

## Research on Evaluation Index System of Nursing Safety Management in Elderly Nursing Hospitals Based on Demand Orientation

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**Abstract:** With the aggravation of population aging, the change of disease spectrum and the weakening of traditional family nursing function, it is of great importance, necessity and urgency to build a scientific, standardized and sustainable elderly nursing system. Therefore, based on demand-oriented, the author studies the evaluation index system of nursing safety management in nursing homes for the elderly. The author has a preliminary understanding of the patient's need for safety and nurses' awareness of safety care management, and provides a reference for the initial construction of nursing safety management evaluation indicators. According to relevant research, the constructed nursing safety management evaluation index system has good operability and practicability in clinical practice, which is more suitable for the clinical needs of nurses and highlights the work characteristics, which is worthy of promotion.

### 1. Introduction

With the aging of the population, the transformation of disease spectrum and the weakening of traditional home care functions, the social demand for aged care services in China is huge, and it is on the rise, and families and society are facing a serious burden of aged care [1]. The development of medical safety management in China is relatively late, and there is a lack of systematic scientific management system in clinical operation. The original "case-based" management also has major deficiencies [2]. In developed countries, nearly half of the harmful events affecting patients are related to care and services [3]. Most of the patients in aged nursing homes have complex health conditions and sensory disturbances, and are more likely to be exposed to adverse events [4]. With the promulgation and perfection of health laws and regulations, patients' awareness of safeguarding their rights has been strengthened, and nursing safety has become more important. Seeking truth from facts, practicing safe nursing and preventing disputes have become an important task at present [5]. Foreign studies have pointed out that more than half of the patients in nursing homes have at least three kinds of disease diagnosis. More than 32% of the patients take nine kinds of drugs. The monthly incidence of adverse drug events is 9.8%, while 4.1% of adverse drug events can be avoided. As a nursing-oriented and medical-assisted institution, the construction and development of geriatric nursing homes are of great significance for rationally diverting patients from large hospitals who need long-term medical care, alleviating the "difficult" problem of the masses, improving the utilization efficiency of medical and health resources, and coping with the challenges posed by the aging population.

The evaluation index system of clinical nursing safety and quality is an important tool for hospital nursing management. [6]. At the same time, it is also a yardstick to measure and monitor the quality of nursing safety and nursing quality. Setting up a reasonable and comprehensive index system can help nursing managers to monitor and objectively evaluate the quality of clinical nursing safety [7]. Safe blood transfusion has been paid more and more attention by nursing colleagues. Safe blood transfusion is the core quality control index of nursing safety management. Nursing safety management is an eternal theme in nursing management [8]. If this problem is not handled properly, it may not only cause family economic crisis, but also seriously affect economic and social stability and development [9]. At present, relevant research on nursing safety management

mainly focuses on investigative research and empirical summative research, and does not provide a more scientific and complete nursing safety management evaluation system for clinical. As the core and foundation of nursing quality management, care safety has only been required as a part of management work for a long time [10]. So far, China's reports on the safety research of nursing homes are very rare, mainly related to the unbalanced development of the nursing homes in China, the lack of sufficient attention for a long time, and the backward management system. Therefore, the establishment of a scientific, standardized and sustainable aged care service system has become an urgent requirement for China's economic and social development.

## 2. Preliminary Construction of Evaluation Index System for Nursing Safety Management

To construct a nursing safety management evaluation system, this study follows the principle of “patient-centered”, basic principles, advanced principles, and practical principles. Patients are full-time participants in safety management and experiencers of nursing safety services. When conducting safety management, they fully respect patients, pay attention to the patient's main status, and encourage patients to participate in their own safety management. There are two main types of statistical indicators. First, according to the different forms of the indicators, they are divided into total indicators and relative indicators. The other is divided into quantitative indicators and quality indicators according to the nature of the indicators. Both categories have a cross relationship. In clinical work, how to take patients as the center, from the perspective of patients, consider whether there are factors that endanger patient safety from the aspects of hospital behavior, process, equipment, environment, building and so on. To minimize the occurrence of medical and nursing accidents. To ensure the safety of patients, we should take precautions against micro-hazards and prevent them from happening in the near future. Through qualitative research, the safety needs of patients and nurses' perception of safety nursing management were analyzed. To provide reference for the preliminary formulation of the evaluation index system of nursing safety management. On the basis of ensuring good cooperation between nurses and patients, we can achieve higher and safer level of nursing safety management and nursing quality. Therefore, when we formulate a set of safety management indicators, we should take patient safety as the basic starting point, earnestly achieve "patient-centered" and promote patients to actively participate in the process of patient safety.

This study reviewed a large number of literature and selected the combination of quantitative analysis and qualitative analysis to study the construction of nursing safety management evaluation index system. Nursing safety management evaluation index system, see Table 1.

Table 1 Safety Evaluation Index System of Nursing Safety Management

First level index	Two level index
1 Visit and Interview Assessment	1 General situation
	2. Preparedness of patients
	3. Assessment of psychological status
2. Safety nursing	4. Environment and equipment preparation
	5 Drug safety preparedness
	6. Preparedness and measures for infection prevention
3. Safety Assessment	7. Safety cooperation in the process
	8 Nursing Documents Record
	9. Follow-up of patients' rehabilitation

In view of the objective reasons such as the uneven level of medical treatment and economic development, there are certain differences in different hospitals. Therefore, in the process of building safety indicators, we should take into account the existing level of different regions and hospitals, and combine with actual needs, strive to develop a broad and applicable basic standard

level. The lag indicators indicate that there is a causal relationship between safety incidents or injury itself. In this study, the self-designed clinical nursing safety evaluation index system was used to guide nursing managers to monitor and evaluate the quality of clinical nursing safety, to create a safe environment for patients, to provide clinical nursing safety, and to ensure the quality of nursing. After clinical nurses' qualitative research, four topics were initially drafted: the need for environmental safety. The need for psychological security. The need for technical safety of medical staff. The need for physical care and safety. The main contents of the interviews with patients mainly focus on the understanding of nursing safety, the safety requirements of the front, middle and back, the satisfaction of the nursing safety, and the improvement methods of safety management. The design of the questionnaire is mainly divided into three parts: the overall introduction of the subject, including the main purpose of the study and the relevant precautions when filling out; the investigation of the general situation of the respondents.

