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Practical Application and Ethical Analysis of Traditional Chinese Medicine in Hospice Care for Elderly Patients with Cancer

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Abstract. The combined effects of a rapidly aging global population and high mortality rates from malignant tumors have pushed end-of-life care for elderly cancer patients to the forefront of the public health agenda. Current symptom-drug-focused intervention models face structural gaps in multidimensional psychosocial care, cultural accessibility, and family support, triggering an urgent need for non-pharmacological, minimally invasive, and locally relevant integrated solutions. This article focuses on evidence-based practice and ethical innovations in Traditional Chinese Medicine (TCM) for end-of-life care for elderly cancer patients. Topical TCM applications leverage a transdermal mechanism of "treating internal illness externally" to simultaneously alleviate cancer pain and reduce opioid dependence; Five Elements music therapy reshapes emotional homeostasis through the resonance of the five tones and the five internal organs; and TCM emotional care focuses on soothing the liver and relieving depression, fostering a collaborative patient-family support network. Current bottlenecks lie in the dual lack of high-quality evidence and a localized ethical framework. Future approaches require integrating TCM's philosophy of benevolence with modern bioethics to construct new approaches to end-of-life care that combine cultural subjectivity with global compatibility.

Keywords: Traditional Chinese Medicine, Geriatric cancer, Hospice care, Emotional care

1. Introduction

Malignant tumors are currently the leading cause of death and a major public health issue worldwide. With the increasing incidence and mortality rates of malignant tumors in the elderly year by year, studies have shown that the number of cases among people aged 60 and above accounts for approximately 60% and 76% of the total number of malignant tumor cases and deaths in the entire population, respectively, especially the proportion of advanced cases has significantly increased [1].

Despite the significant development of modern cancer treatment technology, the goal of treatment for elderly patients with advanced cancer has shifted from simply prolonging survival to maintaining a comfortable and meaningful quality of life at the end of life. Traditional Chinese medicine (TCM), with its philosophy of “living with cancer,” advocates for the harmonious coexistence of cancer and the human body, and focuses on a people-oriented treatment model, which is highly consistent with

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the core goal of hospice care, namely, “improving the quality of life” [2]. Several studies have shown that TCM intervention can effectively reduce the symptom burden of patients with advanced cancer and optimize their quality of life, demonstrating its unique characteristics and potential as a unique Chinese medical system in hospice care [3,4].

In the field of hospice care for elderly cancer patients, the application of Chinese medicine has become a core intervention for relieving terminal symptoms such as pain and pressure injuries due to its advantages of non-invasiveness and syndrome differentiation. This method uses a paste made from Chinese medicine for promoting blood circulation and removing blood stasis to apply to the painful area, or to acupuncture points via meridian conduction to achieve systemic regulation. A single application can maintain long-lasting efficacy for 8 hours. Studies in the past five years have shown that individualized formulas (such as indigo powder combined with recombinant human epidermal growth factor gel) significantly promote wound healing in elderly cancer patients [5]. Five-element music therapy is based on the TCM theory of "five sounds-five internal organs" acoustic resonance, and achieves coordinated regulation of neuroendocrine and emotional pathways through syndrome differentiation [6,7]. TCM emotional care is based on the theory of "five emotions winning together" and directly intervenes in emotional imbalance through the relationship between emotions, achieving non-drug mind-body balance [8]. Its core operations include the method of emotional winning together, the method of empathy and personality transformation, and individualized emotional syndrome differentiation [9,10].

This article aims to summarize the practical application, efficacy characteristics, and related ethical considerations of TCM in hospice care for elderly cancer patients, provide a reference for clinical implementation, and promote the construction of an ethical framework for hospice care that conforms to the Chinese cultural context.

2. Practical characteristics of TCM in hospice care

2.1. The TCM concept of "living with cancer"

The concept of “living with tumor” is proposed in response to the reality that tumors cannot be completely eradicated from the human body. It aims to improve the quality of life of patients, prolong their life cycle, and achieve the goal of “curing the disease and keeping the patient alive” through the model of human-tumor coexistence [11]. In the hospice care of elderly patients with tumors, the concept of “living with tumor” has important ethical value. First, this concept shifts the focus of medical care to the comfort and dignity of patients at the end of their lives, pursuing a higher quality of life, which is consistent with the core goal of hospice care; second, it protects the autonomy of patients, provides them with another treatment option, and respects their right to choose a relatively mild treatment; third, this concept embodies humanistic care, focuses on alleviating patients’ pain, providing spiritual comfort, and maintaining the dignity of patients in the last stage of their lives.

Cheng et al. used TCM to treat two patients with rectal cancer. The results showed that after taking the medicine, the patients' stool bleeding decreased, abdominal pain improved, abdominal distension was relieved, and the condition was stabilized [12]. This finding shows that TCM treatment can effectively improve the clinical symptoms of patients with colorectal cancer and verify the feasibility of "living with tumors". Based on Zhang Jingyue's idea of "supporting yang and eliminating evil", Professor Chang created the "Fuzheng Xiaoliu Decoction". By balancing the support of the body and the elimination of evil, the patient's positive energy is strengthened to inhibit the development of the tumor and reduce the damage to the body caused by drastic measures

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such as surgery, radiotherapy and chemotherapy [13]. These cases show that TCM has achieved good clinical efficacy through syndrome differentiation and treatment, and provides a new perspective for hospice care.

