

World Journal of *Clinical Cases*

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ABOUT COVER

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WJCC mainly publishes articles reporting research results and findings obtained in the field of clinical medicine and covering a wide range of topics, including case control studies, retrospective cohort studies, retrospective studies, clinical trials studies, observational studies, prospective studies, randomized controlled trials, randomized clinical trials, systematic reviews, meta-analysis, and case reports.

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Retrospective Study

Intervention effect of encouraging mental and programmed nursing of patients in interventional operating room on their compliance and bad moods

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Abstract

BACKGROUND

Patients' lack of correct understanding of cardiovascular disease and interventional therapy is often accompanied by varying degrees of fear, depression and anxiety. Negative emotion will affect the hemodynamic fluctuation of patients undergoing interventional surgery, which is not conducive to the smooth and safe operation of interventional surgery. Therefore, it is very important to implement effective nursing intervention in the operating room.

AIM

To explore the intervention effect of motivational psychological nursing combined with programmed nursing on compliance and bad mood of patients in interventional operating room.

METHODS

A total of 98 patients in the interventional operating room of our hospital from October 2019 to March 2021 were randomly divided into study group ($n = 49$) and control group ($n = 49$). The control group took routine nursing. However, the study group took motivational psychological nursing combined with procedural nursing on the basis of the control group. Statistics were made on rehabilitation compliance, Positive and Negative Affect Schedule of bad mood, Simplified Coping Styles Questionnaire score of coping style and satisfaction of intervention between the two groups before and after intervention.

RESULTS

The rehabilitation compliance of the study group (95.92%) was higher than that of the control group (81.63%) ($P < 0.05$). After intervention, the scores of upset, fear, irritability, tension and fear in the study group were respectively, which were lower than those in the control group ($P < 0.05$). After intervention, the score of positive coping in the study group was higher than that in the control group. However, the score of negative coping in the study group was lower than that in the control group ($P < 0.05$). The intervention satisfaction of the study group (93.88%) was higher than that of the control group (79.59%) ($P < 0.05$).

CONCLUSION

The intervention of motivational psychological nursing combined with procedural nursing can improve the rehabilitation compliance, and alleviate the bad mood. In addition, it can change their coping style to the disease, and the patients are more satisfied with the nursing work.

Key Words: Interventional operating room; Motivational psychological nursing; Programmed nursing; Compliance; Bad mood

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Core Tip: Generally, adopting motivational psychological nursing combined with procedural nursing intervention on patients in the operating room can improve rehabilitation compliance and alleviate negative emotions. In addition, it can change their coping style to the disease and increase patient satisfaction with nursing work.

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INTRODUCTION

The interventional operating room is an important department for the clinical treatment of cardiovascular and other diseases. This kind of patient condition is serious, and progress occurs rapidly. Some patients even have a sense of near death, and patients lack correct understanding of their own diseases and interventional therapy. As a consequence, this condition is often accompanied by varying degrees of fear, depression and anxiety[1-3]. Negative emotion can affect the hemodynamic fluctuation of patients undergoing interventional surgery, which is not conducive to the smooth and safe operation of interventional surgery[4,5]. As a consequence, it is important that effective nursing interventions be implemented in the operating room.

Motivational psychological nursing mainly stimulates the internal potential and strength of patients through positive incentives. In addition, it is adopted for disease nursing intervention to help patients alleviate negative emotions through self-regulation and accept interventional therapy with a relaxed and positive attitude[6]. Programmed nursing formulates a series of nursing programs according to the characteristics of the interventional operating room. In addition, it intends to ensure the standardization, organization and rationality of nursing measures and to avoid the blindness and arbitrariness of nursing intervention. Moreover, programmed nursing intends to pay more attention to nursing responsibility to provide quality nursing services for patients[7].

However, there are few systematic studies on the value of programmed nursing combined with motivational psychological nursing intervention at present. As a consequence, this study intends to select 98 patients in the operating room of our hospital to explore the application value of the above combined intervention program.

