

Progress in Investigating the Current Mental Health Status Among Caregivers for Surgical Oncology Patients

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Abstract: This article aims to discuss the current state and research progress concerning the mental health of caregivers for surgical oncology patients. The goal is to offer insights that can serve as a reference for further enhancements in caregivers' mental well-being. This article conducts a comprehensive review and analysis of recent studies on the mental health of caregivers for patients undergoing oncologic surgery. These studies reveal that caregivers commonly grapple with mental health issues, including anxiety, depression, and stress. These problems are closely linked to the stress of the patient's condition and treatment, the caregiver's own mental strain, and a lack of social support. In addition, the mental health status of caregivers significantly influences the patient's treatment and recovery process. Implementing various interventions, such as mental health education, services, the establishment of mental health support teams, and engagement in mental health promotion activities, can contribute to the improvement of caregivers' mental well-being. This, in turn, has the potential to enhance treatment outcomes and the overall quality of life for patients.

Keywords: Tumor patients; Caregivers; Mental health

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1. Introduction

Policies such as the "Healthy China 2030" Plan, the National Nursing Career Development Plan (2016–2020), and the "13th Five-Year Plan for the Development of the National Elderly Career Program and the Construction of the Elderly Care System" have unequivocally outlined the imperative for medical personnel to foster the advancement of continuous care and actively engage in geriatric rehabilitation. The documents explicitly emphasize the need for medical personnel to the development of continuity in care and actively participate in geriatric rehabilitation. Caregivers are destined to become pivotal health partners for patients and are identified as a crucial group requiring attention.

Influenced by China's traditional values and kinship concepts, the caregivers of oncology surgery patients are predominantly family members. During the prolonged postoperative recovery phase of oncology

surgery patients, family members shoulder the dual responsibilities of patient care and managing household affairs. Often lacking professional caregiving skills and deprived of appropriate social resources and support, caregivers find it challenging to meet the comprehensive needs of the patients. In comparison to caregivers of patients undergoing non-malignant tumor surgeries, those tending to malignant tumor surgery patients endure heightened psychological pressure and mental burdens.

The occurrence of malignant tumors represents a severe and stressful event for family caregivers, likely triggering negative psychological stress responses that can lead to physical and mental disorders, subsequently impacting overall well-being. Several studies have indicated a close correlation between psychology and quality of life. Furthermore, the quality of caregiver support is profoundly linked to the recovery and prognosis of surgical oncology patients^[1-7]. Notably, previous research has primarily concentrated on enhancing physiological, somatic, social, and psychological functioning through patients' efforts, with limited attention given to the circumstances and well-being of caregivers.

2. The current situation of mental health among caregivers of surgical oncology patients

Studies conducted both domestically and internationally have indicated a concerning state of mental health among caregivers of surgical oncology patients. Foreign scholars investigating caregivers of surgical oncology patients have revealed that mental health issues arising from the caregiving burden primarily manifest as negative emotions, including anxiety and depression, with incidence rates ranging between 30% and 55%. In a study by Lee *et al.*, which involved 108 caregivers of lung cancer patients utilizing the Hospital Anxiety and Depression Scale, it was found that 50.9% of caregivers were at risk of anxiety, while 32.1% were at risk of depression^[8]. Similarly, a survey by Rodgerson *et al.* involving 208 informal caregivers of cancer patients reported moderate to high levels of anxiety and depression^[9].

Numerous domestic observational studies have also explored the challenges faced by caregivers of patients with malignant tumors. Su and colleagues conducted a questionnaire survey on family members of patients with advanced malignant tumors, revealing that these family members commonly encountered issues such as psychological stress and physical exhaustion while caring for the patients^[10]. In a questionnaire survey conducted by Tian on caregivers of 70 patients with advanced malignant tumors, problems such as negative emotions during caregiving were reported^[11]. Furthermore, Li assessed the anxiety level of 118 caregivers of patients with malignant tumors using relevant psychometric scales, and the results indicated that family members of patients with malignant tumors experienced significant anxiety and severe depression^[12].

3. Factors influencing the mental health of caregivers of surgical oncology patients

The mental health status of caregivers for patients undergoing oncologic surgery is influenced by various factors.

3.1. Caregiver factors

Numerous studies have demonstrated that the mental health of caregivers is contingent on factors such as gender, age, education level, economic status, and the caregiver's relationship with the patient, as well as their own health status.

In an analysis of 19 research papers, Zhang *et al.* discovered that female spousal caregivers exhibited more symptoms of mental illness, including heightened psychological stress, depression, and anxiety, along with

lower levels of psychological well-being compared to their male counterparts ^[13]. Immediate family members and spouses, often shouldering primary caregiving responsibilities, play a pivotal role in the patient's treatment decisions and provide emotional and practical support. As a result, they experience a higher psychological burden, leading to more pronounced symptoms of anxiety and depression. Studies have highlighted that younger, less educated caregivers facing financial stress often report elevated levels of psychological stress ^[14]. Additionally, caregivers with poorer physical health and chronic illnesses find it challenging to manage the substantial caregiving burden, resulting in poorer mental health.

In a comprehensive study involving nearly 3,000 family caregivers during hospice care, it was observed that 15% experienced severe symptoms of pre-terminal grief. Several other studies have reported that 15%–26% of family caregivers of patients with advanced cancer are at high risk of complicated anticipatory grief ^[15-17]. Goy *et al.* noted that 112 family caregivers of patients with advanced cancer exhibited a 72% high risk of anxiety and 69% high risk of depression ^[18]. Li *et al.* highlighted that factors such as prolonged companionship, fear of contagion or heredity, substantial financial expenses, and assuming additional duties and responsibilities contribute significantly to adverse psychological feelings among the patient's family members ^[19].