2.2. TCM topical application therapy

Based on the TCM principles of "obstruction leads to pain, unblocked circulation leads to relief of pain" and "internal disease treated externally," topical application of TCM demonstrates unique value in cancer pain management by promoting blood circulation, removing blood stasis, unblocking meridians, and alleviating pain through transdermal drug delivery.

Based on the TCM theory of "pain due to obstruction," topical application of TCM achieves "external treatment for internal illness" through transdermal absorption. Its core lies in the syndrome differentiation and optimization of prescriptions and the synergistic mechanism of multi-target therapy. Based on the classification of cancer pain (yin syndrome/yang syndrome), prescriptions for warming the meridians and unblocking the collaterals are used for yin syndrome, while detoxifying and dispersing components are used for yang syndrome, combined with penetration enhancers to enhance targeted delivery. Li et al. conducted a multicenter, randomized, double-blind, placebo-controlled trial (n=120) in which a pain-relieving and analgesic gel containing Panax notoginseng, Sanguisorba officinalis, and borneol was applied topically to the corresponding surface of bone metastases twice daily for 14 consecutive days. The results showed that the Visual Analogue Scale score of the treatment group decreased by (3.8±1.2) points compared with the baseline, which was significantly better than the placebo group (1.9±1.1) points ($P<0.01$). The average daily morphine dosage was reduced by 32 mg, the somatic pain dimension of the Medical Outcomes Study 36-Item Short-Form Health Survey increased by 18.7%, and no grade ≥III adverse skin reactions occurred [14]. Chen conducted a single-arm study on 160 patients with moderate to severe cancer pain who were treated with a prescription for dispersing stagnation, eliminating stasis and relieving pain (rhubarb, frankincense, myrrh, parsley, etc., mixed with ginger juice to make a paste) applied every other day for 21 days. The total effective rate was 82.5%, which was significantly higher than the historical control group of 57.5% who received conventional Western medicine treatment during the same period ($P < 0.01$). After treatment, the serum β-endorphin level increased by 2.3 times, indicating that the endogenous analgesic pathway was activated [15]. Xu et al. enrolled 90 patients with gastric cancer pain of blood stasis and heat toxicity type and applied a toad venom and realgar ointment containing toad venom and realgar once a day for 7 days as a course of treatment. The results showed that the Visual Analogue Scale score decreased by (2.9±0.8) points, the incidence of opioid-related constipation decreased from 46% to 14%, and blood drug monitoring showed that Cmax decreased by 37%, suggesting that transdermal administration can reduce the first-pass effect and gastrointestinal adverse reactions [16]. Three independent studies have confirmed that topical application of TCM, optimized through syndrome differentiation, can achieve cancer pain relief and simultaneous reduction of opioid use within the framework of "external treatment for internal illness." Its multi-component, multi-target synergistic mechanism provides a new, evidence-based, low-invasive, and culturally appropriate analgesia paradigm for end-of-life care in elderly cancer patients.

2.3. Five elements music therapy

The Five Elements Music Therapy is based on the acoustic resonance theory of the “Five Tones ”, which classifies Gong (do), Shang (re), Jue (mi), Zhi (sol), Yu (la) as belonging to earth, metal,

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wood, fire and water, reflecting the spleen, lung, liver, heart and kidney. Through syndrome differentiation and application of music, its specific frequency resonates with the organs to improve microcirculation, simultaneously inhibit the activity of the Hypothalamic–Pituitary–Adrenal axis and reduce cortisol levels, and restore emotional balance through the mutual generation and restraint of the Five Elements, thus achieving dual physiological and psychological tuning [17-19].

At present, the research on five-tone therapy mainly focuses on the fields of mental and emotional diseases, brain diseases, digestive diseases, etc. Dong et al. randomly divided 92 stroke patients into two groups. The five-element music group listened to music selected by syndrome differentiation for 30 minutes per day on the basis of routine care. After 4 weeks, the Self-Rating Anxiety Scale and Self-Rating Depression Scale decreased significantly ($P < 0.01$), and the hope level was significantly improved [20]. Huang et al. randomly divided 120 patients with advanced lung cancer into a combined group and a control group. On the basis of routine care, they implemented stress inoculation training combined with music therapy (30 minutes each time, once a day, for 4 consecutive weeks). The results showed that the Self-Perceived Burden Scale score of the combined group decreased from 41.8±6.7 before the intervention to 31.2±5.4, which was significantly better than that of the control group ($P<0.01$), indicating that this therapy can effectively reduce the psychological burden of patients [21]. Xie et al. enrolled 86 patients with advanced cancer and used the five elements of music to select music for syndrome differentiation. The patients listened to music for 20 minutes each time, once a day, for 6 weeks. After the intervention, the Life Orientation Test-Revised score increased by (2.6±0.8) points, and the total score of the Pittsburgh Sleep Quality Index decreased by (3.1±1.2 points), both of which were better than those in the conventional care group ($P<0.05$) [22]. The above studies have confirmed that the five-tone therapy has clear benefits in relieving psychological stress and optimizing physical and mental state, and provides a feasible, low-invasive, culturally appropriate intervention method for hospice care of elderly cancer patients.

