Application of Informationized Nursing Management Measures in Critical Care Medicine

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Abstract
The Department of Critical Care Medicine is a form of modern medical organization management with the development of medical nursing profession, the improvement of hospital management system and the birth of new medical equipment. The clients are mostly critically ill and patients with multiple organ dysfunction. The patient’s condition is critical and changes rapidly. There are many monitoring items and many treatment data records. Therefore, the critical care task is heavy and stressful, and the requirements for nursing management measures are also higher. Today, most hospital intensive care departments do not fully play the role of rescue critically ill patients. The reasons for this are mainly due to the lack of organizational management, the unscientific work mode leading to inefficiency, and poor inter-disciplinary collaboration. Many foreign studies have shown that the composition of the intensive care department, the mode of operation, the working procedures, the understanding of the severity of the disease, the ability to control the equipment, the cooperation between the departments and the professional level of other departments in the hospital are all in the Department of Critical Care Medicine. The implementation effect of specific medical work has a major impact. Although many hospitals have begun to pay attention to and increase investment, the establishment of multiple intensive care units, but the results are not satisfactory. Not only will it cause waste of medical resources, but it also makes resources scattered, limited development of individual strengths, and does not reflect the “whole” thinking of critically ill patients, and it cannot form a complete discipline with competitive advantages. Studies have shown that nursing information management practices as a new intelligent care measures, has achieved good effects in pediatric care, obstetric care, and many other disciplines in. In this study, informational nursing management measures were applied to the Department of Critical Care Medicine to explore its application effects and provide a basis for the improvement of hospital management measures.

Keywords: Critical Medicine, Informationization, Nursing Management, Satisfaction

Aplicación de Medidas de Manejo de Enfermería Informatizadas en Medicina de Cuidados Críticos

Resumen
El Departamento de Medicina de Cuidados Críticos es una forma de gestión moderna de la organización médica con el desarrollo de la profesión de enfermería médica, la mejora del sistema de gestión hospitalaria y el nacimiento de nuevos equipos médicos. La mayoría de los pacientes están críticamente enfermos y los pacientes con disfunción orgánica múltiple. La condición del paciente es crítica y cambia rápidamente. Hay muchos elementos de monitoreo y muchos registros de datos de tratamiento. Por lo tanto, la tarea de cuidado crítico es pesada y estresante, y los requisitos para las medidas de administración de enfermería también son mayores. Hoy en día, la mayoría de los departamentos de cuidados intensivos del hospital no desempeñan plenamente el papel de rescatar a pacientes críticamente enfermos. Las razones de esto se deben principalmente a la falta de gestión organizativa, el modo de trabajo no científico que conduce a la ineficiencia y la escasa colaboración interdisciplinaria. Muchos estudios extranjeros han demostrado que la composición del departamento de cuidados intensivos, el modo de operación, los procedimientos de trabajo, la comprensión de la gravedad de la enfermedad, la capacidad de controlar el equipo, la cooperación entre los departamentos y el nivel profesional de otros. Los departamentos en el hospital están todos en el Departamento de Medicina de Cuidados Críticos. El efecto de la implementación del trabajo médico específico tiene un impacto importante. Si bien muchos hospitales han empezado a prestar atención y aumentar la inversión, el establecimiento de múltiples unidades de cuidados intensivos, pero los resultados no son satisfactorios. No solo causará el desperdicio de recursos
Critical Care Medicine is an emerging medical discipline. It mainly studies the occurrence and development of critical diseases. The pathophysiological changes of the body are the focus of research. Timely and reasonable diagnosis and treatment are the ultimate goals. In the past decade or more, critically ill medicine has been rapidly developed under the impetus of molecular biology research, evidence-based medicine research, related high-tech and computerization as a new interdisciplinary new edge discipline, which is basic medicine, clinical medicine, biology. A clinical discipline in which medical engineering and pharmacology penetrate each other is a product of the development of medical science and technology to a fairly high level. It represents the development trend of modern medicine and is a prominent symbol of modern medical progress [1-3]. The Ministry of Health of the People's Republic of China has clearly listed the content of the review as a review of the hospital's grading. This fully demonstrates the position of critical medicine in modern medicine.

