspect of the treatment process was carefully explained, and feedback from family members was solicited and addressed promptly to ensure satisfaction and rectify any misunderstandings.

(2) Complete guidance: treatment strategies for high fever resulting from various causes were scientifically presented to family members. Emphasis was placed on

empowering them to prevent high fever occurrences at home and administer early treatment when necessary. By imparting comprehensive knowledge and practical skills, family members were better equipped to address high fever emergencies confidently and effectively.

### Observation Indexes

**Assessment of Recovery Time.** The recovery time, encompassing both the normalization of body temperature and the control of convulsions, was accurately observed, and carefully analyzed. Timelines for these crucial physiological responses were precisely documented and subjected to thorough scrutiny. This comprehensive assessment sheds light on the effectiveness of the interventions deployed in managing high fever and associated complications.

**Emotional Impact.** The incidence of negative emotions among family members and the occurrence of nurse-patient disputes were monitored as indicators of emotional well-being and interpersonal interactions. The negative emotions experienced by family members, encompassing tension, preference, anger, worry, anxiety, and depression, are comprehensively assessed through both subjective and objective methodologies.

**Nursing Quality and Satisfaction.** The quality of nursing care provided to the children was evaluated through scoring systems, with particular emphasis on adherence to established protocols and patient satisfaction. Nursing quality and satisfaction are evaluated using a survey scale comprising five dimensions: service image and awareness, working ability, ward management, health education, and care and communication. Scores range from 0 to 100, with 80-100 indicating high satisfaction, 60-80 indicating moderate satisfaction, and below 60 indicating dissatisfaction.

**Health Knowledge.** The level of understanding and mastery of health-related knowledge by family members was assessed to determine their preparedness to manage similar situations in the future. Family health knowledge was assessed through a survey scale covering various aspects such as disease understanding, home fever management, identification of fever causes in children, and awareness of rapid cooling techniques, with a total score of 20. Higher scores indicate better understanding.

**Nursing Proficiency.** Nursing proficiency was evaluated based on skills in physical cooling, medication administration for fever reduction, post-sweating heat preservation, and management of febrile seizures, with a maximum score of 100. Higher scores reflect greater proficiency in nursing interventions. Family members' proficiency in carrying out nursing procedures, such as administering medications and managing medical equipment, was evaluated to determine their capability to provide adequate care.

### Statistical Analysis

Statistical analysis was performed using SPSS version 20.0 software (International Business Machines, Corp., Armonk, NY, USA). Continuous variables were presented as mean  $\pm$  standard deviation ( $\bar{x} \pm s$ ) and compared using the *t*

**Table 1.** Comparison of Temperature Recovery and Convulsion Control Between Study Groups ( $\bar{x} \pm s$ )

Group	Number of Cases	Body Temperature Returned To Normal (H)	Convulsion Control (min)
Control Group	263	26.8 ± 7.4	2.9 ± 0.5
Observation Group	263	21.3 ± 6.7	2.3 ± 0.4
<i>t</i> value		5.234	3.562
<i>P</i> value		.000	.004

Note: Values are presented as mean ± standard deviation ( $\bar{x} \pm s$ ). *t* value and *P* value were calculated using the *t* test to compare the groups.

**Table 2.** Comparison of Incidence of Negative Emotions and Nurse-Patient Disputes Between Study Groups [n (%)]

Group	Number of Cases	Negative Emotions	Nurse Patient Disputes
Control Group	263	28 (10.6)	15 (5.7)
Observation Group	263	15 (5.7)	6 (2.3)
$\chi^2$ -value		4.280	4.018
<i>P</i> -value		.039	.045

Note: The values in parentheses represent percentages. The statistical significance level was set at  $P < .05$ .

**Table 3.** Comparison of Nursing Quality Score and Satisfaction Levels between the Two Groups [n (%)]/ ( $\bar{x} \pm s$ )

Group	Number of Cases	Quality Score	Perfect Contentment	Commonly	Dissatisfied
Control Group	263	80.5 ± 16.4	206 (78.3)	40 (15.2)	17 (6.5)
Observation Group	263	87.2 ± 12.3	225 (85.6)	30 (11.4)	8 (3.0)
<i>t</i> / $\chi^2$		5.124	4.638		
<i>P</i> value		.000	.031		

Note: Values are presented as mean ± standard deviation ( $\bar{x} \pm s$ ) for quality score and as [n (%)] for satisfaction levels. The statistical significance level was set at  $P < .05$ .

