Effect of Quality Nursing Intervention on Atomization Inhalation Safety and Compliance in Children

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Abstract: Objective: to Analyze the Actual Impact of Quality Nursing Intervention on the Safety and Compliance of Children's Atomization Inhalation Therapy, Build a Harmonious Nursery-Patient Relationship, Further Improve the Nursing Service Level, and Boost the Sustainable Development of Modern Medical Cause. Methods: a Total of 100 Pediatric Patients Who Received Atomization Inhalation Therapy in Our Hospital from September 2018 to September 2019 Were Selected. after Communicating with Their Families, They Were Divided into Control Group and Study Group According to the Principle. 50 Children in Each Group Were Divided into Control Group and Study Group. the Therapeutic Effects of Atomization Inhalation Were Compared between the Two Groups, and Then the Therapeutic Compliance, Nursing Satisfaction and Incidence of Adverse Reactions Were Counted. Results: the Study Group Adopted High-Quality Nursing Intervention, Children Nebulization Inhalation Treatment Effect, Compliance, Nursing Satisfaction, Etc. Are Better Than Conventional Nursing Intervention in the Control Group of Children; the Incidence of Adverse Reactions Was 4.71% in the Study Group and 22.39% in the Control Group. Conclusion: after the High-Quality Nursing Intervention, the Atomization Inhalation Safety of Children is Higher, the Implementation of Diagnosis and Treatment Plan Becomes Efficient, and the Life Safety of Children Patients is Guaranteed. in Order to Provide Favorable Conditions for the Formation of Harmonious Nurse-Patient Relationship, the Hospital is Expected to Establish a Good Social Image.

1. Introduction

Atomization Inhalation is the Use of High-Speed Oxygen Airflow, the Liquid into a Fog, through the Respiratory Tract into the Body, So as to Play a Special Treatment Effect. Atomization Inhalation is Generally Used for the Treatment of Respiratory Tract Infection and Anti-Inflammatory Treatment, and Has Played a Role in Reducing Swelling and Removing Phlegm. When Children Receive Atomization Inhalation Treatment, They Are Prone to Fear, Crying and Excessive Struggle, Which Will Affect the Actual Treatment Effect. from the Perspective of Nursing Intervention, the Nursing Staff Should Adopt Some Effective Measures to Improve the Safety and Compliance of Atomization Inhalation for Children, and Make the Family Rest Assured and Trust More in Diagnosis and Treatment Services and Nursing Management. This Experiment Specifically Analyzed the Influence of High-Quality Nursing Intervention on the Safety and Compliance of Children's Atomization Inhalation, and the Research Report Was Summarized as Follows:

2. Materials and Methods

2.1 General Materials

A total of 100 pediatric patients who received atomization inhalation therapy in our hospital from September 2018 to September 2019 were selected. After communicating with their families, they were divided into control group and study group according to the principle. 50 children in each group were divided into control group and study group. Among them, there were 36 male children and 14 female children in the control group, the age range of the children was 1-10 years old, and

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the average age was (5.94 ± 2.27) years old. There were 31 male children and 19 female children in the study group, the age range of the children was 3-12 years old, and the average age was (6.37 ± 2.50) years old.

- 1) disease type: 100 pediatric patients included 28 cases of bronchitis, 27 cases of chronic inflammation, 20 cases of tonsillitis, 16 cases of asthma, and 9 cases of other types of respiratory diseases.
- 2) inclusion criteria: all the children met the treatment conditions of "atomization inhalation". Family members voluntarily participated in the investigation and research activities and signed the informed consent. There was no statistical significance in other data except age, gender and condition between the two groups (p>0.05). Assign good nursing staff, do all the preparatory work.
- 3) exclusion criteria: exclusion of children with serious diseases, malignant tumors, severe drug allergies, family members who do not cooperate with the work or even interfere with the implementation of the nursing plan.

2.2 Nursing Methods

The 50 children in the control group were given routine nursing intervention during atomization therapy, including medication guidance, ward inspection and monitoring of their vital signs. The research group focused on quality nursing intervention, and added the following nursing care on the basis of routine nursing:

