Pediatrics and Child Health (2020) 1: 1-5
Clausius Scientific Press, Canada

DOI: 10.23977/pedch.2020.010101
ISSN 2616-3608

Application Effect of Comprehensive Nursing Intervention in Nursing Children with Febrile Convulsion

Shan Xiao

Neonatal Intensive Care Unit, Jingzhou Central Hospital, Jingzhou, Hubei,China.

Keywords: Child, Febrile Convulsion, Comprehensive Nursing, Nursing Effect

Abstract: Objective: To observe clinical effect of comprehensive nursing intervention of children with febrile convulsion. Method: The 60 children with febrile convulsion who were received and treated in our hospital from January 2018 to March 2019 were classified into 2 groups with single blind method, and each group included 30 cases. Basic nursing was used to intervene in the control group, while the observation group received comprehensive nursing intervention. The nursing effect and nursing satisfaction of family members of two groups were compared. Results: The time of convulsion stop and fever abatement of observation group was shorter than that of control group; the frequency of convulsion occurrence was lower than that of control group; nursing satisfaction of family members was higher than that of control group, $P<0.05$. Conclusion: The effect of comprehensive nursing intervention on children with febrile convulsion is obvious.

1. Introduction

Sousa Cristina Silva et al. [1] indicated that when the children with febrile convulsion fail to treat in time, convulsion duration will extend, and frequent convulsion will injure children's brain and even endanger their intelligence development, demonstrating that it is especially important to treat and nurse the children with febrile convulsion. Generally, it is not just necessary to treat the children with febrile convulsion in time rationally, but also to offer scientific and proper nursing services for them, control the disease as early as possible and promote favourable prognosis [2-3]. 60 children with febrile convulsion were classified into control group and observation group with single blind method, and different nursing schemes were provided for them to explore clinical effect and application value of comprehensive nursing intervention.

2. Data and method

2.1. General method

The research period is from January 2018 to March 2019. The method of random number table was employed to choose 60 children with febrile convulsion received and treated in our hospital, and the single blind method was used to classify them into two groups. Each group had 30 cases. In the

observation group, there were 19 boys and 11 girls, and they were 0.8-5 years old, with the average age of 3.0±0.6. In the control group, there were 20 boys and 10 girls, and they were 0.9-6 years old, with the average age of 3.2±0.4. The comparison of general data of two groups had no difference, P ＞0.05.

2.2. Nursing method

Control group: basic nursing: emergency care was implemented immediately when the patient was hospitalized, and the patient was placed on the sickbed in the supine position. Besides, the head faced one side, and the collar was unbuttoned to clear the dirt in oral cavity carefully. The patient was asked to inhale oxygen in time, and the mouth gag was given to the patient with slightly closed mandibular joint in the convulsion period. The patient was given medication as directed to control clinical symptoms in time and promote reduction of body temperature as early as possible [4-6].

Observation group: comprehensive nursing: (1) propaganda and education of febrile convulsion knowledge: communicate with the family members of children with febrile convulsion, tell them the reasons for the febrile convulsion, let them know clinical treatment means and nursing scheme, eliminate the worry, relieve negative emotion of family members, make them more actively cooperate in each treatment and nursing, urge family members to feed back any abnormal conditions to medical staff, and ensure smooth implementation of various kinds of nursing work. (2) Fever nursing: give timely cooling treatment for the child, wet the forehead and underarms with a cold towel, give the child proper sponge bath, and accelerate heat dissipation with proper physical cooling methods. Measure the body temperature gently at the interval of 4h. If the situation is severe, follow the doctor's advice to give the child appropriate febrifuge. Keep an eye on the child’s perspiration after medication, supplement water for the child in time to correct the disturbance of water and electrolyte. The children in the hyperpyrexia period have a high risk of thirst, so it is required to enhance thirst to prevent oral infection. (3) Respiratory tract nursing: it is especially crucial to keep respiratory tract smoothness in the period of febrile convulsion. In case of febrile convulsion, make the head face one side, unbutton the clothes and trousers, clear the dirt in the mouth to avoid inhalation. Pay close attention to the child’s tongue, and pull out it at once in case of glossoptosis to ensure breathing smoothly and avoid tongue damage during convulsion. In case of dyspnea, provide oxygen immediately. (4) Observation of vital signs: closely monitor the changes of child’s pulse, heart rate, breath, blood pressure and oxyhemoglobin saturation, observe and record the performance during convulsion, feed the records back to the doctor and provide proper treatment. Closely observe the child’s state of consciousness, avoid drug influence and enhance nursing to prevent falling off the bed.

