

# Effects of Psychological Nursing and Diet Nursing on Mood and Vital Signs of Patients Undergoing Thyroid Surgery

Jun Guo, Song Zhang\*, Xianlan Chen, Tao Yu, Yue Zhang

The Third People's Hospital of Yunnan Province, Kunming, Yunnan, China  
286854393@qq.com

\*Corresponding author

**Abstract:** *Objective:* To analyze the application value of psychological nursing and diet nursing in patients with thyroid tumor. *Method:* Eighty-six patients with thyroid tumors who underwent elective surgery from January 2022 to January 2023 were randomly divided into observation group (43 cases) and control group (43 cases). Routine nursing was carried out in the control group, psychological nursing and diet nursing were carried out in the observation group. Compare the difference of surgical prognosis and satisfaction between the two groups, and compare the changes of anxiety and depression scores before and after nursing. *Results:* 1) The incidence of postoperative complications in the observation group was lower than that in the control group ( $P < 0.05$ ), shorter hospital stay than the control group ( $P < 0.05$ ); 2) The satisfaction of the observation group was higher than that of the control group ( $P < 0.05$ ); 3) The change range of anxiety and depression scores in the observation group before and after nursing is higher than that in the control group ( $P < 0.05$ ). *Conclusion:* The implementation of psychological nursing and diet nursing can help to improve the negative emotions of patients, reduce the incidence of postoperative complications, shorten the length of hospitalization, and improve satisfaction, which can be widely used.

**Keywords:** Psychological nursing; Diet nursing; Thyroid; Nursing effect; Postoperative complications; Length of stay; Satisfaction

## 1. Introduction

Thyroid nodules are a common type of thyroid diseases, of which benign nodules account for a high proportion. In recent years, with the improvement of people's health awareness, the detection rate of thyroid benign nodules has been increasing [1]. As an invasive treatment method after surgery, there are certain surgical risks, which will lead to psychological stress and physical and psychological stress reaction of patients, which is not conducive to surgical rehabilitation [2]. Therefore, corresponding nursing intervention measures should be taken. Psychological nursing and diet nursing are mainly aimed at the patients' cognitive situation, to carry out personalized health education, so as to promote the patients to form correct cognition, belief and behavior, and actively cooperate with clinical treatment, so as to improve the prognosis of patients [3].

## 2. Clinical data and methods

### 2.1. Clinical data

Eighty-six patients with thyroid tumors who underwent elective surgery from January 2022 to January 2023 were randomly divided into observation group (43 cases) and control group (43 cases). There were 10 males and 33 females in the observation group; The age ranged from 42 to 65 years, with an average of  $(52.6 \pm 5.2)$  years. There were 9 males and 34 females in the control group; The age ranged from 41 to 64 years, with an average of  $(52.2 \pm 5.4)$  years. Inclusion criteria: ① patients with thyroid tumor undergoing elective surgery; ② Both the patient and his family members were informed of the study and voluntarily signed the consent form. Exclusion criteria: patients with mental illness and cognitive impairment.

## 2.2. Methods

### 2.2.1. Methods in the control group

The specific measures of routine nursing in the control group were as follows.

①Health education was carried out at the time of admission to inform the patients of the harm of thyroid tumor and the advantages of postoperative treatment, and improve the patients' understanding and confidence in the operation. ②Patients were guided to use drugs correctly, and were informed of the necessity of medication, so as to actively cooperate with clinical treatment. ③Patients were guided to eat healthy food, maintain a light and digestible diet during hospitalization, and eat more fresh fruits and vegetables. ④Ward management was strengthened; windows were regularly opened and ventilated; familiar articles were placed for patients to create a warm atmosphere for hospitalization.

### 2.2.2. Methods in the observation group

The specific measures of psychological nursing and diet nursing in the observation group are as follows.