At present, the state has given the hospital a new policy and mission through the reform of the medical and health system. As a main body of reform, large public hospitals should clearly define their own positioning. In the latest edition of the “Comprehensive Evaluation Criteria for Tertiary Hospitals”, it has been clarified that tertiary hospitals mainly undertake the functional orientation of diagnosis and treatment of critical illness and difficult diseases. Intensive care unit for intensive care (mainly responsible for emergency and critical life support for critically ill patients; treatment and organ function support for patients with multiple organ dysfunction and prevention and treatment of multiple organ dysfunction syndrome. It is hospital concentration Guarding and treating the medical wards of critically ill patients. Therefore, the development of the Department of Critical Care Medicine is an important manifestation of the hospital's clear positioning. Moreover, the standardized management of this subject is in line with the needs of patients and the development of clinical disciplines [4-7].

The number of critically ill patients has gradually increased under the trend of population aging in China. By 2049, China's elderly population over the age of 60 will account for 31% of the total population, and the degree of aging is second only to Europe. It can be seen that with the aging of the social population, the increase in demand for high technology, and the increased incidence of serious infections, the demand for the critical medical department has increased, in addition to various public health emergencies and major disasters. In clinical work, intensive medicine has become an important part of hospital modernization in its unique way, and it is the concentrated expression of the professional level and overall strength of modern hospitals [8-11].

The construction of hospital disciplines should be based on the characteristics of hospitals and the needs of patients, and the patient-centered design should be continuously optimized to rationally differentiate and integrate disciplines. Taking the patient as the center and implementing the development concept of full-time specialization, comprehensive centralization and large virtual disciplines will not only solve the problem of diagnosis and treatment, but also lay a solid foundation for the hospital to build key advantages and enhance core competitiveness. In recent years, in addition to academic progress, the development of critical medicine in the international arena is also entering a new historical stage in the process of systematic management and standardization of the discipline. The management model of the Department of Critical Care Medicine can draw on this kind of “integration, integration, and integration”. In the “Three-level General Hospital Accreditation Standards Implementation Rules” (Year Edition) (hereinafter referred to as the “Rules”), the hospital's critical medical disciplines are also explicitly required to establish a multidisciplinary collaboration mechanism. Therefore, in the hospital, combined with different specialties, to achieve complementary advantages, joint collaboration, the use of specialized expertise to solve common problems in memory, around the patient needs multi-disciplinary joint treatment and provide personalized treatment programs to improve the risk the clinical curative effect and diagnostic efficacy of critically ill patients can be combined with the overall strength [12-15].

For the treatment of critically ill patients, different professions have focused on the professional judgment and attitude of the same patient's condition, but based on the same purpose of treatment - favoring the patient's prognosis, it constitutes a common concept of a temporary team [16]. The work of the Department of Critical Care is characterized by team work. Physicians in the intensive care unit should be like the initiators and actors of a group action, and the physicians of other related disciplines are the participants, who together form a decision-making executive team. Although members of this multidisciplinary team belong to different
professions, they share the same goals and have the same execution in the face of the same problem. What is more noteworthy is that the team grasps the whole and makes collective decision-making, can better predict the possible changes of the disease, and can take measures to cut off the cyclical chain of the malignant evolution of the disease and win more vitality for the patients. From the perspective of hospitals, the management mode of innovative intensive care unit is to improve the ability of patients with severe illness and clinical medical level through multi-disciplinary collaboration, learning from each other, sharing resources, better integrating the resources of the hospital, and standardizing construction and management. On this platform, we strive to establish an academic exchange platform and mechanism, conduct multi-disciplinary collaborative operations on major scientific research projects, and jointly tackle key problems, enhance scientific research capabilities and academic influence. It can also undertake the education and training of full-time physicians, advanced students and postgraduates, and jointly complete the teaching and research tasks related to critical medicine. The Department of Critical Care Medicine is a platform that provides more space for different professions. Under the premise of ensuring medical safety, more new technologies and new theories can be used for clinical application, accumulate experience and better serve more patients. The medical model, personnel structure, work flow of the intensive care department, the understanding of the personnel's understanding of the severe disease, the ability to apply equipment, the professional ability of other departments in the hospital, and the level of cooperation between departments, all reflect the clinical effects of the critical medical department. Has a major impact [17-21]. As a new subject, the difficulties faced by the Department of Critical Care Medicine in its development process must be diverse, but its development momentum is unstoppable. How to make the critical medicine healthy and rapid development on a correct track is a subject that must be studied. [22-23].