- 1) Effective psychological care before atomization inhalation therapy must be given appropriate language encouragement according to the psychological characteristics, cognitive characteristics and age characteristics of different children, so as to improve their anxiety, anxiety, tension and other negative emotions. When communicating with the family, understand the children like to watch cartoons at ordinary times, like to listen to children's songs, and so on, using multimedia equipment play interesting video clips, ward posted posters, on the one hand, distract children, make them really relax, on the other hand, reflect the humanism, the advantages of the nursing intervention, professional, scientific and other characteristics, more parents can see the efforts of the nursing staff. Younger children are advised to be coaxed to sleep by their parents to prevent their crying from affecting more than just others.
- 2) Organize the propaganda and education activities within the department, mainly to let the families of children learn more nursing knowledge and understand the real role of atomization inhalation therapy in the propaganda and education activities. Through the introduction of the purpose, advantages and safety of atomization inhalation therapy, it is necessary and crucial to enhance the attention of family members to the disease of children, share successful cases and enhance the treatment confidence of children and family members.
- 3) Appropriate methods should be selected to create a warm, comfortable and quiet atomization inhalation treatment environment. The nursing operation is standardized, the details are dealt with, and the principles of "aseptic disinfection" and "scientific configuration of drugs" are always adhered to, so as to improve the value of high-quality nursing work.
- 4) We should also pay attention to the control of the diet of the sick child, and urge the family members to care about the healthy diet of the sick child. It is better to manage the diet of the sick child according to the balanced diet formulated by the professional nursing staff.
- 5) There are also some matters needing attention in other aspects, such as nursing intervention in the process of atomization inhalation, which needs to help children adjust a comfortable position; Personally demonstrate the scientific way of inhaling, using simple words to specifically describe the correct exhalation and inhalation; Patiently answer the questions raised by the children or their families, with a smile, serious and responsible, and strive to complete the prescribed nursing tasks; After the atomization inhalation treatment, instruct the family members to assist the child in cleaning the face and rinsing the mouth, make relevant nursing records, and arrange the time for their next treatment.
- 6) At the regular meeting of the department, the nursing staff can express different opinions and solve the deficiencies in the nursing intervention together. Nursing staff share the experience of

nursing operation and strive to improve the quality of nursing intervention and nursing management.

2.3 Effect Evaluation

Carefully observe the atomization inhalation treatment of children in the two groups, and then conduct the statistics of treatment effect, treatment compliance, nursing satisfaction, and incidence of adverse reactions.

2.4 Statistical Methods

In this experiment, SPSS 22.0, a professional statistical software, was selected to process various data, and specific analysis of relevant contents in nursing records was effectively carried out. $\chi 2$ was used to test the measurement data, and p<0.05 indicated that the difference in comparison results was statistically significant.

3. Results

1) Routine nursing intervention was mainly used in the control group, while high-quality nursing intervention was mainly used in the research group. As for the comparison of therapeutic effect and therapeutic compliance of children's atomization inhalation, it can be seen in table 1 below:

Table 1 Efficacy and Compliance of Atomization Inhalation in Children

group	n	excellent	effective	noneffective	treatment compliance
the control group	50	21 (42.02%)	16(31.88%)	13 (26.10%)	37(73.90%)
the research group	50	34 (68.19%)	12(23.89%)	4 (7.92%)	46(92.08%)
χ^2		7.023	4.176	5.250	5.188
р		< 0.05	< 0.05	< 0.05	< 0.05

²⁾ Different nursing intervention methods were adopted in atomization inhalation treatment for children in the control group and the study group. As for the survey of nursing job satisfaction, it can be seen in table 2 below:

Table 2 Satisfaction of Nursing Intervention for Pediatric Patients

group	n	fully satisfied	general satisfactory	unsatisfactory	satisfaction rate
the control group	50	19(37.61%)	15 (30.01%)	16(32.38%)	34(67.62%)
the research group	50	41(81.80%)	9 (18.20%)	0 (0.00%)	50(100.0%)
χ2		13.312	8.447	12.105	12.256
p		< 0.05	< 0.05	< 0.05	< 0.05

3.1 Adverse Reactions Occurred during Atomization Inhalation Therapy and Nursing Intervention, and the Incidence of Adverse Reactions Was Analyzed in Table 3 Below:

Table 3 Incidence of Adverse Reactions in the Treatment and Nursing of Children

group	n	hoarseness	mouth irritation	rash	other reactions	incidence rate
the control group	50	4	3	2	2	11(22.39%)
		(7.89%)	(6.33%)	(4.10%)	(4.07%)	
the research group	50	1	0	0	1	2
		(2.31%)	(0.00%)	(0.00%)	(2.40%)	(4.71%)
χ2		4.806	4.617	4.009	3.366	8.124
p		< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

4. Discussion

The child patient's organism is not mature, not only the resistance is poor, the ability of self-management is not strong, so the body has any discomfort will only cry, there is a strong resistance to the hospital. In order to effectively control respiratory tract infection and related inflammation, the choice of atomization inhalation therapy is very important. The purpose of providing high-quality nursing services to children in atomization inhalation is to strengthen psychological nursing, achieve effective communication, further improve their treatment compliance, and better reflect the safety of atomization inhalation [3]. According to the experimental analysis, the quality nursing intervention in the study group, the treatment effect, treatment compliance and nursing satisfaction of the children were significantly better than the control group with conventional nursing intervention. The incidence of adverse reactions in the study group was only (4.71%), while the incidence of adverse reactions in the control group was as high as (22.39%) after routine nursing intervention, which also proved that the penetration of quality nursing intervention concept and the application of effective nursing management methods were more conducive to the efficient implementation of our diagnosis and treatment plan. So in the future practice process, nursing staff must put more energy, more time on the construction of quality nursing model, promote the formation of harmonious nurse-patient relationship. Atomization inhalation therapy ensures the physical health of children, and high-quality nursing intervention enables families to fully trust the hospital for coordinated development and continuous progress. We are looking forward to the continuous acceleration of the long-term planning process of modern medical career.

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