

The Influence of Psychological Security on Quality of Life in Patients Undergoing Hysteroscopic Surgery–The Mediating Effect of Social Support

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Abstract: With the development of minimally invasive gynecological technology, hysteroscopic surgery has been widely used in the treatment of gynecological diseases due to its advantages of rapid recovery and minimal trauma. From the perspective of patients undergoing hysteroscopic surgery, this paper explores the influence of their psychological security on quality of life, analyzes the mediating effect of social support, and puts forward specific countermeasures and suggestions. The purpose is to improve the psychological security and quality of life of patients undergoing hysteroscopic surgery, and provide reference for the subsequent development of hysteroscopic surgery.

Keywords: Patients undergoing hysteroscopic surgery; Psychological security; Mediating effect

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1. Introduction

Clinical medical work usually focuses on patients' physical treatment and postoperative rehabilitation, while lacking attention to patients' psychological state and quality of life. Psychological security is an important manifestation of an individual's mental health, which not only affects the patient's mood, but also relates to their subsequent quality of life and rehabilitation. Social support, as an important resource for individuals to cope with stress, can help patients alleviate negative emotions and continuously improve their psychological adaptability. Based on this, in-depth research on the relationship between psychological security, social support and quality of life of patients undergoing hysteroscopic surgery can help patients improve their physical and mental status and promote the improvement of clinical medical service quality.

2. The influence of psychological security on quality of life in patients undergoing hysteroscopic surgery and the test of the mediating effect of social support

2.1. The influence of psychological security on quality of life in patients undergoing hysteroscopic surgery

Psychological security of patients undergoing hysteroscopic surgery can regulate their emotional state and affect the psychological dimension of quality of life. Among them, patients lacking psychological security may experience emotions such as anxiety before and after surgery; some may even fall into depression due to physical discomfort and excessive worry about their condition ^[1]. Negative emotions directly reduce the psychological state dimension of quality of life, and may even cause patients to develop resistance to postoperative rehabilitation. In contrast, patients with high psychological security have stronger confidence in medical treatment and rehabilitation, can view the risks of surgery rationally, and adjust their emotions flexibly ^[2]. Stable emotions can improve patients' psychological satisfaction with life, help avoid the interference of negative emotions, and lay a solid psychological foundation for quality of life.

In addition, psychological security can affect the degree of cooperation in rehabilitation, which is related to the physical dimension of quality of life. From the perspective of the physical dimension of quality of life, its core lies in the state of the patient's physical functions. The rehabilitation cooperation of patients undergoing hysteroscopic surgery directly affects the speed and effect of recovery ^[3]. Some patients with low psychological security lack trust in medical plans and enthusiasm for cooperating in rehabilitation activities. Their improper behaviors may lead to low scores in the physical function dimension, restricted physical functions, and even reduced quality of life. Patients with strong psychological security recognize the professionalism of medical staff and actively cooperate with the rehabilitation process, such as taking medicine as prescribed by doctors and conducting rehabilitation training ^[4]. Their active cooperation can significantly shorten the recovery cycle of physical functions and lay a physical foundation for improving the patients' quality of life.

2.2. The test of the mediating effect of social support

First, steps for testing the mediating effect. Based on Wen Zhonglin's mediating effect test procedure, regression analysis can be divided into three steps. First, psychological security (X) can be taken as the independent variable and quality of life (Y) as the dependent variable, and a regression model M1 can be established to effectively test the relationship between the independent variable and the dependent variable ^[5]. Second, psychological security (X) can be used as the independent variable and social support (M) as the dependent variable, and a regression model M2 can be built to verify the relationship between psychological security and social support. Finally, psychological security (X) and social support (M) are taken as joint independent variables, and quality of life (Y) as the dependent variable to construct a regression model M3, so as to identify the mediating role of social support between psychological security and quality of life.

Second, analysis of mediating effect results. Tests were conducted on the mediating effects of different dimensions of social support, such as emotional support, informational support, and practical support ^[6]. Mediating effect under emotional support: Regression analysis shows that psychological security has a positive effect on emotional support. Mediating effect under practical support: Psychological security has a positive predictive effect on practical support. Mediating effect under informational support: Psychological security has a positive predictive effect on informational support ^[7]. In conclusion, all dimensions of social support play a mediating role between psychological security and quality of life, among which emotional support has the strongest mediating effect.

3. Countermeasures and suggestions for improving psychological security and quality of life in patients undergoing hysteroscopic surgery

3.1. Intervention strategies for enhancing psychological security

The preoperative period is a critical stage for patients to develop psychological security. Medical staff can effectively alleviate patients' fear through systematic health education and psychological counseling, with specific methods as follows: First, attach importance to the implementation of personalized health education. Medical workers need to understand patients' educational background and disease type to formulate differentiated health education plans ^[8].

For patients with lower educational background, short videos, pictures and texts can be mainly used to explain knowledge about hysteroscopic surgery. For patients with higher educational background, relevant medical literature can be provided to help them understand the risks of the surgery. Second, conduct cognitive behavioral therapy intervention. Patients with anxiety and fear can be referred to psychological nurses or psychological counselors for cognitive behavioral therapy ^[9]. Through communication with patients, medical workers can identify their negative cognitions, such as the concern that a long postoperative recovery period may easily affect normal work. At the same time, medical workers need to encourage patients to master relaxation training skills to help them relieve tension and improve their emotional control ability.

3.2. Intervention strategies for optimizing social support

First, build a diversified social support system. Emphasis should be placed on strengthening family support capabilities: medical workers need to enhance communication with patients' family members to help them master ways to provide medical and nursing support. For example, before surgery, they should explain the possible psychological needs of patients and how to identify preoperative anxiety, so that family members can provide emotional companionship to patients and avoid excessive pressure ^[10].