This paper explores the application of hospital nursing information construction in the intensive care department, thereby improving the nursing work and management efficiency, and providing patients with effective, safe and high quality nursing services. Based on the hospital's digital information management system, the hospital uses nurses’ workstations, mobile nursing evaluation systems and other information systems. Through the nursing information construction and clinical use, the nursing process was optimized, the nursing work efficiency was improved, the patient safety medical treatment was realized, and the clinical nursing management work was actively promoted. With the continuous practice and improvement of nursing information construction, it will become the trend of future nursing development.

2. Proposed method

2.1. The international medical quality control indicators of Critical Care Medicine

2017 years, European Association of Intensive Care Medicine Annual Meeting (European Society Of Intensive Care Medicine, ESICM) organized a group of 18 experts to judge the indicators of quality control in mainstream ICUs in Europe. The criteria for judging were more than 90%. A total of 111 indicators were finishing divided into 102 separate projects, experts debate after five consecutive times, the period from April 2015 to July 2017. Finally, nine final indicators are selected, which are classified according to “structure-process-results”, as shown in Table 1. Indian scholar Ray et al. pointed out in his research that the Indian ICU Chief Committee (The Executive Committee Of The Indian Society Of Critical Care Medicine, ISCCM) decided in 2008 to apply quality control indicators to the burn intensive care unit, coronary heart disease intensive care unit, cardiothoracic surgery intensive care unit, internal medicine intensive care unit, internal surgery teaching unit, post-operative surgical ward, pediatric intensive care unit, neurology monitoring 11 departments including ward, neurosurgical intensive care unit, surgical intensive care unit and trauma intensive care unit were included in the management of Indian ICU. According to ISCCM, Indian ICU quality control is carried out in the following six aspects: ICU profile, patient safety, personnel development, process description, result description, hospital infection control. The ICU profile is controlled by survival rate, mortality, cost effectiveness, hospital equipment, and hospital management personnel. The process indicators include 20 segmentation indicators, and the resulting indicators include 6 segmentation indicators. Dutch Critical Care Medicine Evaluation Center (Dutch National Intensive Care Evaluation, NICE) established a database of patients with ICU in 1996. The data in the database is also based on Professor Donabedian's “Structure-Process-Results” indicator. The three types of indicators of structure, process and result are the three complementary indicators to improve the quality control of ICU, and jointly promote the improvement of the final result, and the completion of the indicator in 2008.

<table>
<thead>
<tr>
<th>Table 1. Final 9 indicators after ESICM assessment</th>
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<tr>
<td><strong>category</strong></td>
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<tr>
<td>Structural index</td>
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<tr>
<td>2.24 hours with a professional intensive care</td>
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Process indicator

1. Adverse event reporting system
2. Conventional multidisciplinary clinical rounds
3. Transfer the patient's standard shift system

Outcome indicator

Standard mortality
2.8 hours and then transferred to the ICU rate
3. The incidence of central venous catheter related infection
4. Accidental rate

Flaatten through the PubMed collection of the Netherlands, India, Germany ICU quality control article, by Spain, the United Kingdom, Sweden, Australia, Scotland and other official sites collect information about ICU quality control documents, a total of 120 segments indexes sorted out. The study pointed out that there are 26 indicators used in at least two countries, and no one indicator is used at the same time. The more widely used is standardized mortality (standardized Mortal Ratio, SMR). SMR is applied to the above six countries, and 38% of the indicators are applied to a single country. In 2002, the Johns Hopkins School of Public Health conducted a retrospective study of 3014 articles on ICU quality control from 1965 to 2000. The quality control indicators were divided into four categories: outcome indicators, process indicators, and medical treatment, Indicators, indicators of complications. It is also necessary to carry out large-scale selective experiments on indicators, and it has a good guiding role for the selection of indicators for future medical units.

