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# **Effective Application of Evidence-Based Nursing** in Cancer Pain Care for Tumor Patients

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Abstract: With the aging of China's population, tumors have become a major disease affecting people's normal life. In particular, "cancer pain" caused by tumors has a severe impact on tumor patients, not only reducing their quality of life but also exerting negative effects on their physical and mental health and emotions. Therefore, in the clinical care of tumor patients, helping them relieve "cancer pain" and improving the quality and efficiency of medical care services have become important research topics. This paper takes evidence-based nursing as the starting point, analyzes the basic concepts and practical characteristics of evidence-based nursing, and then proposes the application process and effects of evidence-based nursing in cancer pain care for tumor patients.

Keywords: Evidence-based nursing; Tumor patients; Cancer pain; Clinical care

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#### 1. Introduction

"Cancer pain" refers to pain caused by tumors and is the most common symptom encountered in the clinical treatment of tumor patients. According to current research data, 60-80% of tumor patients will experience cancer pain in the advanced stage. This pain lasts for a long time and is intense, exerting significant impacts on patients' emotions, physical and mental health, appetite, and sleep quality. In particular, insufficient appetite and sleep can further restrict patients' mobility. In the process of clinical care, if patients do not receive timely intervention and care, they are prone to negative emotions and pessimistic psychology, which may lead to resistance to treatment and even suicidal tendencies.

Evidence-based nursing is a new nursing model based on evidence-based medicine and nursing practice. It systematically collects medical care practice cases, evaluates and analyzes nursing methods and means, and uses practical scientific evidence to guide specific nursing decisions and implementation plans, thereby improving the scientificity, effectiveness, and reliability of nursing. The evidence-based nursing model can provide nurses with scientific nursing implementation processes and standardized plans, while improving nursing quality and patient satisfaction. Additionally, this model can promote communication, cooperation, and collaboration within the

medical care team, especially strengthening the synergy between attending physicians and nursing staff, thereby improving the overall quality of medical services. Current studies have shown that the evidence-based nursing model plays an important role in cancer pain care for tumor patients, not only helping patients better manage pain but also effectively improving their quality of life, reducing adverse drug reactions, and increasing patients' satisfaction with medical care activities [1].

This paper further explores the application value of the evidence-based nursing model in cancer pain care, analyzes its practical effects, and puts forward more perfect nursing suggestions.

# 2. Overview of evidence-based nursing

# 2.1. Concepts and elements

Evidence-based nursing refers to the process where nursing staff obtain medical care evidence based on scientific research conclusions, clinical experience, and patient needs, then formulate clinical nursing decision plans based on this evidence, and explicitly, prudently, and wisely implement nursing activities. In the evidence-based nursing model, obtaining medical evidence is a key and indispensable link, which requires scientific research results with application value and credibility as evidence, and then completes nursing activities through steps such as proposing problems, seeking evidence, and applying evidence.

Specifically, the evidence-based nursing model includes three basic elements: first, the most appropriate nursing research evidence with utilization value; second, the necessary personal skills and long-term clinical experience of nursing staff; third, the actual situation, personal values, and requirements of patients. Only by organically integrating the above three basic elements and establishing a nursing concept that uses research to guide practice and summarizes experience from practice can the progress and improvement of the evidence-based nursing model be continuously promoted. In addition, the experience of professional nursing staff is an important element in the implementation of the evidence-based nursing model, and patient-centeredness is the core concept in the practice of this nursing model. Nursing staff need to carry out work based on the actual situation of patients, emphasizing both unified optimal behaviors and not ignoring individualized targeted care.

### 2.2. Practical procedures and steps

Evidence-based problems, evidence-based support, evidence-based observation, and evidence-based application are four consecutive processes in the implementation of the evidence-based nursing model and the basic activities of nursing staff in implementing nursing behaviors.

From its practical procedures, it can be found that the evidence-based nursing model has long-term development significance. It can accumulate experience and summarize evidence over time and practice, thereby optimizing and improving nursing methods and approaches. Therefore, compared with the total quality improvement model, the evidence-based nursing model has better application value. The evidence-based nursing model can transform practical and theoretical problems generated in the nursing practice process into reference bases, collect empirical evidence through authoritative materials, and then find and determine the best nursing methods and behaviors. It can also analyze its actual effects through criticism and evaluation, thereby exploring whether further research is possible. Through such a cycle of research and spiral upward research model, nursing quality can be continuously improved, and more scientific nursing effects can be achieved.

The evidence-based nursing process is divided into five specific steps: first, identify problems in clinical

practice and conduct specific and structured analysis of these problems. Second, conduct a review and analysis of the proposed problems and seek reliable medical evidence from relevant literature. Third, analyze scientific research evidence, determine its effectiveness and promotability, and conduct a prudent evaluation. Fourth, integrate elements such as scientific research evidence, clinical experience, professional knowledge, and patient needs obtained in the above process, then transform scientific research evidence into clinical evidence, and formulate nursing plans and programs that meet the needs of patients. Fifth, implement the above nursing plans and monitor their clinical application effects through self-evaluation, peer review, and assessment [2].