3.2. Patient factors

Elderly oncology surgery patients, grappling with numerous disease symptoms and diminished physiological function, present increased needs and necessitate prolonged care. As the patient's condition deteriorates and physiological function decreases, caregivers experience escalating levels of anxiety, depression, and tension. Furthermore, the mental health status of caregivers of surgical oncology patients is significantly correlated with that of the patients. Elevated levels of anxiety and depression in caregivers suggest a less optimistic mental health outlook.

3.3. Caregiving burden

Caregiving burden emerges as the foremost predictor of anxiety and depressive symptoms in caregivers. Große *et al.* demonstrated a positive correlation between caregiving burden and anxiety-depressive symptoms, revealing that the prevalence of depression in caregivers experiencing caregiving burden feelings was six times higher than that in caregivers without such feelings ^[20]. Chou *et al.* observed that as the caregiving duration increases, the caregiver has less time for personal rest and relaxation, consequently experiencing a heightened sense of burden ^[21]. This is primarily attributed to caregivers gradually encountering anxiety and isolation within their original social group during caregiving tasks, particularly when effective support and assistance are lacking. Papstavrou's study indicated that caregiving for more than 16 hours starts to impact the caregiver's normal sleep ^[22]. Foreign studies by Arai *et al.* have also affirmed that caregivers perceive less burden when afforded more than 3 hours of relaxation during the caregiving process ^[23].

3.4. Social support

Young and Snowden investigated the mental health status of 63 caregivers of cancer patients and discovered a significant positive correlation between caregivers' social support and their mental health status ^[24]. Lobo *et al.*'s study also affirms that social support can harmonize the relationship between caregivers' needs and depression, ultimately improving the mental health status of caregivers of cancer patients ^[25].

Higher levels of social support imply, to some extent, a superior economic status, elevated social standing, and abundant medical resources. Consequently, family members with strong social support enjoy economic and interpersonal advantages, facilitating the management of medical expenses, access to authoritative medical experts, and a relatively more relaxed approach when confronting medical program developments ^[26]. Conversely,

family members of patients with low levels of social support may hesitate or feel uncertain in making decisions about treatment options due to a lack of medical resources and decision-making information.

Moreover, a higher level of social support is conducive to family members sharing decision-making ideas and suggestions, understanding each other's preferences and concerns, and helping them analyze the advantages and disadvantages of decision-making more clearly. This not only eases the medical decision-making pressure within families but also promotes decision-making consistency, thus reducing conflicts among family members ^[27].

To alleviate decision-making pressure caused by insufficient economic support, healthcare professionals should continuously assess the economic status of the patient's family and provide treatment plans that match their economic level and have fewer adverse effects. For families in special need of assistance, healthcare professionals can help them obtain financial aid from social welfare organizations such as Waterdrop Charity Fundraising, Easy Fundraising, Love Charity, and others. Additionally, healthcare professionals can establish a WeChat group for family support, encouraging families to share their decision-making experiences and caregiving tips. This not only aids family members in obtaining tangible and practical decision-making results but also provides them with spiritual support and emotional comfort.

3.5. Sense of uncertainty about illness

Tanimukai *et al.*'s study involving 94 caregivers of end-stage cancer patients revealed that heightened levels of anxiety were linked to increased levels of uncertainty about the patient's illness. The study further suggested that reducing caregivers' uncertainty about the patient's illness contributed to improved mental health ^[28].

Primary caregivers of patients with confidential illnesses often experience heightened psychological stress. After conducting an investigation, Wang found that the majority (approximately 97.7%) of patients' family members would implement confidentiality measures. Only a small percentage (around 2.3%) of patients' family members would truthfully disclose the patient's condition ^[29]. Jiang posited that truthfully informing patients of their cancer diagnosis might exacerbate their psychological burden, shatter their confidence in overcoming the disease, and, in severe cases, lead to a refusal to continue treatment ^[30]. Luo and Zeng concluded that keeping patients' conditions secret does not genuinely "protect" them; instead, concealing their true conditions tends to instigate suspicion, anxiety, and depression, hastening the deterioration of their health ^[31].

Several studies have highlighted that the concealment of a patient's condition constitutes a significant factor influencing the caregiving burden on primary caregivers in home hospice care. Caregivers often grapple with persistent concerns about the patient's condition once it becomes known to them, creating mental entanglement during the caregiving process and increasing the burden of thoughts.

4. Summary

In summary, there is an urgent need to comprehend the mental health status of caregivers for patients undergoing oncologic surgery and to analyze and explore the factors influencing it. A review of the literature reveals a scarcity of studies on the underlying mechanisms of factors influencing the mental health of caregivers for patients undergoing oncologic surgery. Furthermore, most studies employing the multiple regression method to analyze these influencing factors have explored the correlation between mental health and the influencing factors, but have not delved into whether these factors exert direct or indirect effects, the magnitude of their effects, and other critical issues. Additionally, many studies lack a solid theoretical foundation.

The stress coping model emphasizes that cognitive appraisal and coping are pivotal in determining whether a stressful event becomes impactful for an individual. Coping resources influence the cognitive appraisal of stressful events, and the outcomes of cognitive appraisal influence the selection of coping styles

and, consequently, coping outcomes. Therefore, by systematically investigating the mechanisms through which factors influence the mental health of caregivers for surgical oncology patients, constructing a structural equation model to elucidate the relationships, pathways, and strengths of these factors in relation to the mental health of the caregivers for surgical oncology patients, this study serves as a foundation for the targeted development of interventions for clinical caregivers. This research contributes significantly to the enhancement of the mental health of surgical oncology patients. The proposed model not only establishes a basis for clinical caregivers to formulate targeted interventions but also holds substantial guiding significance for improving the psychological well-being of caregivers for surgical oncology patients.

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