MATERIALS AND METHODS

General data

A total of 98 patients in the interventional operating room of our hospital from October 2019 to March 2021 were selected. The inclusion criteria were as follows: (1) All patients were in the department of cardiology; (2) Patients who were to be treated with PCI; (3) Patients who were informed consent to this

study; and (4) Patients with good compliance and can cooperate to complete the investigation. Exclusion criteria: (1) Patients with speech communication disorder, hearing impairment and mental system disorders; (2) Patients with malignant tumor; (3) Patients with severe systemic diseases; (4) Patients with allergic constitution; and (5) Patients with history of alcohol and drug dependence. According to the simple random number table, the patients were divided into study group ($n = 49$) and control group ($n = 49$). There were 26 males and 23 females, aged 44-79 years, with an average of (63.54 ± 10.37) years, and education level: primary school and below 13 cases, junior middle school and senior high school 26 cases, college and above 10 cases. In the control group, there were 29 males and 20 females, aged from 41 to 79 years old, with an average of (65.04 ± 11.32) years, and education level: primary school and below 16 cases, junior middle school and senior high school 25 cases, junior college and above 8 cases. The clinical data of the two groups were balanced and comparable ($P > 0.05$), and this study was approved by the Ethics Committee of our hospital.

Methods

The control group were treated with routine nursing care, including assisting patients with relevant examination before operation, preparing surgical materials, health education, close monitoring of vital signs during operation, and so on. On the basis of the control group, the study group adopted motivational psychological nursing combined with programmed nursing, programmed nursing: (1) Preoperative intervention, grasping the patient's condition and other information through communication with patients, and explaining in detail the safety and necessity of interventional therapy; (2) preparing the materials needed for interventional therapy, putting in sodium, nitroglycerin, dopamine, *etc.*, according to the risks during interventional therapy, specify the drug name and dose, *etc.*; (3) carrying out psychological intervention for those with clear consciousness to alleviate their tension and fear, to arrange nurses to accompany them when entering the operating room, avoiding letting patients wait alone in the interventional operating room; (4) properly adjusting the humidity and temperature of the interventional operating room. It can also play soothing and soft music according to patients' preferences; (5) intervention during operation, perfect preoperative treatment, including double vena cava needle placement, skin preparation, *etc.*, connect the monitor, closely monitor the patient's ECG and blood pressure, and inform the doctor to take corresponding treatment in case of sweating or convulsions; and (6) postoperative intervention, timely informing the patient that the operation is very successful, and avoiding worrying too much about the treatment effect. Besides, closely observing the electrocardiogram and vital signs, making a detailed record, straightening and breaking the operating side of the limb 4-6 h after operation, and telling nurses to stay in bed for 24 h. checking the puncture site for bleeding, reporting it to the doctor in time if bleeding, and taking corresponding nursing plan. Monitor the limb temperature and arterial pulsation on the operative side, and tell the patients to drink more water, the amount of drinking water should be more than 1500 mL within one day, and it is appropriate not to feel abdominal distension after drinking water, so as to urge the contrast medium to be excreted as soon as possible. Motivational psychological nursing: (1) Preoperative motivational psychological nursing, patiently listening to patients' cognitive and psychological needs of their own diseases and interventional therapy, and responding positively through physical movements such as nodding in the process of listening. avoid too many summaries and inquiries. Encouraging language was adopted to respond to patients during listening, make them feel cared for and cared for, and establish a harmonious and trusting relationship; (2) Adopting easy-to-understand language, keeping the speech speed moderate and the tone calm, explaining the interventional operation method, anesthesia scheme and necessity to the patients, and patiently answer the questions raised by the patients; (3) Intraoperative motivational psychological nursing, they are prone to strong psychological stress reactions after entering the interventional operating room, such as language tremor, rapid heartbeat, pale complexion and so on because the patients are unfamiliar with the interventional surgical treatment plan and the interventional operating room. When nursing staff find such manifestations, they appease and encourage patients by means of body movements, language and eyes. Adopting self-appropriate positive and positive language cues to help patients build up confidence in treatment[8]; and (4) postoperative motivational psychological nursing, patiently and carefully listening to patients' experience and feelings of operation and anesthesia and postoperative rehabilitation nursing needs. In addition, it is necessary to alleviate patients' negative emotions and build up confidence in rehabilitation. urge patients to actively cooperate with postoperative rehabilitation nursing by explaining cases with ideal results in the past to.