2.3. Evaluation index and criterion

Convulsion stop, frequency and fever abatement time of 60 patients were observed. The self-made scale was used to survey nursing satisfaction of family members, including four parts: propaganda and education of febrile convulsion knowledge, fever nursing, respiratory tract nursing, and vital sign observation, the score of each part is 25 points. Nursing satisfaction is equal to the sun of the scores of the above four parts, with the total score of 100.

2.4. Statistical method

SPSS 24.0 software was chosen. Enumeration data were expressed with (%), and the statistical significance was tested with chi-square test. Measurement data were expressed with ($\bar{x} \pm s$), and statistical significance was tested with t test. $P < 0.05$ means the difference has statistical significance.

3. Results

3.1. Convulsion stop, frequency and fever abatement time of 2 groups

Based on the statistical calculation, convulsion stop and fever abatement time of observation group was shorter than that of control group, and the frequency of convulsion was lower than that of control group, $P < 0.05$, as shown in Table 1.

Table 1 Comparison of convulsion stop, frequency and fever abatement time ($\bar{x} \pm s$)

Group	Convulsion stop time (s)	Frequency of convulsion (times)	Fever abatement time (d)
Observation group	34.0±1.3	3.0±0.5	1.4±0.6
Control group	58.6±1.5	5.3±0.2	4.0±0.8
t	67.881	23.393	14.241
P	0.000	0.000	0.000

3.2. Comparison of nursing satisfaction of 2 groups

Based on the statistical calculation, nursing satisfaction of observation group was higher than that of control group, $P < 0.05$, as shown in Table 2.

4. Discussion

The children in the infant period often suffer febrile convulsion, and many children will have fever to different degrees. Such case generally occurs in the early stage of upper respiratory tract infection and other infectious diseases. The body temperature of children can exceed 38.5℃, thus easily leading to convulsion[7].

Some studys indicated that the children with febrile convulsion would also suffer convulsion of the limbs, except the body temperature exceeding 38℃[8-9] . Besides, they will lose consciousness in the convulsion process, and the symptoms of glassy eyes and lip darkening are severe. They are often accompanied with severe arm and leg twitch, and rigidity. Since conventional nursing mainly

provides basic nursing, the pertinence of nursing content is poor, and nursing activeness is low. it cannot play an optimal role for the children with febrile convulsion[10]. The convulsion and fever abatement time of the children receiving comprehensive nursing was short, and the frequency of convulsion was low. Meanwhile, the high nursing satisfaction was gained. The comprehensive nursing content pays attention to health and disease knowledge education for family members to enhance the popularity of disease conditions among family members and eliminate negative mood of family members so that they can better cooperate in clinical treatment and nursing. The fever nursing can reduce the body temperature of children as early as possible to avoid irreversible damage caused by high temperature. Then, respiratory tract nursing can be adopted to keep children's breath smoothness and stability to avoid dyspnea, which also plays a positive role for disease recovery. Vital sign observation can ensure children's vital signs are closely monitored. As well, abnormal conditions can be found in time so that they can be handled in time. Meanwhile, it is required to enhance observation of the medication of children and anti-falling.

Table 2 Comparison of nursing satisfaction of 2 groups ($\bar{x} \pm s$, point)

Group	Propaganda and education of febrile convulsion knowledge	Fever nursing	Respiratory tract nursing	Vital sign observation	Nursing satisfaction
Observation group	23.0±0.5	23.8±0.5	23.7±0.3	23.5±0.7	94.5±2.3
Control group	19.3±0.7	19.5±0.6	19.7±0.4	19.0±0.2	82.0±2.5
t	23.558	30.155	43.818	33.856	20.154
P	0.000	0.000	0.0000	0.000	0.000

In conclusion, comprehensive nursing intervention has very significant application effect and value on the children with febrile convulsion, and also owns very good promotion value in terms of disease treatment and nursing satisfaction.

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