①Cognitive assessment and health education. Nurses should assess the patient's cognitive level of disease and surgery, understand the patient's physical symptoms, psychological status, behavior habits, social support status, etc., actively communicate with the patient, build a good relationship with the patient, and analyze the specific problems troubling the patient, so as to provide targeted support and help the patient solve problems. The wrong cognition of the patient should be corrected, and targeted health education should be carried out according to the patient's cultural level and cognitive level, including one-to-one explanation, distribution of health manuals, watching promotional videos, etc. The aim is to inform the patient of the effect of surgical treatment, precautions and complications, and explain the matters that the patient needs to cooperate with. ②Psychological nursing. According to the psychological status of patients, personalized psychological counseling was carried out to guide patients to communicate with each other and share experiences through organizing patient associations, thereby establishing confidence in surgery. At the same time, the patients were guided to maintain their physical and mental stability through deep breathing training, muscle relaxation training, meditation and other ways, so as to better accept surgical treatment. ③Behavioral nursing. Nursing guidance should be strengthened based on the patient's behavioral habits; the nursing plan should be timely adjusted; the physical and mental discomfort of the patients should be minimized. ④Diet intervention. In order to ensure the effect of dietary health education for patients undergoing thyroid surgery, it is also necessary to develop diversified health education approaches in combination with the clinical characteristics of patients, and try to ensure that each health education approach can meet the needs of patients for dietary health education, so that patients can receive detailed, coherent and complete health education. The effect of diet health education for patients should be maximized, and patients should be helped to master the skills of diet management, recipe formulation, calorie conversion, high-sugar food identification, and diet taboos.

For the patients with education level of junior high school or below, poor and general independent reading ability, lack of independent reading consciousness, older age and poor visual function, oral education for nurses is the main way. Nurses use easy-to-understand language to explain the content of health education one-to-one, with thyroid surgery diet health education PPT, video, pictures. During the period of education, the tone slows down, gentle and patient, so that patients have sufficient time to understand relevant knowledge and master relevant knowledge. In order to ensure the implementation of diet health education, it is necessary to formulate an education plan according to the situation of patients and carry out health education according to the plan. It is helpful to avoid the incoherence and incompleteness of education caused by the decisive duration of hospitalization. Food health education manuals should be distributed as much as possible, or patients should be guided to follow the official Wechat account of the hospital. A way of long-term education should be provided to let patients learn relevant knowledge for a long time and improve their mastery of dietary knowledge.

The diet health education manual for thyroid surgery is routinely distributed to patients with junior high school education level or above, good independent reading ability and ability to complete reading independently, extroverted personality, active communication and skilled application of mobile devices. Patients should be instructed to watch popular science videos, attend relevant lectures in hospitals, and pay attention to the WeChat Official Accounts of hospitals. Let patients through various ways to complete self-basic learning, master the basic knowledge of healthy diet. Patients should be

encouraged to ask questions if they don't understand. Nurses should answer from a medical point of view, but it is necessary to answer in plain language and reserve a certain amount of time for the patient to fully understand the relevant knowledge [4]. After the patient completes the knowledge learning, the patient also needs to be instructed to learn the self-management skills of diet. Through demonstration education and video broadcast education, patients can master the skills of diet calorie conversion, healthy recipe formulation, high-sugar food identification, etc. And set the corresponding scene or provide the corresponding case, let the patient combine the scene content or case information, independently formulate the corresponding scientific diet plan. Nurses evaluated the protocol, confirmed the patient's accurate content, pointed out the wrong content, and continuously improved the patient's diet self-management ability [5].

### 2.3. Observation indicators

Compare the difference of surgical prognosis and satisfaction between the two groups, and compare the changes of anxiety and depression scores before and after nursing.

### 2.4. Statistical analysis

SPSS22.0 statistical software was used for analysis.

## 3. Results

### 3.1. Difference of surgical prognosis between the two groups

See Table 1 for the difference of surgical prognosis between the two groups.

