# **Original Research Article**

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# **Observation of the Application Effect of Comfort Care in Operating Room Nursing**

## Zhi-Peng Hao\*

\*Correspondence to: Zhi-Peng Hao, Tianjin Hospital, Tianjin, 300000, China, E-mail: 815027367@qq.com

**Abstract: Purpose:** To analyze the application effect of comfort care in operating room nursing. **Methods:** A total of 74 patients undergoing surgical treatment from January 2023 to January 2024 were selected for the study. They were evenly divided into a control group of 37 cases receiving routine care and an observation group of 37 cases receiving comfort care, using a random number table method. The nursing effects of the two groups were compared. **Results:** The scores for mental, physiological, psychological, and environmental comfort in the observation group were significantly higher than those in the control group, while the NHP score, SBP, DBP, and HR were significantly lower than those in the control group (P < 0.05). **Conclusion:** Providing comfort care to patients undergoing surgical treatment can significantly improve comfort, improve health status, and maintain stable vital signs, with promotional value.

Keywords: Comfort care; Operating room nursing; Vital signs; Comfort level

urgery is an effective treatment for various diseases, and its effectiveness not only depends on surgical intervention but also on preoperative preparation and postoperative recovery. Comprehensive and effective nursing care can promote disease recovery. Some patients lack understanding of their conditions or the surgical procedure, leading to anxiety and fear when experiencing discomfort or facing disease progression and outcomes. These emotional fluctuations can affect hormone levels, interfere with disease diagnosis, and hinder smooth surgical procedures.Currently, there is continuous improvement in operating room nursing, with higher nursing standards demanding meticulous and comprehensive care to enhance the success rate of treatment and improve patient health. Comfort care, as a supplementary approach to routine care, incorporates

techniques such as psychological counseling and consultation to improve both physical and mental comfort, thereby facilitating disease recovery. This study focuses on patients undergoing surgical treatment, analyzing the application effect of comfort care in promoting their recovery.

## 1. Data and Methods

#### **1.1 General Information**

A total of 74 patients undergoing surgical treatment at our hospital from January 2023 to January 2024 were selected for the study. They were evenly divided into a control group of 37 cases, with 19 males and 18 females, aged 18 to 64 years (mean age 47.15  $\pm$  4.16 years), and an observation group of 37 cases, with 20 males and 17 females, aged 19 to 65 years (mean age 47.32  $\pm$  4.08 years). There were no significant

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differences in general data between the two groups (P > 0.05), indicating comparability.

Inclusion criteria: Patients with surgical indications; Complete medical records; Informed consent for participation in the study. Exclusion criteria: Abnormal mental function; Poor cognitive ability; Language communication barriers; Coagulation dysfunction.

## 1.2 Methods

The control group received routine nursing care, including receiving admitted patients, assisting patients in adjusting their positions, collaborating with physicians and anesthesiologists, and monitoring vital signs. The observation group received comfort care based on the control group:

#### **1.2.1 Preoperative Comfort Care**

Twenty-four hours before surgery, nurses visited the patients in the ward to explain the surgical procedure, gain patient trust, enhance cooperation, improve psychological comfort, and alleviate surgical discomfort. The visit time was strictly controlled, generally lasting 10 minutes, to prevent excessive fatigue and tension. ① Medical record review: Carefully examine the medical records to collect patient information, including name, gender, affected area, surgical method, medical history, etc.; assess the status of various systems and organs, such as the hematologic system, liver and kidney function, circulatory system, etc.; review laboratory test results for abnormalities; check for infections and skin conditions; assess nutritional status; determine the degree and location of functional impairments; record patient weight, height, etc.; understand their lifestyle, occupation, and social background. 2 Psychological intervention: Nurses should smile and ensure standard and neat attire while explaining the operating room environment, preparing accordingly, removing dentures, refraining from makeup, and explaining the significance of fasting. Evaluate the psychological status of patients, who typically experience negative emotions such as restlessness and nervousness before surgery, which can interfere with appetite, sleep, immune function, and may lead to complications. Explain the significance of surgery, understand the psychological characteristics of patients, introduce successful cases, communicate actively with family members,

answer their questions, gain their trust, and alleviate discomfort. ③ Preoperative preparation: Observe the patient's limb veins to facilitate subsequent puncture and relieve their sense of pain; examine the condition of the whole-body skin, including redness, swelling, ulceration, etc., and protect the wound during positioning to reduce discomfort. ④ Skills training: Based on the type of surgery, analyze potential issues during the operation and conduct behavioral training, including functional training, preoperative body movement training, bedpan practice, deep breathing exercises, etc. Some patients have a nasogastric tube after surgery, which may interfere with their language function, so they should be guided to express their needs appropriately.