**Table 4.** Comparison of Health Knowledge Mastery Rate and Nursing Processing Ability Score between the Two Groups [n (%)]/ ( $\bar{x} \pm s$ )

Group	Number of Cases	Health Knowledge	Nursing Processing Ability
Control Group	263	218 (82.9)	74.6 ± 13.8
Observation Group	263	235 (89.4)	82.3 ± 10.5
<i>t</i> / $\chi^2$		4.597	12.326
<i>P</i> value		.032	.000

Note: Values are presented as [n (%)] for health knowledge mastery rate and as mean ± standard deviation ( $\bar{x} \pm s$ ) for nursing processing ability score. The statistical significance level was set at  $P < .05$ .

test. Categorical variables were expressed as counts and percentages [n (%)] and analyzed using the chi-square test ( $\chi^2$ ).  $P < .05$  was considered statistically significant, indicating a notable difference between groups.

## RESULTS

### Comparison of Temperature Recovery and Convulsion Control

The observation group exhibited significantly shorter temperature recovery and convulsion control times compared to the control group ( $P < .05$ ). Please refer to Table 1 for detailed data analysis.

### Comparison of Negative Emotions and Nurse-Patient Disputes

The observation group exhibited a significantly lower incidence of negative emotions and nurse-patient disputes compared to the control group ( $P < .05$ ), as depicted in Table 2.

### Comparison of Nursing Quality Score and Satisfaction

The nursing quality score and satisfaction levels were notably higher in the observation group compared to the control group ( $P < .05$ ), as illustrated in Table 3.

### Comparison of Health Knowledge Mastery Rate and Nursing Processing Ability Score

The observation group exhibited a significantly higher health knowledge mastery rate and nursing processing ability score among family members compared to the control group ( $P < .05$ ), as indicated in Table 4.

## DISCUSSION

The psychological characteristics of family members of children with high fever significantly influence their health needs. The progression and outcome of a child's illness, particularly when marked by heightened tension, can exacerbate the stress experienced by family members even more than the child's crying. Moreover, a preference mentality, characterized by a strong desire for priority care, can lead to conflict if any delays in diagnosis, treatment, or nursing care are perceived.<sup>4</sup>

In general, if a high fever persists for more than two days without improvement, it can trigger feelings of anger among family members. They may begin to question the competency of doctors and nurses, increasing the likelihood of considering transferring the patient to another hospital, which could potentially delay necessary treatment. Additionally, there is often excessive concern about the possibility of recurrence and the development of long-term sequelae. Consequently, family members may expect doctors and nurses to provide repeated assurances or conduct frequent checks.<sup>5-7</sup>

Therefore, this study carefully identified the primary health requirements of family members caring for children with high fever through comprehensive questionnaires. Subsequently, it employed a holistic nursing approach tailored to address these needs. This strategy encompassed aspects such as prompt temperature reduction, disease management, health education, and enhancing the caregiving skills of family members. By adopting this comprehensive approach, the study aimed to enhance the quality of medical care provided to both children and their families, thereby elevating the standard of nursing services.<sup>8</sup>

The research findings indicated a notable reduction in the duration required for temperature normalization and convulsion management within the observation group. In a similar study, Xiaoyunzhen et al.<sup>9</sup> emphasized the great importance of devising an emergency health education model for children susceptible to febrile seizures. Such an approach holds considerable promise in enhancing family members' understanding and adeptness in managing the condition, therefore mitigating tensions between medical practitioners and patients.

Xielenyan et al.<sup>10</sup> conducted an analysis revealing that family-centered nursing interventions for children experiencing febrile seizures result in several favorable

outcomes. These interventions include shortened temperature recovery times, reduced seizure recurrence rates, and enhanced satisfaction among family members regarding the quality of nursing care. Moreover, Yanjingjing<sup>11</sup> demonstrated that implementing high-quality nursing interventions for children afflicted with febrile seizures leads to significant improvements in acute symptoms and alleviates various negative emotions experienced by family members.

Previous studies often provide fragmented insights, focusing on isolated aspects of the topic. In contrast, our study adopted a comprehensive approach, investigating the disease characteristics of children admitted to the emergency department with high fever and assessing the associated health needs of their families. Moreover, it examined the effectiveness of implementing key nursing strategies to address these multifaceted needs.