2.2. Informationization

Informationization of the Department of Critical Care Medicine is inevitable. The key step in achieving informationization is the support of the intensive care system. The intensive care department nursing information system is a clinical information system that provides patient information as the center, nurses as the main body, and provides information processing support for treatment and nursing services through multi-system data sharing. The system is mainly composed of ICU bed management module, mobile clinical nursing module, supply room quality traceability module, ICU clinical monitoring information module, and nursing management module. The specific functions include: visual display of various data of patients, real-time automatic acquisition and display data from external devices connected; correctly identify the patient to ensure the correct execution of orders; prompt attention to high-risk patients and nurses to take measures; backtracking query all the data of previous patients. It can also make full use of the existing resources of the hospital, and connect with the medical order system, inspection system, mobile nursing equipment, electronic medical record system, surgical anesthesia system, etc., to realize the management informationization of critically ill patients, and is an effective tool to ensure the quality of nursing work.

ICU bed management module The Department of Critical Care Medicine is a form of medical organization management that integrates modern medical care technology with the development of medical nursing profession, the birth of new medical equipment and the improvement of hospital management system. It requires a large number of nursing staff to provide patients with daily care. Nursing services, the use of a wide range of equipment, there are a large number of statistical works needs to be completed, especially with the development of medical technology, the establishment of hospital evaluation standards, the patient's various information statistics work requirements are more comprehensive and specific. ICU beds in the main interface management module overview may care ward status, your doctor and the hospital, electronic medical records, anesthesia system is connected, automatically obtain all relevant patient information, automatically generated by time and type of day shift needs Patient information reports, instrument usage reports, and workload reports. The system can carry out information management for patients, nursing staff, equipment, etc. Through the collection of data, the statistics and recording functions of basic information of patients can be realized in an all-round way, and the system can also automatically generate various reports and perform various workload statistics. The nurses are freed from the daily workload registration, the registration and transfer work of various equipment and equipment records, and more time is given to the nurses, and the nurses' time is returned to the patients.

Mobile Clinical Care module implements closed-loop medication order management, ensure the safety of intensive medicine the patient's condition in critically ill patients, the situation is complex, multi-treatment projects, diversification of the route of administration, drug varieties complicated, nurses face enormous pressure to work every day, in the implementation of doctor's advice It is easy to make mistakes. Through the use of the intensive care department's nursing information system, the nurses can directly confirm the execution of the doctor's prescription in the system, print various treatment labels, use the handheld computer to check the medicine, scan the patient's wristband, confirm the patient's identity, and then execute the doctor's advice. Function to control key aspects. Execution information reception through the doctor's PDA, and the medication
to the patient information is automatically recorded on a single recording care of critically ill patients, according to the drug dosage can automatically segment statistics intake time, and the combined out of balance amount calculation patient for The medical staff can understand the patient's condition and adjust the treatment plan to provide reliable data support, and the nurse no longer needs to transfer the doctor's advice, prevent the mistakes caused by the transfer, save time, and truly ensure the correctness of each key link of the medication. To prevent nurses from taking medication errors and achieve closed-loop management of drug orders to ensure patient safety. Identify and alert high-risk patients, improve nurses' risk prevention awareness. ICU pools critically ill patients and gives patients the best protection in terms of manpower, material resources and technology, in order to obtain good treatment results. By using intensive medicine care information system, nurses can always see each patient APACH II, falls and pressure sores score results, so high-risk patients for prevention and intervention can and; at the same time shift, the system can automatically extract every day the information of high-risk patients strengthens the nurse's attention to high-risk patients and achieves the goal of reducing the incidence of falls or pressure sores. It can also report the adverse events of nursing through the system, according to the requirements of the “Three-level General Hospital Evaluation Standards” issued by the Ministry of Health. Multi-conditional and multi-angle statistics of the incidence of pressure ulcers, criticality, and the incidence of falls/drops and the severity of injuries in hospitalized patients provide a basis for improvement. Supply room quality traceability module Intensive medicine department as the key department of infection control, the management of aseptic package has become one of the important links of infection control.

The supply sterile pack modules quality back washing, packaging, sterilization, registration, distribution, so that each part, recycled, or the like unified identification tags, and acknowledgment information tracing process etc. of the specification, if not According to the requirements of the process, the system will automatically report an error when the next step is performed, thus achieving the purpose of quality control. When using a sterile bag, you need to scan the bag and scan the patient's wristband to bind the patient and the sterile bag. When a patient has an infection, the sterile bag and the same batch can be traced. The aseptic package can be traced back to the patient who used the batch of sterile bag and can be traced back to the person who cleaned, packaged, sterilized, and registered the sterile bag, and facilitated the traceability and improvement of the quality of care.