#### 1.2.2 Intraoperative Comfort Care

(1) Environmental care: Ensure cleanliness of the bed unit without bloodstains, maintain room temperature between 22-25°C, humidity between 50%-60%, create a warm and comfortable environment. The operating room should be quiet, with no discussion of topics unrelated to the surgery. During relevant procedures, ensure gentle, accurate, and stable movements, minimize noise, and prevent adverse stimuli. 2 Anesthesia care: Some patients lack understanding of anesthesia knowledge, fear its safety, and worry about its impact on intelligence, leading to increased anxiety. Circulating nurses should actively assess the patient's mindset, accompany the patient throughout the process, distract their attention through actions like shaking hands, provide care and compassion, and make them feel safe. ③ Positioning care: Meet the surgical requirements without interfering with physiological functions, select appropriate positions, prepare relevant supports and pads, and provide protection for all joints. For example, in lithotomy position, conventional positioning may affect the peroneal nerve, so using a leg support board under the calf instead of the thigh can reduce pressure on the popliteal fossa. In lateral position, fix the patient's buttocks and shoulders to promote venous return from the axillary and jugular ④ Detail intervention: Venipuncture causes veins. certain trauma, and leaving the needle in place during surgery results in noticeable trauma. Properly protect the indwelling needle, explain the necessity and significance before puncture, ensure careful, skilled, and precise operation, correct needle-holding method, control needle insertion angle, improve the success rate, and secure it in place. For patients administered atropine, which may cause dry lips, moisten a cotton swab and gently wipe the lips. When using an electrocautery grounding pad, ensure proper adhesion, slowly peel it off to alleviate discomfort.

#### 1.2.3 Postoperative Comfort Care

After completing the surgery, carefully wipe away any bloodstains or disinfectant residue on the patient's skin with warm saline solution. Assist the patient in dressing and covering them with blankets to keep them warm. When transferring the patient, use the four-person lift or bed transfer method, handle with care throughout to prevent discomfort or pain caused by vibration, ensure proper protection of the incision, keep intravenous and drainage tubes unobstructed, and secure drainage bags. For restless patients, appropriate restraint may be applied. Anesthesiologists and circulating nurses should transport the patient together to the ward or ICU, carefully hand over information such as infusion and positioning to the ward nurse, and inform the patient that they will be followed up the next day.

#### **1.3 Observation Items and Indicators**

Evaluation of Vital Signs: Monitor SBP, DBP, and HR before and after intervention<sup>[3]</sup>. Evaluation of Health Status: Utilize the NHP scale<sup>[4]</sup>, which includes 6 dimensions. Higher scores indicate poorer health status. Evaluation of Comfort: Conduct a questionnaire survey covering mental, physiological, psychological, and environmental comfort, scored on a scale from 0 to 100.

#### **1.4 Statistical Methods**

Data analysis will be performed using SPSS 27.0. Measurement data will be expressed as  $(\overline{x} \pm s)$ , and the independent sample t-test will be conducted. A significance level of P < 0.05 will be used to determine statistical significance.

#### 2. Results

# 2.1 Comparison of Vital Signs between the Two Groups

After intervention, both SBP, DBP, and HR in both groups were significantly lower than before intervention, with a more pronounced change observed in the observation group (P < 0.05). See **Table 1** for details.

