

# Analysis of the Significance of Key Points of Patient Interventional Psychological Care and Pain Care

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**Abstract:** Interventional therapy has become increasingly popular in clinical practice due to advancements in medical technology. However, patients often experience psychological and physiological pressure due to its invasive nature. The management of patient discomfort and tension is crucial to ensure effective treatment. Psychological and pain management are essential components of interventional therapy, as they significantly impact patient recovery and prognosis. This article discussed the importance of interventional psychological and pain care for patients, starting with the development and spread of interventional therapy. The significance of providing high-quality nursing services to patients and improving their quality of life was also discussed.

**Keywords:** Interventional treatment; Psychological nursing; Pain care; Key points; Significance analysis

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## 1. Introduction

In routine clinical interventional, nursing work extends beyond treating patients to providing psychological and pain care. Interventional treatments often cause patients to experience intense physical stimulation and distress, which causes physical pain and greatly impacts their psychological state, which may cause patients to experience fear, anxiety, loneliness, and helplessness<sup>[1]</sup>. Not only will these problems directly affect the patient's mental health but also indirectly affect their treatment outcomes and recovery process. Therefore, it is crucial to implement effective holistic care during interventional treatment, including psychological care and pain care to improve the patient's treatment compliance, quality of life, and physical and mental recovery.

## 2. The development and popularization of interventional therapy

### 2.1. Overview of interventional therapy

Interventional therapy, also known as interventional radiology, is a method that combines imaging diagnosis and clinical treatment. It uses medical imaging technologies, such as X-ray, ultrasound, magnetic resonance imaging (MRI), etc., to guide doctors to accurately diagnose and treat disease. Interventional therapy has become an

important part of modern medicine due to its minimally invasive, safe, and effective characteristics <sup>[2,3]</sup>.

## **2.2. Development of interventional therapy**

Early interventional therapy can be traced back to the 1950s when it was mainly used to diagnose vascular diseases. With the development of catheter technology, interventional therapy has gradually begun to diagnose and treat cardiovascular diseases. By the 1980s, with the advancement of imaging technology and the emergence of new interventional materials, the application scope of interventional therapy continued to expand, involving many fields involving tumors, nerves, and urology. In the 21st century, interventional therapy technology has become increasingly popular and has become the preferred treatment method for many diseases. Interventional therapy has been widely accepted and applied globally <sup>[4]</sup>.

## **2.3. Popularization of interventional therapy**

In many countries, interventional therapy has become a standard treatment method for various diseases. The number and types of interventional treatments have continued to increase, demonstrating its strong vitality and broad development prospects. Although interventional therapy in China started later than in Western countries, it has developed rapidly. Since the 1980s, China has begun to introduce and develop interventional treatment technology. After decades of development, China's interventional therapy has reached an advanced level internationally and even surpassed some countries in certain fields. With the popularization of medical knowledge and increased awareness of improving one's health, interventional therapy has been widely used and promoted in China.

## **3. Key points of psychological care for interventional patients**

### **3.1. Preoperative psychological care**

#### **3.1.1. Establishing a trusting relationship**

Before interventional therapy is performed, it is crucial to establish a trusting nurse-patient relationship. Nurses should communicate with patients in a warm and friendly manner so that patients feel cared for and supported. Nurses should patiently listen to their appeals and concerns, answer queries, and demonstrate professionalism. In addition, successful stories of treatment with interventional therapy can be shared with patients to enhance their treatment compliance and trust in medical staff.

#### **3.1.2. Relieve anxiety and fear**

Preoperative patients often experience anxiety and fear due to the unknown outcomes of surgery. Nursing staff should monitor patients' emotional changes, assess their level of anxiety, and explain to them the necessity, safety, and prognosis of surgery. Relaxation training, deep breathing, and other methods can be performed to relieve tension. In addition, companionship, encouragement, and psychological counseling can also be provided to enhance the patient's sense of security and reduce anxiety levels <sup>[5]</sup>.

#### **3.1.3. Provide information and education**

Providing patients with adequate information and education is an important part of preoperative psychological care. The interventional treatment process, possible risks, and countermeasures should be introduced to patients in detail so that they clearly understand the treatment process. In addition, patients should be educated on how to cooperate with the treatment, such as preoperative preparation, postoperative precautions, etc. <sup>[6]</sup>. This way, patients can better understand the treatment process, alleviate unnecessary worries, and be mentally prepared.