ICU clinical monitoring information module ICU clinical monitoring information module is the core of the intensive medical care information system. Through digital medical instruments (bedside monitor, central monitor, ventilator), various clinical information systems of hospitals (such as medical order system, the inspection system, mobile nursing equipment, electronic medical record system, surgical anesthesia system, etc., the local communication system is connected to achieve efficient management of patient data and improve work efficiency. Automatically collect and record data such as monitoring data and ventilator setting parameters. Critically ill patients require hemodynamics, respiratory system and other indicators to monitor due to their serious condition. The vital signs change rapidly and require frequent records by nurses. The ICU clinical monitoring information module can automatically collect the patient's vital signs, various monitoring indicators and ventilator setting parameters in real time, and record the values to the corresponding positions of the critical patient care record, automatically depicting the various parameter curves for the patient. condition changes at a glance, and can set recording intervals on request according to the degree of critically ill patients. Shortening the record of nursing records by establishing a nursing record template the nursing record is a true reflection of a series of nursing activities performed by nurses for the care recipients. It is not only a measure of the quality of care, the basis for providing medical treatment, but also the provisions of the Medical Accident Treatment Regulations. Court evidence. At present, there are problems such as irregular writing, missing records, and untimely records in the writing of nursing records. The nursing records of critically ill patients not only require vital signs, medication records, but also a description of the patient's condition and a record of the various treatments. The nurses need sufficient time and extensive work experience to complete these records. However, the traditional manual writing care record not only takes up a lot of time and energy of ICU nurses, but also makes scientific, effective, fast and complete collection of various data. The ICU clinical monitoring information module forms a template for some treatment measures and condition descriptions commonly used by nurses. Nurses only need to use the corresponding template and simply modify and fill the corresponding content to complete the recording, standardize the nursing records, and make up for Defects such as imperfect nursing records, inaccuracies, etc., improve the writing quality of nursing documents and save a lot of time for writing nursing records. Treatment and operations performed automatically extract relevant contents, to prevent the omission record Gu autumn welcome and so have raised the question omission exists in the use of intensive care clinical information system software, omission of mainly after part of the care operation is performed, nurse omission Click records, such as oral care, catheter tube, bed head elevation, urine color assessment and other items; the part of the description of the condition needs to be manually entered, and the low-age nurse may have problems with insufficient entry. The intensive care department nursing information system of our hospital can automatically extract relevant content in the record after the nurse holds the PDA to confirm the patient's
identity, perform specific treatment and operation, avoiding the omission, ensuring the timeliness and accuracy of the record.

2.3. Nursing management

The nursing head of the nursing staff inputs the information of each nurse in the department into the nursing management module, which covers the basic information, professional title, position, academic information, award information, scientific research information, social part-time, etc. of the nurse, thus achieving each nurse Comprehensive understanding of career, education, training and research; can be grouped according to the qualifications and abilities of daily responsible nurses to implement patient care; can be scheduled online, convenient, easy to view, and real-time statistics Nurses work hours to count the workload of nurses and achieve quality care services. The nurse can fill in the application for leave at any time. The head nurse can check and review it in time, and turn the head nurse's “parental management scheduling” into humanized management to achieve the satisfaction of the nurse, and provide the basis for personnel deployment and performance evaluation. The scientific and feasible nursing rules and regulations of the nursing rules and regulations are the working standards of nursing staff and the premise of ensuring the quality of nursing and the safety of nursing. However, current nursing staff are not optimistic about the cognition and implementation of the nursing system. In 2007, Gao Ronghua and other 55 nursing staff including 11 head nurses in the hospital management annual inspection conducted an assessment of the knowledge of several core systems such as the graded care system, the handover system, and the check system. Less than 30% of the people are mastered, most of them are only partially understood; in the implementation of the system, they are limited to writing on paper, hanging on the wall, and printed into a book. There is no model that relies on systems, norms, and systems for management. Therefore, in order to improve the nurses' awareness rate and execution ability of the nursing rules and regulations, the rules and procedures of our hospital have formed a standardized system, which is put into the nursing information system to realize the electronicization of the nursing rules and regulations, and the nurses can view and timely at any time. Understand the latest version, ensure the knowledge and implementation of various regulations and processes, and standardize the nursing work.