SBP (mmHg) DBP (mmHg) HR (Times	es/min)
Crown	
Group Example Before After Before After Before	After
Observation Group37 $104.71\pm4.60$ $111.49\pm6.66^{a}$ $61.32\pm3.18$ $72.48\pm5.04^{a}$ $77.33\pm7.39$	82.42±3.25 <sup>a</sup>
Control Group 37 104.62±4.58 135.57±7.03 <sup>a</sup> 62.41±3.09 82.24±5.51 <sup>a</sup> 76.94±7.82	$92.52{\pm}3.26^{a}$
t / 0.084 15.126 1.495 7.950 0.220	13.346
<i>P</i> / 0.933 0.000 0.139 0.000 0.826	0.000

**Table 1**: Comparison of Vital Signs between the Two Groups  $[n(\overline{x} \pm s)]$ 

Note: Compared with before intervention in the same group,  ${}^{a}P < 0.05$ .

# 2.2 Comparison of Health Status between the Two Groups

significantly lower than those in the control group (P < 0.05). See **Table 2** for details.

The NHP scores in the observation group were

Table 2: Comp	arison of	Health	Status	between	the Two	Groups	$[n(\overline{x} \pm s)]$
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Group	Example	Sleep (points)	Energy (points)	Pain (points)	Social Activity (points)	Physical Activity (points)	Emotional Reaction (points)
Observation Group	37	7.11±1.23	7.21±1.05	4.10±0.35	2.70±0.21	2.63±0.16	4.12±0.25
Control Group	37	9.86±1.03	9.98±1.16	$6.00{\pm}0.34$	3.95±0.23	3.98±0.17	5.47±0.41
t	/	10.427	10.769	23.685	24.413	35.175	17.100
Р	/	0.000	0.000	0.000	0.000	0.000	0.000

# **2.3** Comparison of Comfort Level between the Two Groups

The scores for mental, physiological, psychological, and environmental comfort in the observation group were significantly higher than those in the control group, with statistical significance (P < 0.05). See **Table 3** for details.

Group	Example	Mental Comfort (points)	Physiological Comfort (points)	Psychological Comfort (points)	Environmental Comfort (points)
Observation Group	37	92.26±4.16	91.33±3.26	93.34±4.80	92.65±4.17
Control Group	37	81.25±3.90	82.35±3.41	81.53±4.19	83.26±3.64
t	/	11.745	11.579	11.275	10.319
Р	/	0.000	0.000	0.000	0.000

Table 3: Comparison	n of Comfort	Level between t	the Two Group	os $[n(\overline{x} \pm s)]$
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## 3. Discussion

Surgical therapy is widely used and can effectively treat various diseases. However, it involves certain trauma that can affect patients both physically and mentally, interfering with their endocrine and nervous systems, and directly impacting the prognosis. Conventional nursing care carries risks and often fails to eliminate patients' negative psychological states, thus improving the prognosis. Comfort care aligns with modern nursing concepts, aiming to enhance service quality and meet patients' diverse needs, including their mental and physical well-being. This approach, based on conventional care, further optimizes care delivery by establishing scientific and comprehensive nursing protocols.

Implementing comfort care involves comprehensive preoperative interventions, ensuring that surgical instruments are prepared, providing information and counseling services, and understanding patients' basic characteristics, interests, hobbies, and occupations. Emphasizing a patient-centric approach during surgery, every detail is attended to, creating a conducive environment, providing comfort to patients, collaborating closely with anesthesiologists and physicians, and selecting appropriate positions. Postoperatively, promptly cleaning patients' skin, monitoring their physical condition dynamically, selecting the most comfortable positions, and creating a clean and warm nursing environment are crucial. By stimulating patients' interests and providing positive guidance, they can envision a better life.

The results of this study showed that compared to the control group, the observation group had lower SBP, DBP, and HR (P < 0.05), indicating that comfort care can maintain stable vital signs and alleviate surgical stress. The observation group also had lower NHP scores (P < 0.05), suggesting that comfort care can improve health status and expedite the recovery process. Moreover, the observation group had higher scores for mental, physiological, psychological, and environmental comfort (P < 0.05), indicating that patients' comfort significantly improved after receiving comfort care, motivating them to actively participate in their care. These findings indicate that applying comfort care can enhance surgical outcomes.

In summary, providing comfort care to patients undergoing surgical treatment significantly improves comfort levels, enhances health status, and maintains stable vital signs, demonstrating its potential for widespread application.

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