Table 1: Differences in surgical prognosis between the two groups

Group	Postoperative complication rate (n, %)	Length of stay (d)
Observation group (n=43)	3 (7.0)	5.6±1.2
Control group (n=43)	7 (16.3)	7.8±2.5
X <sup>2</sup> /t value	5.234	5.165
P value	0.042	0.041

### 3.2. Difference in satisfaction between the two groups

See Table 2 for the difference of satisfaction between the two groups.

Table 2: Difference in satisfaction between the two groups

Group	Very satisfied	Basically satisfied	Dissatisfied	Total satisfaction (%)
Observation group (n=43)	19	20	4	90.7
Control group (n=43)	16	18	9	79.1
X <sup>2</sup> value				5.325
P value				0.043

### 3.3. Differences in scores between the two groups

See Table 3 for the difference between the two groups.

Table 3: Difference of scores between the two groups (points)

Group	Anxiety score		Depression score	
	Before nursing	After nursing	Before nursing	After nursing
Observation group	62.4±6.8	54.6±5.3	61.5±7.0	52.4±5.4
Control group	62.5±7.0	58.4±6.1	61.4±7.1	56.8±6.3
t value	1.225	5.321	1.154	5.241
P value	0.113	0.043	0.106	0.042

#### 4. Discussion

Thyroid tumor is a common clinical disease, which mostly occurs in female patients and has no obvious symptoms in the early stage. As the tumor grows, it will cause the appearance change of patients, and cause dysphagia, hoarseness and other symptoms, affecting the health and safety of patients [6]. At present, surgery is the first choice for clinical treatment of thyroid tumors, but there are certain risks in surgery. Some patients are too nervous and anxious before surgery because of fear of surgery risks, which is easy to cause physical and psychological stress reactions, and is not conducive to postoperative rehabilitation [7]. Therefore, it is necessary that clinical nursing intervention should be strengthened.

The conventional nursing model does not play the initiative of patients, and the overall nursing effect is poor, so it has certain limitations. Psychological nursing and dietary nursing mainly focus on providing theories about the impact of cognition on patients' emotions and behaviors, and taking corresponding cognitive interventions based on patients' cognitive conditions, which can help improve patients' cognitive level of diseases and surgery, thereby changing patients' concepts and behaviors [8]. In the process of carrying out psychological nursing and diet nursing, it is necessary to improve the knowledge reserve of medical staff, commit to standardizing clinical nursing work, improve the continuity and standardization of nursing, help patients better accept surgical treatment, prepare for surgery, and reduce the incidence of postoperative complications [9]. At the same time, it is necessary to strengthen psychological counseling and improve the psychological status of patients, so as to improve the quality of life of patients.

At present, many studies have pointed out that the development of psychological nursing and diet nursing can help improve the cognition and belief of patients, improve the confidence of surgery and improve the prognosis of surgery, which is consistent with the results of this study [10]. During the implementation of psychological nursing and diet nursing, it is necessary to reasonably evaluate the cognitive level of patients, so as to launch targeted nursing measures. The development of psychological nursing and diet nursing is conducive to giving full play to the initiative of nursing staff. The two kinds of nursing are helpful for providing high-quality nursing for patients, optimizing the nursing process, thus improving the quality of nursing, building a good nurse-patient relationship with patients, guiding patients to prepare for surgery, reducing stress reactions, and reducing the occurrence of postoperative complications.

#### 5. Conclusion

In order to adapt to the continuous deepening of modern medical reform, the content of clinical nursing has been constantly enriched, and a variety of nursing models have emerged. Psychological nursing and diet nursing are a new type of nursing model, and have shown good applicability in clinical research. Through cognitive theory and nursing intervention, psychological nursing and diet nursing can evaluate patients' misconceptions about diseases and treatment methods, thus providing personalized guidance, improving patients' treatment confidence, and actively cooperating with clinical treatment, which is helpful to improve patients' prognosis. In summary, the implementation of psychological nursing and dietary nursing can help improve patients' negative emotions, reduce the incidence of postoperative complications, shorten hospital stay, and improve satisfaction, which can be widely used.

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