# 3. Application process of evidence-based nursing in cancer pain care for tumor patients

In cancer pain care for tumor patients, the application and implementation of the evidence-based nursing model also need to follow the four consecutive processes of its practical procedures to achieve more scientific and effective nursing goals.

## 3.1. Evidence-based problems

This link is the process of summarizing problems arising in nursing practice. Nursing staff should summarize and analyze the work experience and practice process of cancer pain care for tumor patients, identify the main and secondary problems, then classify and count these problems. Nursing managers should organize relevant nursing staff to carry out evidence-based problem exploration activities, not only explaining the theoretical basis of practical problems in cancer pain care but also specifically analyzing the differential needs and individualized characteristics of different patients. Specifically, nursing managers and nursing staff with rich nursing experience need to take the initiative to share the content and process of previous cancer pain care work for tumor patients and specifically analyze the questionable issues. For abstract theoretical issues, specific analysis should be conducted in combination with practical nursing problems; for uncertain issues, forward-looking nursing bases and plans should also be established so that they can be solved and optimized according to preset plans when encountered in the future.

# 3.2. Evidence-based support

This link is the process of analyzing the reasons for the insignificant effect of nursing practice. After the completion of the previous cancer pain care for tumor patients, nursing staff need to summarize the direct and indirect reasons for the insignificant effect of cancer pain care implementation based on nursing activity content, nursing implementation processes, and patient feedback. Through result analysis, query relevant research results and literature through journal websites such as VIP, CNKI, and Wanfang. Nursing managers should guide nursing staff to carry out literature reading, summarization, and analysis activities simultaneously, seek new support and evidence for new phenomena and problems arising in nursing practice, so as to provide empirical support for the next step of optimizing nursing programs.

#### 3.3. Evidence-based observation

This link is the process of evaluating and assessing nursing programs, implementation processes, and empirical evidence. Nursing staff should formulate targeted nursing intervention measures based on the effective literature

and materials consulted, requiring that the content of these measures aims to optimize and solve problems in cancer pain care for tumor patients and is scientific and reasonable. At the same time, nursing managers should organize relevant experts to evaluate nursing measures, nursing programs, nursing plans, and empirical materials, establishing unified and perfect evaluation standards and giving evaluation results based on these standards to ensure that the optimized evidence-based nursing program is feasible, reliable, effective, and scientific. In this process, it should also be noted that in the formulation of nursing measures, the actual situation of patients should be fully considered, and nursing measures should be formulated according to factors such as their pain degree, pain location, pain mode, pain time, and drug effectiveness, so as to further improve nursing effectiveness and meet the individualized nursing needs of different patients.

### 3.4. Evidence-based application

This link is the practice process of applying nursing programs formed based on the evidence-based process. In cancer pain care for tumor patients, the nursing content mainly includes drug intervention, etiological intervention, physical pain relief intervention, psychological intervention, and more.

First, drug intervention is the most important nursing method and intervention measure in cancer pain care for tumor patients. By preparing drugs suitable for patients' pain symptoms, pain is relieved through drugs, reducing the degree of pain suffered by patients. However, in this link, it is necessary to track and observe the side effects of drugs used by patients to avoid more serious negative effects, and also instruct patients and their families to take drugs as prescribed.

Second, etiological intervention is a treatment method that meets the needs of all patients in cancer pain care, mainly including radiotherapy and chemotherapy, surgical treatment, and so on, through medical methods to specifically implement pain intervention.

Third, physical pain relief intervention measures are nursing methods to reduce patients' pain through physical methods, mainly including massage, hot compress, cold compress, etc. Some tumor patients may experience symptoms such as nausea and vomiting after surgery or when in severe pain. Nursing staff need to inform patients' families to prepare light, low-fat food containing high-quality protein. At the same time, according to the doctor's advice, patients may need to fast. For patients with good eating ability and acceptable digestive function, families can be instructed to prepare food with dietary fiber and high-protein foods to prevent constipation. For patients who have already developed constipation, nursing staff can provide glycerin enema services or guide families to help patients relieve constipation in the correct way. Patients can also be given oral lactulose, and abdominal auxiliary massage can be used to help patients defecate normally [3]. In addition, nursing staff should require patients to form a habit of regular daily defecation to determine the defecation time and form a physiological routine.

Finally, psychological intervention and negative emotion counseling services. Cancer pain in tumor patients mostly occurs in the advanced stage, and after experiencing long-term pain and illness, most patients have certain fear and depression symptoms. This requires nursing staff to maintain patience and care in the nursing process, help patients establish confidence in recovery through encouragement, and guide families to master methods and skills to comfort patients, thereby guiding patients to gradually release negative psychology and emotions. In addition, daily entertainment services should be provided according to patients' previous living habits and hobbies, such as playing soothing music, comedy movies, and organizing family games to help patients relieve depressed emotions. For patients with certain mobility, simple outdoor exercise assistance can be provided, and families can

be urged to guide them as required, so as to improve patients' quality of life and achieve the goal of efficient care.