Observation index

Statistics of rehabilitation compliance of the two groups, self-scale evaluation, were conducted including standardized drug use, healthy diet, regular work and rest, a total of 100 points, 90-100 points for complete compliance, 70-89 points for basic compliance, less than 70 points for non-compliance. Rehabilitation compliance = (complete compliance + basic compliance)/total number of cases $\times 100\%$.

The negative emotions of the two groups before and after intervention were counted and evaluated according to the Positive and Negative Affect Schedule (PANAS) negative psychological questionnaire. Five dimensions of upset, irritability, nervousness and fear were selected. The score range of each dimension was 1-5 points, and the lower the score, the better.

The coping styles of the two groups before and after intervention were counted. According to the Simplified Coping Styles Questionnaire (SCSQ) evaluation of the simplified coping style questionnaire, including positive coping and negative coping, a four-level scoring system was adopted, which was divided into "often adopted", "sometimes adopted", "occasionally adopted" and "not adopted"[9].

There were 19 items evaluated by the Newcastle Nursing Satisfaction Scale, with a full score of 95, > 85 as very satisfactory, 67 to 85 as general satisfaction, < 67 as dissatisfaction, satisfaction = (general satisfaction + very satisfactory)/the total number of cases in this group × 100%[10].

Statistical analysis

The data were analyzed by SPSS22.0, measurement data were expressed with mean ± SD, and conducted *t* test, counting data were expressed with *n* (%), and conducted χ^2 test. *P* < 0.05 indicated that the difference was statistically significant.

RESULTS

Rehabilitation compliance

The rehabilitation compliance of the study group (95.92%) was higher than that of the control group (81.63%) (*P* < 0.05, Table 1).

PANAS score

Before intervention, there was no significant difference between the study group (3.78 ± 0.59, 3.45 ± 0.78, 3.64 ± 0.91, 4.01 ± 0.55, 4.11 ± 0.65) and the control group (4.01 ± 0.64, 3.51 ± 0.82, 3.56 ± 0.88, 3.96 ± 0.61, 4.04 ± 0.71) in upset, fear, irritability, tension, fear (*P* > 0.05). After intervention, the scores of upset, fear, irritability, tension and fear in the study group were 1.44 ± 0.32, 1.39 ± 0.21, 1.50 ± 0.41, 1.55 ± 0.54 and 1.49 ± 0.37, respectively, which were lower than those in the control group (1.96 ± 0.41, 1.89 ± 0.38, 2.01 ± 0.60, 2.24 ± 0.65, 2.09 ± 0.53) (*P* < 0.05). As show in Table 2.

SCSQ score

Before intervention, there was no significant difference between the positive coping score and the negative coping score in the study group (1.35 ± 1.04), (2.76 ± 0.73) and the control group (1.29 ± 0.97) and (2.80 ± 0.76) (*P* > 0.05). After intervention, the score of positive coping in the study group (3.03 ± 0.96) was higher than that in the control group (2.21 ± 0.88). However, the score of negative coping in the study group (0.74 ± 0.46) was lower than that in the control group (1.10 ± 0.59) (*P* < 0.05, Table 3).

The intervention satisfaction

The intervention satisfaction of the study group (93.88%) was higher than that of the control group (79.59%) (*P* < 0.05, Table 4).

DISCUSSION

The patients in the interventional operating room were seriously ill. They have serious negative emotions, which can affect the efficacy and safety of interventional surgery because they are worried about their own diseases and therapeutic effects and lack a correct understanding of interventional therapy[11-13]. As a consequence, the implementation of effective nursing intervention during the treatment of patients in the interventional operating room is very important to ensure the therapeutic effect of the disease and promote positive outcome of the disease[14,15].