3. Experiments

Case data retrospective analysis of the diagnosis and treatment of 125 critically ill patients admitted to hospitals from October 2015 to July 2017. The patients who underwent traditional nursing measures from October 2015 to July 2016 were the control group. From January to July 2017, patients who took information management measures for nursing were the research group. Inclusion criteria: Meet the ICU admission criteria for tertiary hospitals; patients or their guardians signed informed consent and were approved by the hospital ethics committee. The study group consisted of 65 patients, including 36 males and 29 females; aged 31-76 (57.45±7.42) years old; ICU hospitalization time 4-15 (6.73±1.35) days. There were 60 patients in the control group, including 32 males and 28 females; aged 29-75 (56.86±7.31) years old; ICU hospitalization time was 3-16 (6.34±1.28) days. There were no significant differences in gender, age, and ICU hospitalization time between the two groups (P>0.05), which were comparable.

The nursing measures control group is managed by traditional nursing measures: regularly monitor the vital signs such as body temperature, blood pressure, heart rate, blood oxygen saturation, etc., pay attention to changes in the parameters such as breathing, metabolism, and circulation of the patient, and record them in time; strengthen cleaning and anti-infection. Wait for routine care work. Once an abnormal condition is found, report it to the doctor for processing. Study group received information Care Management measures management: (1) the establishment of intensive monitoring care information management system, the patient's basic situation and related medical instruments are in accordance with the format entry system developed to reduce nurse handwritten medical records of the time, and the system can automatically count at the time of entry, doctors, patients and their families can also access information directly through the mobile terminal. (2) Establish a real-time automatic detection system, and connect the ventilator, monitor, electrocardiograph, blood gas analyzer, continuous hemodynamic detector, defibrillator and other devices directly to the system through the collection center server to realize data collection. Automatic import. The nurse can also set the acquisition frequency through the system to realize the quantitative automatic collection of the vital signs of the patient. (3) Establish a medical order execution inspection system. The nurse enters the medical order attributes into the system according to the classification. For example, the patient's hourly fluid injection amount, medication dosage, etc., the completion condition is recorded into the system to achieve automatic preservation analysis, and strengthen the supervision of patients who do not comply with the doctor's advice. guide. (4) Establish a system for identifying and alerting high-risk patients with critical illnesses. Through the information management platform, nurses can check the scores of patients' falling, falling, and pressure sores at any time,
and provide early warning of the occurrence of adverse events, and timely intervene in high-risk patients. And care, giving patients the best guarantee in terms of technology, manpower and material resources. The effect picture of the nurse is shown in Figure 1 below:

The observation indicators were used to calculate the incidence of adverse drug delivery errors, the rate of complaints, the time of writing care records, the incidence of adverse events such as pressure ulcers, tube slippage, central venous catheter infection, and patient care satisfaction. After 3 months of hospitalization in the ICU, the patient was scored anonymously by a score of 100, with a score of ≥90 being very satisfied; 90>score ≥75 being satisfactory; 75>score ≥60 being general; score <60 For dissatisfaction, satisfaction = (very satisfied with the number of cases + satisfactory cases) / total number of cases × 100%.

Statistical methods were analyzed using SPSS20.0 software. The measurement data were expressed as x±s. The t-test was used for comparison between groups. The count data were expressed by example and percentage. The χ² test was used. P<0.05 was considered statistically significant.

4. Discussion

Compared with the control group, the nursing error and the rate of complaints were lower in the study group, and the writing care record time was shorter (P<0.05, Table 2).

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Number of errors in administration [time (%)]</th>
<th>Number of complaints [time (%)]</th>
<th>Writing care time (min/d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>research group</td>
<td>65</td>
<td>1 (1.54)</td>
<td>2 (3.08)</td>
<td>2.15 ± 7.95</td>
</tr>
<tr>
<td>Control group</td>
<td>60</td>
<td>7 (11.67)</td>
<td>1 (18.33)</td>
<td>4.67 ± 7.84</td>
</tr>
</tbody>
</table>

The incidence of adverse events in the study group and the control group were 7.69% and 23.33%, respectively, and the former was significantly lower than the latter (P<0.05, Table 3).