## **3.2. Intraoperative psychological support**

### **3.2.1. Intraoperative companionship and communication**

During interventional surgery, patients may experience negative emotions such as tension, anxiety, and fear. Not only will these emotions affect the surgery's effectiveness but they may also negatively impact the patient's postoperative recovery. Therefore, intraoperative companionship and communication are important factors in the psychological care of patients. Firstly, good communication should be established. Medical staff should communicate with patients in a friendly and caring manner and avoid using professional jargon so that patients can better understand the surgical process and precautions. At the same time, the privacy and rights of patients should be respected to avoid unnecessary harm and discomfort. Secondly, companionship should be provided during surgery. Medical staff should accompany the patient throughout the operation, promptly detect and address any signs of discomfort and abnormalities, and encourage patients to express their feelings and thoughts by providing positive feedback and comfort.

### **3.2.2. Diversion of attention and relaxation training**

Attention diversion and relaxation training are important methods of intervention in psychological care. They can help patients relieve negative emotions such as tension, anxiety, and fear, and reduce the pain and discomfort caused by surgery. During the operation, medical staff can divert the patient's attention by communicating with the patient, playing music, and talking about relaxing topics to alleviate the patient's nervousness. Patients can be guided to take deep breaths and meditate to help relax their body and mind. Furthermore, relaxation training, such as progressive muscle relaxation, and mind-calming exercises can be performed to help patients relax, stay calm, relieve tension, and reduce the pain and discomfort caused by surgery.

## **3.3. Postoperative psychological counseling**

### **3.3.1. Guidance during the postoperative adaptation period**

After interventional treatment, patients need time to adapt to post-treatment changes. During this period, nurses should explain the postoperative precautions to patients in detail, including adjustments to daily habits, diet, and exercise. This helps reduce the patient's anxiety, restlessness, and improves their ability to self-manage their emotions.

### **3.3.2. Dealing with patients' emotional reactions**

After interventional treatment, medical staff must properly handle the patient's emotions. Nurses should show understanding and empathy for patients' emotional reactions so that they feel cared for and supported. This helps build a trusting relationship and makes patients more willing to share their feelings and thoughts. Secondly, regular communication with patients is needed to understand their feelings and needs. Nurses should listen patiently to patients' concerns and fears and provide appropriate comfort and explanations. At the same time, nurses should help patients eliminate their fear of the unknown by providing accurate information about the disease and treatment. At the same time, patients are encouraged to participate in making treatment decisions and enhance their autonomy and sense of control. In addition, patients should be taught stress-coping techniques, such as deep breathing, meditation, relaxation training, etc., to help them better cope with the discomfort caused by treatment.

### **3.3.3. Family support and counseling**

Medical staff should explain the interventional treatment process, expected effects, and possible complications to family members so they can have a more comprehensive understanding of the treatment. Furthermore, family members should be encouraged to actively participate in the patient's recovery process by providing emotional

support. This helps reduce the patient’s psychological stress and speeds up the recovery process. In addition, family members should also be reminded to regulate their emotions when communicating with the patient. A healthy home environment is crucial for a patient’s recovery.

## 4. Key points of pain care for interventional patients

### 4.1. Pain assessment

#### 4.1.1. Selection and application of assessment tools

Table 1 describes the selection and application of common pain assessment tools in interventional care <sup>[7]</sup>.

**Table 1.** Selection and application of common pain assessment tools in interventional care

Pain assessment tool	Detailed description
Abbreviated pain scale	The scale is a reliable, standardized instrument that consists of three parts: facial expressions, word descriptions, and numerical scores. It is easy to use and understand, and suitable for patients of all ages.
Visual Analog Scale (VAS)	The VAS is an intuitive method wherein patients mark their pain level on a 10cm line. The two ends of the line represent “no pain” and “most painful,” respectively. This method is especially useful for patients with difficulty expressing themselves <sup>[8]</sup> .
Facial expression pain rating scale	This child-friendly assessment tool uses a range of facial expressions to represent varying pain levels. Children can use facial expressions to express their feelings of pain.
Numerical Scoring System (NRS)	A number from 0 to 10 was used to describe the patient’s pain level, with 0 indicating no pain and 10 indicating the worst pain. This method is simple and clear, easy for patients to understand and operate.