# 4. Analysis of the application effect of evidence-based nursing in cancer pain care for tumor patients

Current research data show that about 4 million new tumor patients are added in China every year. Due to the insidious nature of tumor onset, many patients are diagnosed in the advanced stage, and 60–80% of patients suffer from cancer pain. This pain mainly results from clinical symptoms caused by tumor cells invading patients' organs and bones or compressing nerve roots and plexuses. Cancer pain directly affects the treatment effect of tumor patients, keeping them in a state of negative emotions for a long time, which not only affects their physical and mental state but also their appetite and sleep, thereby reducing their initiative and enthusiasm to cooperate with treatment. Therefore, in the clinical care of cancer pain in tumor patients, improving nursing quality is of great importance, as it can not only relieve patients' pain but also further improve their quality of life and extend their lifespan.

At present, the treatment and care methods for cancer pain in tumor patients mainly include drug therapy, psychological therapy, physical therapy, rehabilitation care, etc. With the research and development of modern clinical nursing medicine, various nursing models have been applied in clinical care and have shown good application roles and effects. The current conventional cancer pain care methods for tumors lack targeting and scientificity, resulting in poor nursing effects, which cannot effectively relieve cancer pain in all patients. This not only causes a waste of medical resources but also reduces patients' trust in hospitals and medical staff, and may even easily lead to doctor-patient disputes. In the development process of evidence-based medicine, the evidence-based nursing model has become an important way to optimize the clinical care of cancer pain in tumor patients [4].

Evidence-based nursing is a nursing method based on evidence-based medicine. It systematically collates and collects the latest medical evidence, then provides guidance for nursing decision-making and program formulation through evaluation and application activities, thereby achieving the goal and effect of scientific nursing. Evidence-based nursing can improve the scientificity of nursing activities, enhance nursing quality, and thus improve patient satisfaction. The evidence-based nursing model is based on nursing-related research practices and literature, aiming at optimizing clinical practice, and then creates personalized and reliable nursing guidelines, which are extensive and critical. Especially with the support of the latest evidence-based medical evidence, it can provide more convenient interaction methods and collaboration bases for doctors and nurses, thereby better implementing nursing work and safeguarding patients' health and lives [5].

The results of this study show that after the implementation of the evidence-based nursing model, the pain of tumor patients is significantly reduced, and their quality of life is significantly improved. The main reasons are as follows: first, the evidence-based nursing model has high scientificity, and the nursing behaviors implemented for patients are targeted. Through the sequential implementation of the four levels of problem, support, observation, and application, it can effectively solve the main problems in current cancer pain care for tumor patients, thereby improving patient satisfaction and cooperation. Second, the evidence-based nursing model provides a more complete information channel for nurses' work, which can help nurses more comprehensively understand the real situation of patients, and then select appropriate nursing and treatment methods targeted.

At the same time, the evidence-based nursing model can also provide nurses with information on the use and effects of drugs for patients, which can avoid unnecessary drug use and reduce adverse drug reactions. Third, the

evidence-based nursing model can also demonstrate the professionalism of nurses, making it easier for patients to feel the work ability and care of nurses, thereby cooperating more with their nursing work.

### 5. Conclusion

In conclusion, compared with conventional nursing methods, the evidence-based nursing model has significant advantages and roles in cancer pain care for tumor patients. Hospitals and other institutions should comprehensively promote the widespread promotion and application of this nursing model to improve the service quality of cancer pain care for tumor patients.

#### Disclosure statement

The author declares no conflict of interest.

#### References

- [1] Yao N, 2023, Application of Evidence-Based Nursing in Cancer Pain Care for Tumor Patients. Henan Medical Research, 32(19): 3609–3612.
- [2] Zhang T, Tian R, 2020, Efficacy Observation of Evidence-Based Nursing in Cancer Pain of Tumor Patients. Shanxi Medical Journal, 49(06): 752–753.
- [3] Liu J, Huang B, 2020, Value of Evidence-Based Nursing in Pain Care for Advanced Tumor Patients. China Continuing Medical Education, 12(03): 152–154.
- [4] Chen P, 2019, Observation on the Effect of Evidence-Based Nursing in Cancer Pain Care for Tumor Patients. Journal of Practical Clinical Nursing (Electronic Edition), 4(51): 11.
- [5] Cheng D, 2019, Analysis of the Application Effect of Evidence-Based Nursing in Cancer Pain Care for Tumor Patients. Journal of Practical Clinical Nursing (Electronic Edition), 4(46): 40 + 54.

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