### 3. Results and discussion

Through the statistical analysis of the questionnaire results, the main factors that have the knowledge of nursing safety include three aspects: working years, technical titles, and work. From the perspective of the management of the aged care homes, it is considered that the factors at the macro level are relatively uncontrollable and therefore not included in this study. The formulation of indicator entries is carried out only from the internal factors of the aged care home. Nursing safety is an important factor affecting the quality of care. In this study, the nursing safety quality index system applied theory research combined with the nursing practice, and introduced the analytic hierarchy process to comprehensively evaluate the clinical nursing safety quality. It highlights the overall goal of clinical nursing safety quality, and achieves the objectives of classification management, clear hierarchy, index system can be divided and met, and meets the needs of different evaluations. It is scientific, practical and operability. Therefore, nursing safety culture is listed as one of the evaluation indicators in this index system, and the measures related to nursing safety culture in the literature are categorized to form three-level indicators, including non-punitive reporting system, event analysis and improvement mechanism, adverse event reporting frequency and defect information sharing item, which are unanimously recognized by experts.

With the extension of working hours, nurses' mastery of nursing-related knowledge is also higher. In the work they are engaged in, head nurses' mastery of safety-related knowledge is the best. The stepwise multiple linear regression results of the three factors are shown in Table 2.

Table 2 Stepwise multiple linear regression results of influencing factors

Factor		Biased regression coefficient	Standard error	Standard regression coefficient
Technical title	Nurse	1.33	3.18	0.46
	Nurse in charge	10.65	4.52	2.64
Engage in work	Front line nurses	26.33	3.75	0.59
	Nursing team leader	16.21	6.77	0.13
	Head nurse	22.37	5.93	0.13

Finally, based on the established safety management evaluation index system, a self-assessment questionnaire for nurses' knowledge of safety management was constructed, and a survey was conducted among nurses. Through rigorous statistical analysis, the reliability and validity of the questionnaire were verified, and the index system was further improved and verified. In the indicator system formed in this study, the effective cooperation of medical, nursing and anesthesia is emphasized. According to the final calculation results, the quality of nursing services in

department C is the highest, followed by B. The quality of department A service ranks third, and the quality of departmental care service is the worst. Therefore, this study reveals the factors related to the occurrence of adverse events from the proportion of nursing staff, nurses' professional knowledge, practical skills, language communication skills, legal knowledge and whether they have love. Investigate and supervise the aspect, and strive to establish an excellent team of nursing staff to provide a strong guarantee for patient safety. It provides an effective method and basis for the nursing manager to evaluate the quality of hospital nursing work and make scientific decisions.

Medical and nursing safety is the basis of survival and development of hospitals. Preventing and reducing the occurrence of nursing defects is an important part of medical and nursing safety work. In the course of the research, we can strictly supervise the quality control of the research according to the actual situation of Chinese clinical practice. The whole process embodies the rigorous and scientific characteristics and attitudes, combines experience and practice, and integrates scientificity, representativeness and universality. It can be seen that the new evaluation index system of nursing safety management in thoracic surgery developed in this study meets the strict scientific process and the operation requirements of hospitals. The results are scientific and reliable, which provides a reference for nursing safety management. It not only ensures the safety of patients, but also promotes the quality of nursing. In a country that legislates for long-term care, the condition of family members' care is basically excluded from the assessment of the eligibility for benefits of long-term care security. That is to say, no matter whether or not the family is visited or cared for, it does not affect the eligibility. In order to promote the construction and development of nursing homes, efforts must be made in the functional orientation, management system, training and publicity of nursing homes. In the process of implementation, this study can be based on the reality of our country and carry out strict quality control of the research process. The whole process is rigorous and scientific, that is, based on experience, strict conditional control, representativeness and universality. Therefore, it can be considered that the research method of this study is scientific.

#### **4. Conclusion**

This study focuses on the construction of nursing safety management evaluation indicators, and through literature research, to understand the current research status of nursing safety management at home and abroad. On this basis, several countermeasures and suggestions are proposed for each department to improve and improve the quality of care. It should be noted that although this paper builds an evaluation index system for the quality of hospital nursing work, it believes that there are still some flaws in this index system. In the future study, work and research process, the research needs to be advanced. Due to the resource advantages of talents, technology and equipment in public hospitals, there may be some differences in management standards from other types of nursing homes. The index system can also be used for cross-sectoral comparisons, which is conducive to the transparency of medical institutions and the real-time safety and quality monitoring of health administrative departments. The frequency of assessment may be quarterly or annual, or it may be used as a guidance for the newly constructed nursing homes. Through qualitative research, the evaluation index system of nursing safety management was preliminarily drawn up. On this basis, after two rounds of Delphi expert consultation, the evaluation index system of nursing safety management was finally formed. In the specific application of this index system, it is necessary to modify it according to local conditions according to the nature of nursing homes. The empirical study of the index system will continue in the next stage of the project.

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