

# Application of Details Management in Operating Room Nursing Management

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## Abstract

This paper aims to explore the application effects of detail management in operating room nursing management. 100 patients from June 2016 to September 2016 were treated as control group, and 100 patients from September 2016 to December 2016 were treated as observation group. In the control group, routine care was taken during the operation, and the patients in the observation group increased the details management on the basis of routine care. Besides, the following aspects were compared including the satisfaction of the two groups of patients with the nursing work, doctor's satisfaction with the nursing work and the quality of operating room nursing before and after the implementation of details management. As a result, the satisfaction of nursing work was significantly higher in the observation group than in the control group ( $P<0.05$ ). The satisfaction of doctors was significantly higher after implementation of details management than those before implementation detail management ( $P<0.05$ ). And the quality of operating room care was significantly better after implementation of details management than before ( $P<0.05$ ). Therefore, the enhancement of details management in operating room nursing management is beneficial to improve the satisfaction of patients and doctors, and increase the quality of operating room nursing, which is worth promoting.

**Keywords** Details management; Operating room; Nursing management



## 1. Introduction

As the operating room is an important place to perform surgical treatment and rescue measures on patients, each of the tiny links in its management is closely related with the patients' lives and health <sup>[1]</sup>. Details management is also process management which is to refine a whole set of working process into a number of details, quantify them and complete some details within a certain period of time. After completing all details determined in advance, quantification and improvement will be continued. Specifically, it is to refine object, function and position, each specific work and each implementation links of the management system, which is characterized by work refinement and management refinement, especially the implementation refinement. Attention paid to details management can effectively improve the nursing effects. In order to deeply analyze the application effects of details management in operating room nursing management, this study selected 200 cases of surgical patients to carry out controlled clinical trial. The relevant report is as follows.

## 2 Data and methods

### 2.1 Clinical data

A total of 200 patients receiving surgery from June 2016 to December 2016 were selected as cases for controlled clinical trial in this study. All patients who were eligible for surgical indications volunteered to participate in this study with their families. As they were informed of the operation and content of the study, they all signed informed consent. In addition, 100 patients receiving surgery within the period from June 2006 to September 2016 were included in the control group. Among them, there were 63 male patients and 37 female patients, with an age ranging from 20 to 82 and an average age of  $42.2 \pm 6.3$ . In this group, there were 26 cases of orthopedic surgery, 35 cases of general surgery, 21 cases of urological surgery and 18 cases of gynecological surgery. 100 patients receiving surgery within the period from September 2016 and December 2016 were chosen as the observation group. Among them, there were 59 male patients and 41 female patients, with an age

ranging from 20 to 85 and an average age of  $43.5 \pm 5.9$ . In this group, there were 24 cases of orthopedic surgery, 36 cases of general surgery, 21 cases of urological surgery and 19 cases of gynecological surgery. As a result, there was no statistically significant difference between the two groups in terms of gender, mean age, type of operation, etc.

### 2.2 Methods

The patients in the control group were treated with routine nursing during surgery. However, for the patients of observation group, the details management was added on the above routine nursing. The specific methods were as follows.

#### 2.2.1 To strengthen risk education and concept of details management

It's required to carry out risk prevention education weekly, report and analyze violations. Reviewing the reason, process and details of the occurrence of defects was also necessary so as to encourage nurses to discuss and analyze which links were prone to encounter risk and its extent. Besides, each nurse should pay attention to details and had a full understanding of the importance of details. At the same time, it was also necessary to listen to the views of nursing staff and ask them to jointly develop the specific implementation measures of details management.

#### 2.2.2 To revise and refine the operating room system and process, and organize business study

The hospital should study the operating room management system, and combine with the characteristics of the operating room to refine various management systems and processes for operating room which include sending surgical patients into the operating room, surgical safety checking, infection management, specimen inspection. Each link was matched with detailed description of requirements. In addition, the hospital also needed to monthly assess operating room's specific nursing quality, implementation of core system and infection control management so as to make timely improvement according to the existing problems.

### **2.2.3 To strengthen training and assessment and enhance the proficiency in cooperation with specific surgery**

As the nursing staff could be responsible for relatively fixed cooperation with specific surgery, the hospital could organize relevant training for them. According to the characteristics of different specialties surgery cooperation, it's demanded that the hospital should organize doctor-nurse cooperation training as well as cases discussion guided by specialist doctors together with surgical nurses. In addition, the hospital also could invite directors and doctors of different specialists to give lectures on the new business, new technology development, and new surgical methods, steps and the characteristics of specialist surgery as well as the requirements of each step of the surgery. What's more, the hospital should timely develop the process of cooperation with new technologies and new processes to proficiency in surgery cooperation. The specialist doctors should answer questions and clear up confusion raised by nurses. The hospital also could invite external suppliers to introduce the operation and use of various types of external instruments and tools to deepen the staff's understanding.

