

Effectiveness of Nursing Risk Management in Surgical Nursing Care for Head and Neck Tumors

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Abstract: Objective: To investigate the clinical effectiveness of nursing risk management in surgical nursing care for head and neck tumor patients. Methods: A total of 120 patients admitted to the Head and Neck Tumor Surgery Department of our hospital from December 2022 to December 2024 were selected as participants. They were randomly divided into a control group (60 cases, receiving routine nursing care) and an observation group (60 cases, receiving nursing risk management interventions). The control group followed standard nursing protocols, while the observation group implemented enhanced nursing risk management strategies alongside routine care. Patient satisfaction and the incidence of nursing risk events were evaluated using validated assessment scales. Results: The nursing satisfaction rate in the observation group was 96.67% (58/60), significantly higher than 83.33% (50/60) in the control group ($P < 0.05$). The incidence of nursing risk events in the observation group was 6.67% (4/60), markedly lower than 23.33% (14/60) in the control group ($P < 0.05$). Conclusion: Nursing risk management effectively reduces the incidence of adverse events and enhances patient satisfaction in head and neck tumor surgical care, demonstrating significant clinical value for optimizing nursing quality. These strategies should be recommended for clinical implementation.

Keywords: nursing risk management; head and neck tumor surgical patients; nursing satisfaction

1. Introduction

Patients undergoing head and neck tumor surgery face elevated risks during nursing care due to the inherent complexity of their conditions, extensive surgical trauma, high postoperative complication rates, and prolonged recovery periods. These challenges impose significant demands on nursing quality and safety management. Nursing risk management, as a systematic and proactive approach, aims to reduce adverse event incidence, ensure patient safety, and enhance care quality through the identification of potential risk factors, implementation of targeted interventions[1], and dynamic monitoring protocols. While traditional nursing models provide basic care, they exhibit limitations in risk anticipation, personalized care planning, and interdisciplinary collaboration, often leading to frequent nursing-related adverse events that compromise patient recovery experiences and therapeutic confidence. With growing emphasis on patient safety and satisfaction in healthcare quality evaluation systems, establishing a scientific risk prevention and control framework has become a priority in head and neck tumor surgical nursing management[2]. This study focuses on the practical application of nursing risk management in this specialized field. By comparatively analyzing the outcomes of different nursing models, we explore actionable pathways to optimize care workflows and strengthen risk mitigation strategies, thereby providing theoretical support for advancing specialized nursing practices.

2. Materials and Methods

2.1 General Information

A total of 120 patients admitted to the Head and Neck Tumor Surgery Department of our hospital from December 2022 to December 2024 were enrolled in this study. The study protocol was approved by the Institutional Review Board, and written informed consent was obtained from all participants and their families. Inclusion criteria required pathological confirmation of head and neck tumors necessitating surgical intervention, while exclusion criteria comprised severe cardiopulmonary dysfunction, mental disorders, or voluntary withdrawal from the study. Patients were randomly allocated into a control group and an observation group using a random number table method, with 60 cases in each group. The control group included 25 male and 35 female patients, aged 20–80 years (mean age: 54.17 ± 6.14 years). The observation group comprised 26 male and 34 female patients, aged 21–78 years (mean age: 50.87 ± 5.20 years). No statistically significant differences were observed in baseline characteristics between the two groups, including gender, age, tumor type, or clinical stage (all $P > 0.05$), confirming comparability.

2.2 Methods

Control Group: The control group received the hospital's routine nursing care, which mainly included regular monitoring, medication guidance, health education, and other standard practices.

Observation Group: On the basis of routine nursing care, the observation group implemented a nursing risk management model. The nursing team conducted dynamic risk assessments based on the individual characteristics of the patient's condition, identifying potential risk factors such as aspiration, falls, pressure ulcers, etc., and developed targeted preventive and control measures. [3].

2.3 Evaluation Indicators

The nursing satisfaction and the incidence of nursing risk events (such as aspiration, falls, pressure ulcers, etc.) were compared between the two groups of patients. 1.4 Statistical Methods, Data were analyzed using SPSS 22.0 software. Measurement data were expressed as ($\bar{x} \pm s$) and analyzed using t-tests. Count data were expressed as rates and percentages, and the Chi-square (X^2) test was used for comparison. A p-value of <0.05 was considered statistically significant.

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3. Results

3.1 Comparison of Nursing Satisfaction Between the Two Groups

As shown in Table 1, the nursing satisfaction rate of the observation group was 96.67%, which was significantly higher than that of the control group at 83.33%. The difference was statistically significant ($P < 0.05$).

Table 1. Comparison of Nursing Satisfaction Between the Two Groups

Group	n	Very Satisfied (n)	Satisfied (n)	Unsatisfied (n)
Observation Group (n=60)	60	32	26	2
Control Group (n=60)	60	26	25	10
P				

3.2 Comparison of the incidence of nursing nursing risk events in the two patient groups

As shown in Table 2, the incidence of adverse events, including aspiration, falls, and pressure ulcers, was significantly lower in the observation group than in the control group. The difference was statistically significant ($P < 0.05$).

Table 2. Comparison of the Incidence of Nursing Risk Events Between the Two Groups

Group	n	Aspiration (n)	Falls (n)	Pressure Ulcers (n)
Observation Group (n=60)	60	1	1	1
Control Group (n=60)	60	2	2	3
X^2				
P				

4. Discussion

Nursing care for head and neck tumors occupies a significant position in the clinical field due to its unique disease characteristics and treatment complexity. The head and neck region has a delicate anatomical structure, involving multiple physiological functions such as breathing, swallowing, speech, and facial appearance. Tumor lesions and surgical interventions can lead to difficulties in airway management, delayed wound healing, and functional compensation disorders. Patients often experience severe physical and psychological stress due to postoperative pain, changes in eating habits, and facial appearance damage. Additionally, the combined effects of radiotherapy and chemotherapy significantly increase the risk of complications, such as aspiration, infection, and deep vein thrombosis, which may directly threaten patient safety. The long treatment cycle and the urgent need for functional rehabilitation mean that nursing care must not only focus on stabilizing physiological indicators but also address psychological support and social function reconstruction.

The nursing risk management model demonstrates many advantages in the nursing care of head and neck tumors. The nursing team can accurately identify risks such as aspiration and falls through dynamic risk assessments. By combining personalized plans with standardized operational procedures, a closed-loop management system for prevention, monitoring, and response can be formed, reducing risk factors from the source. The responsible nurse system and high-frequency patrol mechanisms reinforce the continuity of nursing services, ensuring that abnormal situations are detected early and intervention occurs promptly, thus preventing the escalation of risk events. Optimized nurse-patient communication and enhanced health education not only increase the patient's understanding of the treatment plan but also provide emotional support to alleviate anxiety, boosting treatment confidence and adherence.

References

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