Routine nursing only pays attention to the treatment of diseases. However, it does not pay enough attention to the psychological state of patients, and the nursing content is not systematic enough, thus decreasing patient benefits. Programmed nursing can provide patients with systematic, professional and standardized nursing measures, thus helping them avoid nursing errors, ensure the safety of patients to the maximum extent, and provide high-quality nursing services compared with routine nursing[16,17]. Motivational psychological nursing is an important clinical psychological support technology that mainly entails stimulating the behavioral goals and motivation of the intervention objects to keep them highly excited, mobilizing their enthusiasm and giving full play to their inherent potential[18,19]. In motivational psychological nursing, mental motivation can enable patients to establish correct health beliefs and alleviate a negative psychological state; goal motivation can enhance patients' successful experience and enhance treatment initiative and enthusiasm; example incentives can help patients establish treatment confidence; and trust incentives can reduce patients' psychological pressure and improve compliance[20]. After the intervention of patients in the interventional operating room combined with motivational psychological nursing and programmed nursing, it was found that the rehabilitation compliance of the study group (95.92%) was higher than that of the control group (81.63%), PANAS scores were lower than those of the control group, and the improvement of each

Table 1 Comparison of rehabilitation compliance between the two groups, *n* (%)

Group	Number	Complete compliance	Basic compliance	Disobey	Rehabilitation compliance
Research group	49	30 (61.22)	17 (34.69)	2 (4.08)	47 (95.92)
Control group	49	26 (53.06)	14 (28.57)	9 (18.37)	40 (81.63)
χ^2					5.018
<i>P</i> value					0.025

Table 2 Comparison of Positive and Negative Affect Schedule scores between the two groups (mean \pm SD)

Group	Tumult	Fear	Irritable	Nervous	Fear
Before intervention					
Research group (<i>n</i> = 49)	3.78 \pm 0.59	3.45 \pm 0.78	3.64 \pm 0.91	4.01 \pm 0.55	4.11 \pm 0.65
Control group (<i>n</i> = 49)	4.01 \pm 0.64	3.51 \pm 0.82	3.56 \pm 0.88	3.96 \pm 0.61	4.04 \pm 0.71
<i>t</i> value	1.850	0.371	0.442	0.426	0.509
<i>P</i> value	0.067	0.711	0.659	0.671	0.612
After intervention					
Research group (<i>n</i> = 49)	1.44 \pm 0.32	1.39 \pm 0.21	1.50 \pm 0.41	1.55 \pm 0.54	1.49 \pm 0.37
Control group (<i>n</i> = 49)	1.96 \pm 0.41	1.89 \pm 0.38	2.01 \pm 0.60	2.24 \pm 0.65	2.09 \pm 0.53
<i>t</i> value	6.999	8.061	4.913	5.716	6.498
<i>P</i> value	0.000	0.000	0.000	0.000	0.000

Table 3 Comparison of Simplified Coping Styles Questionnaire scores between the two groups (mean \pm SD)

Group	Respond positively	Negative coping
Before intervention		
Research group (<i>n</i> = 49)	1.35 \pm 1.04	2.76 \pm 0.73
Control group (<i>n</i> = 49)	1.29 \pm 0.97	2.80 \pm 0.76
<i>t</i> value	0.295	0.266
<i>P</i> value	0.768	0.791
After intervention		
Research group (<i>n</i> = 49)	3.03 \pm 0.96	0.74 \pm 0.46
Control group (<i>n</i> = 49)	2.21 \pm 0.88	1.10 \pm 0.59
<i>t</i> value	4.408	3.368
<i>P</i> value	0.000	0.001

dimension score of SCSQ scale was significantly better than that of the control group ($P < 0.05$). This shows that motivational psychological nursing combined with programmed nursing has high application value in interventional operating room patients, which is helpful to alleviate patients' negative emotions, urge them to face the disease actively and improve their compliance. The main reasons are as follows: (1) Programmed nursing mainly takes nursing procedures and treatment procedures as the basis, comprehensively considers the patient's condition, and formulates a standardized and programmed intervention plan to provide efficient and high-quality nursing services for patients. The prevention of nursing omissions and can shorten the rescue time to ensure the effect of treatment. Additionally, preoperative programmed nursing can deepen patients' understanding of interventional therapy, guide them to face their own diseases and treatment correctly and positively, establish confidence in rehabilitation, improve nurse-patient communication and make them feel respected and cared for to accept interventional surgery with a good mentality and reduce the stress reaction caused by invasive operation. Intraoperative nursing can ensure the safe and smooth progress of interventional surgery, shorten the treatment time and reduce the risk of complications, while postoperative nursing