### **2.2.4 To strengthen the exchange of medical care**

The operating room nurses and the surgeon should pay on-site visit to the surgical patients one day before their surgery to explain the purpose, expected results and precautions of the surgery and timely solve the doubts from patients and their families, thus easing their tension, anxiety, depression, fear and so on. Targeted operating room care process should be developed and preparation of surgical supplies should be made according to the patient's disease characteristics, surgical methods, personality psychology and other information. In the course of surgery, it is necessary to conduct a comprehensive monitoring on the patient's blood pressure, heart rate, pulse, oxygen saturation, skin color, etc. The surgeon and equipment nurses should establish skilled cooperation between each other so that proper wound dressing and drainage tube treatment could be conducted. After surgery, the nursing staff should timely communicate with patients

to deal with their discomfort and comfort them. In addition, it's required that medical specimens should be submitted timely according to the doctor's advice.

## **2.3 Effect assessment**

The two groups of patients' and the doctors' satisfaction with the nursing work before and after the implementation of the details management was compared with the self-made satisfaction questionnaire having options, including "Very Satisfied, Satisfied, Basically Satisfied and Unsatisfied"; in addition, the specific nursing quality, implementation of core system and infection control management were also compared.

## **2.4 Statistical processing**

SPSS 17.0 statistical software was used to analyze the obtained data. The comparison of the measurement data was based on the paired t test and the ranked data was compared with the rank sum test.

## **3 results**

**3.1 Satisfaction of nursing work was significantly higher in the observation group than in the control group (see Table 1)**

**3.2 The satisfaction of doctors was significantly higher after implementation of details management than before (see Table 2)**

**3.3 The quality of operating room care was significantly better after implementation of details management than before (see Table 3)**



**Table 1 Comparison of satisfaction of two groups of patients with nursing work**

Groups	Cases	Very satisfied	Satisfied	Basically satisfied	Unsatisfied
Control group	100	69	20	6	5
Observation group	100	83	16	1	0
Z value			-2.560		
P value			0.010		

**Table 2 Comparison of the doctors' satisfaction with nursing work before and after implementation of details management**

Groups	Cases	Very satisfied	Satisfied	Basically satisfied	Unsatisfied
Before implementation	100	71	21	6	2
After implementation	100	84	12	4	0
Z value			-2.215		
P value			0.027		

**Table 3 Comparison of the nursing quality of the operating room before and after implementation of details management**

Groups	Times of examination	Quality of specific nursing of the nursing room	Implementation of core system	Infection control management
Before implementation	3	95.0±0.50	95.5±0.50	95.7±0.29
After implementation	3	98.3±1.04	98.3±0.76	98.2±0.29
Z value		-5.0	-5.376	-10.607
P value		0.007	0.006	<0.001

## 4. Discussion

### 4.1 Implementation of the details management in the operating room nursing quality management is conducive to improving the patient's satisfaction with the nursing work.

With the continuous development of medical and health undertakings, the concept of the public for medical and health services has also undergone great changes compared with the past, because they have raised higher requirement for the quality of health services. Instead of only focusing on reduction of the pain, they tend to enjoy high quality nursing and physical and psychological treatment<sup>[2]</sup>.

In the operating room details management, the nurses of the operating room are required to pay on-site visits to the patients together with the surgeons one day before the surgery, which is in favor of having a timely and comprehensive understanding of the patient's general condition and mental state. In addition, they also need to timely provide surgery-related health education and psychological nursing to reduce the fear of patients. On the day of surgery, it's essential that they should focus on communication with patients to reduce their psychological pressure, thus enhancing their satisfaction with the nursing work.

#### 4.2 Implementation of the details management in the operating room nursing quality management is conducive to improving the doctors' satisfaction with the nursing work.

In order to strengthen the specialist training, specialist doctors should introduce the cutting-edge dynamic and the latest progress of the specialist, which can improve the nurses' learning interest and enthusiasm and broaden their vision. As a result, the nurses are capable of catching up with the development of surgical technology, and grasping the focuses of the specific nursing with enhancement of the awareness of nursing safety and improvement the quality of nursing<sup>[3]</sup>. In recent years, the use of nurse-doctor cooperation in the training for the operating room nurses training has gradually attracted attention along with good results achieved<sup>[3-4]</sup>. In the details nursing management model, great attention has been attached to on-the-job training and continuing education of nurses which are very important link. The hospital mainly conducts academic exchanges with various outstanding hospitals and regularly organizes training on nurses' technical ability and humanistic training to encourage nurses to learn by themselves and enhance their skill operation level. Only in this way can they serve the patients with more proficient nursing skills<sup>[5-6]</sup>.

#### 4.3 Implementation of the details management in the operating room nursing quality management is conducive to improving the quality of nursing in the operating room.

Any flaws occurring in a certain link of routine nursing are easy to lead to nurse-patient disputes. Therefore, in order to strengthen the operating room nursing, it is necessary to apply details nursing to make up the existing defects of conventional nursing models<sup>[7]</sup>. Refinement of the management system and process of the operating room benefits the improvement of the implementation force of nurses and the implementation consistency. Combined with the characteristics of the operating room, the plan in line with the requirements of professional knowledge and continuing teaching training for the operating room nursing staff is developed to help nurses consciously and independently complete the nursing work without management and boost their self-cultivation and inner concentration. Moreover, it should be pointed that

details management applied to the operation of the operating room can effectively improve the working efficiency of nursing staff as well as their nursing quality and effectiveness<sup>[8]</sup>.

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### Competing Financial Interests

The authors declare no competing financial interests.

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