The study revealed a decrease in the incidence of negative emotions and nurse-patient disputes among family members, along with an improvement in nursing quality scores and satisfaction levels. Additionally, there was an increase in the health knowledge mastery rate and nursing processing ability score of family members. By conducting a thorough investigation into the disease characteristics of children and addressing the specific health needs of their families, the study facilitated more tailored nursing interventions. This targeted approach not only enhanced the efficiency of nursing practices but also alleviated the need for unnecessary comprehensive nursing processes.<sup>12</sup>

We aimed to achieve multiple objectives through addressing the health needs of family members and supporting health education initiatives. Firstly, this approach allows for a better understanding of the treatment procedures within emergency nursing, thereby enhancing the overall doctor-patient relationship.<sup>13</sup> Moreover, it serves to disseminate essential knowledge regarding the onset, treatment, remission process, and prognosis of febrile illnesses. This increased awareness and mastery of health-related information are crucial for both preventing and intervening in febrile diseases, particularly convulsions, post-discharge.<sup>14</sup>

Family members were guided to monitor temperature changes and observe alterations in children's mood, diet, and behavior, enabling the timely identification of potential complications, which could then be promptly reported to medical staff. They were also instructed in various physical cooling and thermal insulation measures.<sup>15</sup> Active cooperation with treatments, examinations, and invasive procedures was emphasized to minimize the risk of missed diagnosis or misdiagnosis.<sup>16</sup> The study particularly underscored the holistic nursing strategy centered on intravenous infusion, which was viewed as indispensable for children with high fever and served as a primary focus in nursing care.<sup>17</sup>

Our findings suggest that children presenting with high fever in the emergency department often undergo rapid deterioration of their condition, eliciting a range of negative emotions among their families. Furthermore, these children

exhibit diverse health requirements, thereby complicating the nursing approach. However, the adoption of a comprehensive nursing strategy centered on intravenous infusion demonstrates notable efficacy. This holistic approach, specifically tailored to address internal infection, results in several beneficial outcomes. Primarily, it markedly improves the clinical prognosis of children, facilitating quicker normalization of body temperature and more effective convulsion control compared to conventional emergency nursing methods.

Moreover, the adoption of this strategy resulted in decreased occurrences of nurse-patient conflicts and mitigates the adverse emotional effects experienced by family members. Additionally, there is a marked enhancement in the quality of nursing care, as reflected by elevated nursing quality scores and heightened levels of satisfaction among both patients and their families. Notably, there is a noticeable increase in the mastery rate of healthcare knowledge among family members, coupled with an enhancement in their proficiency in providing nursing assistance.

Our outcomes emphasize the significance of personalized nursing interventions tailored to meet the unique demands of cases involving emergent high fever situations. Implementing a chronic nursing strategy focused on addressing internal infection results in significant improvements in healthcare outcomes. This approach not only enhances the clinical prognosis of children but also reduces instances of nurse-patient conflicts, improves nursing quality, and enhances the caregiving skills of family members. Overall, these findings underscore the valuable application and positive impact of tailored nursing strategies in the healthcare setting.

### Study Limitations

Several limitations should be acknowledged in this study. Firstly, the sample size was relatively small, which may limit the generalizability of the results to a broader population. Additionally, the study was conducted at a single medical facility, potentially limiting the applicability of the findings to other healthcare settings. Furthermore, the study primarily relied on self-reported data from participants and their families, which introduces the possibility of recall bias and subjective interpretation. Moreover, the duration of follow-up may not have been sufficient to capture long-term outcomes and effects. Finally, as with any observational study, there may be unaccounted confounding variables that could influence the observed associations. Therefore, cautious interpretation of the results is warranted, and future research with larger sample sizes and diverse settings is needed to validate and expand upon these findings.

### CONCLUSION

In conclusion, this study underscores the significance of implementing a comprehensive nursing strategy centered on internal infection for children with high fever in the emergency department. The findings demonstrate that this

approach leads to significant improvements in clinical outcomes, including faster temperature recovery and better convulsion control. Moreover, it reduces nurse-patient conflicts, enhances nursing quality, and increases the healthcare knowledge and skills of family members. These results highlight the importance of tailored nursing interventions to address the specific needs of patients and their families in emergency healthcare settings. In the future, further research with larger sample sizes and diverse settings is warranted to validate these findings and optimize nursing care for pediatric patients with high fever.