Table 4 Comparison of intervention satisfaction between the two groups, *n* (%)

Group	Very satisfied	Generally satisfied	Dissatisfied	Intervention satisfaction
Research group (<i>n</i> = 49)	25 (51.02)	21 (42.86)	3 (6.12)	46 (93.88)
Control group (<i>n</i> = 49)	19 (38.78)	20 (40.82)	10 (20.41)	39 (79.59)
χ^2				4.346
<i>P</i> value				0.037

can provide security for patients and make them feel that nurses have a rigorous and serious attitude; and (2) By listening to the patients' cognition and attitude towards their own diseases and treatment plans before operation, we can understand the emotional state of the patients; introduce the intervention operation, necessity and treatment purpose in detail; and answer the patients' questions. These steps can eliminate patients' confusion and alleviate the fear caused by the lack of correct understanding of the disease and interventional surgery in motivational psychological nursing. The positive implication can directly alleviate the negative psychology of patients, stimulate positive emotion and body potential, effectively mobilize self-control and subjective initiative, and face the disease and treatment and rehabilitation with the best psychological state.

In addition, it was also found that the intervention satisfaction of the study group (93.88%) was higher than that of the control group (79.59%) ($P < 0.05$). It was further confirmed that the combined program of motivational psychological nursing and programmed nursing had high application value in interventional operating room patients, mainly because the nursing intervention program could effectively regulate the physical and mental state of patients from the subjective point of view. Urging them to face the disease and treatment with a correct attitude is conducive to shortening the process of disease rehabilitation and increasing patient satisfaction.

CONCLUSION

Generally, adopting motivational psychological nursing combined with procedural nursing intervention on patients in the operating room can improve rehabilitation compliance and alleviate negative emotions. In addition, it can change their coping style to the disease and increase patient satisfaction with nursing work.

ARTICLE HIGHLIGHTS

Research background

Patients' lack of correct understanding of cardiovascular disease and interventional therapy is often accompanied by varying degrees of fear, depression and anxiety, which will affect the hemodynamic fluctuation of patients undergoing interventional surgery, which is not conducive to the smooth and safe operation of interventional surgery.

Research motivation

The rehabilitation compliance, adverse mood, coping style scores and intervention satisfaction were compared between 2 groups before and after intervention.

Research objectives

This study intends to explore the intervention effect of motivational psychological nursing combined with programmed nursing on compliance and bad mood of patients in interventional operating room.

Research methods

A total of 98 patients in the interventional operating room were selected. The control group were treated with routine nursing care, including assisting patients with relevant examination before operation, preparing surgical materials, health education, close monitoring of vital signs during operation, and so on. On the basis of the control group, the study group adopted motivational psychological nursing combined with programmed nursing, programmed nursing

Research results

The rehabilitation compliance of the study group was higher than that of the control group. After intervention, the scores of upset, fear, irritability, tension and fear in the study group were respectively,

which were lower than those in the control group. The intervention satisfaction of the study group was higher than that of the control group.

Research conclusions

Adopting motivational psychological nursing combined with procedural nursing intervention on patients in the operating room can improve rehabilitation compliance and alleviate negative emotions. In addition, it can change their coping style to the disease and increase patient satisfaction with nursing work.

Research perspectives

Further study with large sample data is required in the future.

FOOTNOTES

Author contributions: Chi RB and Mao HP designed this study and wrote this manuscript; Chi RB, Mao HP and Cai YY were responsible for sorting the data; and all the authors reviewed and approved the final version to be published.

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