2.4. TCM emotional nursing

TCM emotional nursing is a nursing model based on the theory that emotions contribute to disease. It uses targeted emotional interventions to improve patients' psychological well-being. Its core approaches include verbal guidance, emotional coordination, empathy, and emotional relief. These methods, by regulating patients' emotions, can effectively improve organ function and promote physical and mental recovery. In the care of elderly patients with terminal cancer, this model not only meets patients' psychological needs but also improves the overall quality of care. Clinical practice has shown that TCM emotional care has shown significant effects in patients with various tumors. Hua et al. randomly divided 92 patients who underwent radical mastectomy for breast cancer into an emotional care group and a conventional group. After two weeks of intervention, the Self-Rating Anxiety Scale and Self-Rating Depression Scale scores in the emotional care group decreased by (7.4±2.1) and (8.6±2.3) points, respectively. The incidence of upper limb edema on the surgical side decreased from 26.1% to 10.9%, and the postoperative recovery time was shortened by (2.8±0.7) days. The differences were statistically significant ($P<0.05$) [23]. Li et al. conducted a study on 116 robot-assisted radical resections of gynecological malignancies. Based on the concept of Enhanced Recovery After Surgery, they superimposed TCM emotional care: emotional guidance was performed for 30 minutes daily within 1 day before surgery and 3 days after surgery. The results showed that the time of first flatulence, eating, and getting out of bed were earlier than those in the control group by (10.4±3.2) hours, (7.8±2.5) hours, and (11.3±4.1) hours, respectively. The Hospital Anxiety and Depression Scale score was significantly reduced ($P<0.01$) [24]. Su proposed a three-

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step intervention for terminally ill cancer patients: “soothing emotions and relieving depression – empathy and changing temperament – emotional victory”, supplemented by massage of the Hegu and Taichong acupoints, 15 minutes each time, once a day. After 4 weeks, the total score of the patient's Profile of Mood States negative emotions decreased by (13.7±4.5) points, and the Functional Assessment of Cancer Therapy-General quality of life score increased by (7.9±2.8) points [25]. The above experiments show that TCM emotional care can simultaneously reduce anxiety and depression levels and accelerate functional recovery in all stages from the perioperative period to the end of life, providing cancer patients with an emotional intervention plan that is both effective and humane.

3. Challenges and optimization strategies in the application of TCM in hospice care

The application of TCM in hospice care for elderly cancer patients involves not only specific diagnostic and treatment techniques but also profound ethical considerations. These considerations stem from the humanistic traditions of TCM itself but also require examination and adaptation within the framework of modern bioethics. First, informed consent and independent choice are fundamental requirements. Patients should be provided with a detailed explanation of the treatment principles, expected effects, and potential risks, allowing them to make choices based on a full understanding. Second, safety is a key consideration. Researchers must select proven safe TCMs, strictly control the use of potentially toxic drugs, and establish a monitoring mechanism for adverse reactions. Furthermore, when promoting and applying TCM in cross-cultural contexts, researchers must fully consider cultural sensitivities and individual differences, strictly adhere to confidentiality, and protect patient privacy. While maintaining the individualized nature of TCM, a certain degree of standardization and regularization must be achieved. Selecting appropriate external application prescriptions based on the patient's constitution and syndrome type is key to ensuring efficacy. Finally, practitioner qualifications are crucial; they should possess relevant professional knowledge and adhere to professional ethics. These considerations ensure the scientific and humanistic nature of TCM application.

4. Conclusion

In summary, guided by the concept of "living with cancer," specialized therapies such as TCM topical application, five-element music therapy, and TCM emotional care can effectively alleviate patients' symptom burden, improve their psychological well-being, enhance their quality of life, and provide important psychological support for their families. These interventions have demonstrated positive effects in numerous clinical studies and offer advantages such as ease of use, minimal side effects, and high patient acceptance. However, challenges remain, including a lack of high-quality research, an incomplete evaluation system, and the need for a well-established ethical framework.

Future research should focus on developing a TCM-specific evaluation system and promoting the adaptive application of TCM hospice care in cross-cultural contexts. Furthermore, efforts should be made to strengthen professional talent development and service system development, promote the deep integration of TCM and modern hospice care, and provide more comprehensive and humane end-of-life care for elderly cancer patients.

The application of TCM in hospice care for elderly cancer patients embodies the holistic care concept of "preventing disease before it occurs" and "treating disease after it occurs", "body" and "spirit", and patients and their families, and contributes unique Chinese wisdom and solutions to the global hospice care cause.

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