#### COMPETING INTERESTS

The authors report no conflict of interest.

#### FUNDING

None.

#### ACKNOWLEDGEMENTS

None.

#### AVAILABILITY OF DATA AND MATERIALS

The data that support the findings of this study are available from the corresponding author upon reasonable request.

#### REFERENCES

1. Rosenfeld Yehoshua n, Barkan s, Abu kishk I, et al. hyperpyrexia and high fever as a predictor for serious bacterial infection (SBI) in children-a systematic review. *Eur J Pediatr*, 2018, 177 (3): 337-344. doi:10.1007/s00431-018-3098-x.
2. Cui QY, Meng HH, Liao SX. Effect of clinical nursing pathway on prognosis of children with severe pneumonia and febrile seizures and negative emotions of parents. *General Practice Nursing*. 2018;16(19):2341-2343.
3. Liu LH, Guo YJ, Zhang XY. Influencing factors and effective nursing measures of febrile seizures in children. *Hainan Medical Journal*. 2018;29(16):2361-2363. doi:10.36106/ijst/6820602
4. Alateeq nm, albader Bo, Al howti sy, et al. parent's knowledge and practice in home management of fever in their children in Riyadh, Saudi arabia. *J family Med prim care*, 2018,7 (5): 1012-1018. doi:10.4103/jfmpc.jfmpc\_18\_18.
5. Shi YM, Zhang XQ, Shi HM, et al. The influence of the whole green channel nursing path on the first aid effect, complications and family satisfaction of children with febrile seizures in the emergency department. *general nursing*, 2019,17 (03): 298-300.
6. Liu XH. Evaluation of the application value of nursing intervention in children with febrile seizures. *China Health Standard Management*. 2018;9(14):186-188. doi:10.1097/00006565-198812000-00030
7. Wei F, Wen FQ, Yang WG, Zheng YJ. [Clinical features of children with influenza and plastic bronchitis: an analysis of 63 cases]. *Zhongguo Dang Dai Er Ke Za Zhi*. 2020;22(10):1105-1108.
8. Li N. Clinical application effect of personalized nursing in the nursing of children with severe pneumonia and febrile seizures. *China practical medicine*, 2018,13 (32): 170-172.
9. Xiao YZ, Luo YX, Su YQ, et al. Exploration of emergency health education mode for children with febrile seizures. *Integrated traditional Chinese and Western medicine nursing*, 2018,4 (9): 137-139.
10. Xiao S. Application Effect of Comprehensive Nursing Intervention in Nursing Children with Febrile Convulsion. *Paediatr Child Health*. 2020;1:1-5. doi:10.23977/PEDCH.2020.010101
11. Yan JJ. Effect of high quality nursing intervention on the improvement of symptoms of children with febrile seizures and the emotional state of their families. *Medical Equipment*. 2018;31(12):184-185.
12. Cao ML. Effect analysis of targeted emergency nursing mode in the emergency nursing of children with febrile seizures. *Syst Med (New Rochelle)*. 2018;3(23):179-181.
13. Wang J, Guo YJ, Guan RY. Study on clinical nursing methods and effects of febrile seizures in children. *Inner Mongolia Medical Journal*. 2019;51(01):113-114. doi:10.4094/jkachn.2010.16.4.277
14. Hu C, Wang L, Huo GG, et al. Health education effect of homemade propaganda video + popular science video on children's families. *China Medical Herald*. 2018;15(2):140-142.
15. Liang LH, Chen YY. Analysis of the application of pre hospital first aid nursing in children with febrile seizures by the same route. *General Nursing*. 2018;16(36):4552-4553. doi:10.4314/aipm.v10i2
16. Mao YH, Liu Y, Jiang XY, Ji Y. Application of cluster management strategy in emergency nursing of children with febrile seizures. *Integrated traditional Chinese and Western Medicine Nursing (Chinese and English)*, 2019,5 (01): 126-128.
17. Zhang LL. Clinical application of personalized nursing in the nursing of children with severe pneumonia and febrile seizures. *Chinese Medical Guide*. 2019;17(02):243-244.