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Pressure sore</th>
<th>Pipe slippage</th>
<th>Central venous catheter infection</th>
</tr>
</thead>
<tbody>
<tr>
<td>research group</td>
<td>65</td>
<td>4 (6.15)</td>
<td>0 (0.00)</td>
<td>5 (7.69)</td>
</tr>
<tr>
<td>Control group</td>
<td>60</td>
<td>1 (16.67)</td>
<td>3 (1.67)</td>
<td>14 (23.33)</td>
</tr>
</tbody>
</table>

The nursing satisfaction of the study group and the control group were 86.15% and 63.33%, respectively, and the former was significantly higher than the latter (P<0.05, Table 4).

<table>
<thead>
<tr>
<th>Group</th>
<th>n</th>
<th>Very satisfied</th>
<th>satisfaction</th>
<th>general</th>
<th>Not satisfied</th>
<th>Total satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>research group</td>
<td>65</td>
<td>2 (32.31)</td>
<td>35 (53.85)</td>
<td>7 (10.77)</td>
<td>2 (3.08)</td>
<td>56 (86.15)</td>
</tr>
</tbody>
</table>
Patients in intensive care department are critically ill, complicated in equipment and testing equipment, and have a large number of rescue drugs, which have high requirements for quality of care. In the process of intensive care, digital and standardized management can significantly improve the efficiency of nursing work, effectively alleviate the patient's condition and improve the quality of life of patients. The results of this study show that compared with the use of traditional nursing measures, after the adoption of information-based nursing management measures, the hospital has a lower incidence of drug misapplication, a lower rate of complaints, shorter writing care records, and the incidence of adverse events. Lower, more satisfied with care. There are mainly the following reasons for the good application of information management measures. Standardize medical procedures to establish an intensive care information management system, adopt standardized and standardized medical management methods for clinical monitoring, so that the quality of care is more controllable, and the electronic medical records are easier to retrieve and extract, which is convenient for doctors, patients and their families to understand the condition in real time. System platform is built, reducing the time nurses handwritten nursing records, so that nurses have more time to serve the patient and reducing omissions and errors due to writing and transcribing lead, reducing the incidence of error and the nurse administered the complaint rate. Improve the quality of care and patient satisfaction with care. The nursing staff used are quite satisfied, and the statistical effect chart is shown in Figure 2 below:

![Figure 2. Nursing staff score statistics](image)

Automatic collection and record detection data Automatic collection and record is an important part of information management measures. It is connected with medical instruments such as ventilator, monitor, electrocardiograph, blood gas analyzer and continuous hemodynamic detector to realize detection. The data is automatically collected, and the interval and number of collections can be set according to the critical degree of the patient, so that the trend of various vital signs can be observed and analyzed. When the collected value is abnormal, the system can provide early warning and reminder in time for the doctor to intervene in time to reduce the incidence of adverse events. Ensure that the doctor's correct execution of the doctor's orders and patient performance into the system, automatic save analysis, reminding the operation errors and missing items, improve the accuracy and timeliness of the implementation of the doctor's orders, reducing the incidence of errors. The doctor can check the implementation of the doctor's advice and the development of the patient's condition in real time through the system, analyze the existing problems and deficiencies, and timely adjust the treatment and care plan. Strengthen the nursing of high-risk patients with critical illness and use the information nursing management platform to establish a system for identifying and alerting high-risk patients with critical illness, and comprehensively analyze the clinical data according to the changes of vital signs and medical records of patients, and restore the unsatisfactory condition of the disease. The patient is prompted to perform a comprehensive analysis to determine the results of the key care, strengthen the nursing, achieve the precision of critical medical care, and effectively improve the quality of care.

5. Conclusions
Patients in intensive care unit have complex conditions and are high-incidence areas for nosocomial infections. Quality control must be carried out in a fine manner. For adverse events, prevention and timely reporting of adverse event risk factors should be carried out. Through refined management, the ICU wards are rationally partitioned and integrated with the disciplines, and the responsible persons in the corresponding areas are reorganized, the treatment process is refined, the data collection is carried out, and the comprehensive management is done. In summary, the information management measures are applied well in the intensive care department. By standardizing the medical procedures and automatically collecting and recording the test data, it is ensured that the doctors correctly implement and strengthen the nursing of high-risk patients with critical illness, which can significantly improve the nursing efficiency and nursing. Quality, reducing the incidence of adverse events in patients, and improving patient satisfaction with care are worthy of widespread application.

References