After surgery, family members can be guided to assist with patients' daily care and encouraged to participate in rehabilitation activities, such as accompanying patients in appropriate postoperative exercises which use to enhance patients' emotional attachment and stimulate their motivation for recovery. Medical workers also need to provide family members with postoperative rehabilitation manuals to help them familiarize themselves with key nursing points. Meanwhile, improve medical and nursing support. Medical institutions should strengthen training for medical staff on communication skills and humanistic care to enhance their ability to provide social support ^[11]. In daily diagnosis and treatment, medical staff should take the initiative to build a good doctor-patient relationship: through patient listening and gentle communication, patients can feel respected and understood.

When providing information support, medical staff should use easy-to-understand language and avoid excessive professional terminology that may cause comprehension difficulties. For instance, when explaining postoperative review items, a table can be used to list the review time, item name, and purpose, making it clear at a glance for patients. A "Medical and Nursing Support Consultation Desk" can be set up in gynecological wards, where experienced medical staff answer questions from patients and their families and provide personalized support suggestions ^[12]. In addition, attach importance to enriching social support channels. Medical institutions need to focus on building patient communication platforms, such as establishing online platforms for patients who have undergone hysteroscopic surgery to encourage patients to share rehabilitation experiences and insights, providing references for newly operated patients. They can also organize offline patient exchange activities and encourage medical staff to participate in answering questions, so as to strengthen communication and interaction

among patients. For the introduction of volunteer services, medical institutions should cooperate with universities and social organizations to recruit volunteers with basic medical knowledge. These volunteers can provide services such as preoperative companionship and postoperative rehabilitation support, for example, accompanying patients to familiarize themselves with the hospital environment, to effectively alleviate patients' fear and expand the sources of social support.

Second, provide personalized social support services. Provide support stratified by age: For young patients (≤ 35 years old), focus on information support, such as pushing information on the latest hysteroscopic surgery technologies, postoperative rapid rehabilitation skills, and fertility protection through short videos and online courses, to meet their needs for professional knowledge. For middle-aged patients (36–50 years old), provide more emotional support, by organizing exclusive psychological counseling groups for middle-aged patients to allow them to share rehabilitation experiences under family and work pressure within the same age group, and provide suggestions on balancing “family-work-rehabilitation” to help alleviate the pressure caused by multiple roles^[13]. For elderly patients (> 50 years old), strengthen practical support: provide postoperative life care services (such as assisting in purchasing daily necessities and meal delivery) and simplify the postoperative rehabilitation process, for example, creating picture-based rehabilitation step guides for elderly patients to avoid operational difficulties caused by complex procedures. Provide support stratified by disease severity: For patients with mild conditions such as simple endometrial polyps, basic social support can be provided through online platforms such as regular rehabilitation reminders and online Q&A can use to reduce the inconvenience of patients traveling to the hospital. For patients with moderate conditions including single submucous uterine fibroids, in addition to online support, regular follow-ups by medical staff can be arranged to adjust the support plan based on patients' recovery status. For patients with severe conditions such as intrauterine adhesions combined with infertility or malignant tumors, provide “one-on-one” exclusive support services with a support team composed of medical staff and volunteers provides full-process emotional support, information support, and practical help, such as assisting in booking specialist outpatient appointments and providing fertility consultation can help patients cope with multiple pressures caused by the disease.

3.3. Comprehensive intervention strategies for improving quality of life

First, improve physical function. Attach importance to the adjustment of postoperative care plans: medical institutions need to grasp the characteristics of hysteroscopic surgery and establish standardized postoperative care procedures. After surgery, personalized pain management plans can be provided for patients. Based on specific pain scores, the causes of pain can be identified in a timely manner, and treatment methods can be adjusted appropriately to effectively relieve patients' postoperative discomfort. Medical workers should pay attention to patients' postoperative diet and rest, formulate scientific and appropriate diet plans, help patients arrange their rest time, and avoid overwork^[14].

Meanwhile, conduct guidance on postoperative rehabilitation training: medical workers need to develop progressive rehabilitation plans. 1–2 hours after surgery: mainly guide patients to perform in-bed turning exercises to effectively promote blood circulation and prevent thrombosis. 1–7 days after surgery; if patients recover well, they can take appropriate short walks. 2 weeks after surgery: medical workers can guide patients to perform Kegel exercises to improve their pelvic floor muscle function. During the actual rehabilitation training, medical staff need to regularly evaluate patients' training effects and physical reactions, and adjust the training intensity in a timely manner to avoid physical injuries caused by improper training.

Second, enhance psychological and social functions. Organize postoperative psychological counseling activities: medical institutions can invite psychological counselors to carry out popular science activities such as emotional regulation and stress coping to improve patients' psychological adjustment ability. Among these activities, mindfulness meditation training can help patients stay more focused, and recognize and manage their own emotions^[15]. Medical institutions can encourage patients to participate in social activities. Once after surgery, encourage patients to resume normal social interactions such as gatherings with friends to avoid the decline of social skills caused by long-term home isolation. They can also strengthen cooperation with communities, organize social activities for postoperative patients such as community development projects, expand patients' social circles, and improve their social adaptability.

4. Conclusion

In summary, this study analyzes the relationships among psychological security, social support, and quality of life in patients undergoing hysteroscopic surgery. It clarifies the impact of psychological security on quality of life and explores the mediating role of social support. To improve the postoperative satisfaction of patients undergoing hysteroscopic surgery, efforts can be made from the perspectives of enhancing psychological security and optimizing social support. This provides a reference for the development of medical and nursing work, promotes the physical and mental well-being of patients undergoing hysteroscopic surgery, and helps them achieve better postoperative rehabilitation.

Disclosure statement

The authors declare no conflict of interest.

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