### 4.2. Dynamic assessment and recording

Nurses are required to perform pain assessments regularly on patients whenever their pain status changes. The patient’s pain level and duration should be recorded during the assessment. Pain duration should include the onset time, duration, and time point when the pain was relieved or worsened. This information is important in understanding patient pain trends. In addition, the documentation of pain management measures is also necessary. The care plan must be dynamically adjusted based on the patient’s pain assessment results and changing trends. For example, when a patient’s pain worsens, the frequency of analgesic administration may require adjustments. The adjustments will then be recorded for future reference.

### 4.3. Pain interventions

#### 4.3.1. Drug treatment

Appropriate analgesic medication is administered based on the patient’s pain level and the doctor’s instructions. Drug administration should adhere to the principles of time, dosage, and sequence to avoid unnecessary adverse medication and drug interactions. Any side effects of the drug, such as nausea, vomiting, drowsiness, etc. should be monitored and the medication regimen should be adjusted promptly. For patients with a history of drug allergy, special attention should be paid to drug selection and dosage levels.

#### 4.3.2. Non-drug treatment

Non-pharmacological treatment is an important means of intervention in patient pain care, including physical therapy and psychological therapy. Physical therapy includes cold compresses, hot compresses, and massage therapy to help relieve muscle tension and pain. Psychological treatments include relaxation training and cognitive behavioral therapy to help patients regulate their mentality and reduce anxiety and depression. In

addition, breathing exercises and music therapy can be provided to help patients relax physically and mentally, and relieve their pain.

### **4.3.3. Health education**

Pain-related health education can be provided to patients and their families to let them understand the causes, treatment, and ways to care for pain. Patients should be educated on adopting the correct posture, and activities, and getting sufficient rest to avoid factors that aggravate pain. At the same time, patients and their families should be educated on the correct use of analgesics to avoid drug abuse and addiction <sup>[9]</sup>. In addition, the importance of non-pharmacological treatment should also be emphasized to improve patients' self-care ability.

## **5. The importance of psychological care and pain care in interventional treatment**

### **5.1. Improves patient's treatment compliance**

During the interventional treatment process, the treatment outcome is greatly impacted by the patient's compliance. Implementing psychological care and pain care can effectively improve the patient's treatment compliance. Psychological nursing can help patients correctly understand the necessity and importance of interventional treatment. The process, effects, and precautions of interventional treatment can be explained to patients in detail to eliminate doubts and fears and increase their confidence and trust in the treatment. When patients undergo interventional therapy, surgical trauma, and pain and discomfort during postoperative recovery often affect their treatment compliance. Through effective pain care, such as drug analgesia, physical therapy, and massage therapy, the patient's pain and discomfort can be reduced, thus improving the patient's tolerance and compliance with receiving treatment <sup>[10]</sup>.

### **5.2. Improves patient's quality of life**

Interventional therapy has significant advantages in the treatment of certain diseases, but the treatment process often causes physical and mental stress to the patient. Implementing psychological care and pain care can significantly improve the patient's quality of life. Psychological care can help patients adjust their mentality and enhance their psychological endurance to better cope with the stress caused by the disease and treatment. Through effective communication, we can understand the patient's needs and concerns and provide targeted psychological support to maintain a good state of mind, thereby improving their quality of life. Pain care can reduce patients' pain and discomfort through medication, physical therapy, and massage therapy, thus improving their overall well-being.

### **5.3. Conducive to promoting patient recovery**

Not only can psychological care and pain care help patients complete the interventional treatment process but they also facilitate a faster recovery. Psychological care can help patients establish correct recovery concepts and enhance their confidence in recovery. By introducing rehabilitation knowledge and skills to patients, they can better perform postoperative rehabilitation training and accelerate the rehabilitation process <sup>[11]</sup>. Pain care can effectively relieve patients' pain and discomfort, reducing their psychological burden, and improving their physical and mental health.

## **6. Conclusion**

Psychological and pain care demonstrated significant advantages in interventional treatment. As the medical

model continues to evolve along with the increase in people's health needs, psychological care, and pain care will play a greater role in interventional treatments. To better serve patients, clinical medical staff should continuously improve their professional skills in psychological and pain care and conduct in-depth research on interventional patient's psychological characteristics and pain trends to provide more personalized and professional care services. At the same time, communication and collaboration between doctors and nurses should be strengthened to accelerate the patient's recovery.

## Disclosure statement

The authors declare no conflict of interest.

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