

Article

Study on the mechanism of improving mental health of cancer patients under the synergy of medical social work and social welfare security

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CITATION

Gou W. Study on the mechanism of improving mental health of cancer patients under the synergy of medical social work and social welfare security. *Psycho-Oncologie*. 2026; 20(1): 4473.
<https://doi.org/10.18282/po4473>

ARTICLE INFO

Received: 6 May 2025
Revised: 7 July 2025
Accepted: 18 September 2025
Available online: 9 January 2026

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Abstract: Cancer is a major chronic disease that not only poses a serious threat to the physical health of patients, but also significantly affects their psychological state and social adaptability. In the face of the dual pressures imposed by both physical and mental challenges, the role of social support systems in psychosocial intervention has garnered increasing attention. This study adopts a dual focus on medical social work and social welfare protection to explore their synergistic effects in psychological interventions for cancer patients. Employing a mixed-methods research design, the study integrates comparative psychological scale assessments with 40 in-depth interviews to systematically analyze the impact pathways of social welfare and medical social work in areas such as emotional regulation, self-efficacy restoration, and the reconstruction of social functioning. Quantitative findings indicate that patients who receive both social welfare support and medical social work services experience the most significant improvements in perceived stress and symptoms of anxiety and depression, with the combined intervention yielding greater effectiveness than either approach alone. The qualitative analysis, conducted through NVivo-based thematic extraction, identifies five core themes: the psychological buffering function of welfare policies, the humanistic care provided by social workers, challenges in family caregiving, disparities in resource accessibility, and post-intervention functional recovery. These findings further illuminate the interconnected mechanisms by which institutional policies and professional services contribute to psychosocial support. Based on these results, the study constructs a comprehensive intervention model centered on the integration of social welfare and medical social services, thereby enriching the localized application of social support theory. It concludes that the coordinated development of institutional support and service-based interventions is essential for advancing the psychological rehabilitation and social reintegration of individuals living with cancer.

Keywords: social welfare; cancer; psychological intervention; medical social work; psychosocial support

1. Introduction

Cancer is a chronic illness that poses a severe threat to human health. In recent years, both its incidence and mortality rates have continued to rise globally, with an increasing number of cases occurring in younger populations. As such, cancer has emerged as a critical issue in the field of global public health that demands urgent attention [1,2]. Medical research has demonstrated that, in the course of treatment, cancer patients not only endure physical pain and functional decline but also experience considerable psychological distress and challenges in social adaptation [3–5]. Anxiety, depression, emotional instability, feelings of isolation, and existential uncertainty are commonly reported sources of psychological burden. These mental health challenges not only exacerbate physical suffering but may also impair

treatment adherence and adversely affect prognosis and recovery outcomes [6,7]. Consequently, there is a pressing need for systematic attention and intervention targeting the psychological well-being of cancer patients.

However, existing models of psychological intervention are largely grounded in clinical and biomedical paradigms, relying primarily on pharmacological treatment and psychological counseling, while paying insufficient attention to the broader social context. In particular, they tend to overlook the influence of patients' social structural positioning and access to resources on mental health outcomes [8–10]. In real-world settings, many cancers patients' psychological distress is closely linked to financial hardship, lack of social support, and experiences of systemic exclusion or marginalization [11–13]. Thus, it is of both theoretical and practical significance to approach cancer-related psychological interventions from a sociological perspective, incorporating the structural provisions of social welfare systems alongside the professional services of medical social workers to provide more comprehensive and sustainable psychosocial support.

As an institutional framework that embodies the state's commitment to the basic well-being of its citizens, the social welfare system encompasses a wide range of services, including health insurance, financial assistance, unemployment benefits, and social relief programs [14]. In the context of psychosocial care for cancer patients, these institutional supports can play a crucial role in alleviating economic stress induced by illness, enhancing individuals' sense of security and social belonging, and ultimately reducing symptoms of anxiety and depression. Simultaneously, medical social work—an interdisciplinary practice that integrates healthcare and social services—can offer multidimensional psychosocial support to patients and their families through case management, emotional counseling, resource coordination, and family-based support interventions. Such services assist patients in adjusting to illness-related life changes and rebuilding social functioning.

Accordingly, this study aims to examine the mechanisms by which social welfare protection and medical social work jointly influence the psychological well-being of cancer patients, and to assess whether their combined intervention produces more effective outcomes than either approach alone. Through a qualitative research design integrating in-depth interviews, questionnaire surveys, and observational data, the study seeks to uncover the underlying logic by which institutional structures and professional services collaboratively constitute a supportive network for the psychological care of cancer patients. In doing so, it contributes both theoretical insights and practical guidance for improving the psychosocial support system within China's healthcare framework.

The objectives of this study are fourfold: (1) to clarify the institutional function of the social welfare security in mitigating the psychological stress experienced by cancer patients; (2) to analyze in depth the professional strategies employed in medical social work to enhance patients' psychological adaptability; (3) to evaluate the practical outcomes of combined interventions involving social welfare and medical social services; and (4) to propose a feasible, comprehensive psychosocial intervention model for cancer patients, offering constructive recommendations for policymaking and service implementation.

To facilitate a clear understanding of the research framework and process, this thesis is structured into six sections. Section 1 provides an introduction to the research background, objectives, and overall structure of the study. Section 2 presents a literature review, summarizing existing domestic and international scholarship on cancer patients' psychological health, social welfare policy, and medical social work, while identifying the theoretical foundations and research gaps. Section 3 outlines the research design and methodology, detailing the qualitative research approach, participant selection, research instruments (PSS and HADS scales), interview protocol, and ethical considerations. Section 4 presents the data analysis and research findings, including statistical analysis of the scale data and thematic interpretation of the interview materials, revealing the pathways through which social welfare and medical social work affect patients' mental health. Section 5 provides a discussion section that responds to and reflects on relevant theories in the light of the study's findings, and makes policy recommendations. Finally, Section 6 concludes the study by summarizing its key contributions, reflecting on its limitations, and suggesting directions for future research.

2. Related work

This section aims to review existing domestic and international research concerning the psychological health challenges faced by cancer patients, the impact of social welfare systems on psychosocial interventions, the role of medical social work in cancer care, and the theoretical foundations underpinning these domains. Through a systematic literature review, the section seeks to clarify the theoretical underpinnings and practical relevance of the present study, thereby highlighting its originality and the necessity of its contribution to the field.

2.1. The bidirectional interaction mechanism between psychology and disease and the mental health problems of cancer patients

There exists a close, bidirectional relationship between mental health and physical illness. Contemporary medical research has demonstrated that chronic psychological stress, negative emotions, and mental disorders are not only potential contributing factors in the onset of illness, but can also significantly disrupt the body's immune function, nervous system, and endocrine system responses [15–17]. A poor psychological state may compromise the body's ability to resist disease, prolong the recovery process, and, in some cases, exacerbate the underlying condition.

Cancer, as a life-threatening disease with limited curative potential in advanced stages, is frequently accompanied by serious psychological complications. Numerous studies have shown that the prevalence of anxiety and depression among cancer patients is significantly higher than in the general population [18–20]. Mitchell et al. reported that approximately 20% to 40% of individuals with cancer experience varying degrees of anxiety or depressive symptoms, and that these rates are closely associated with disease stage, type of treatment, and the level of social support available [21]. Other studies have indicated that, following diagnosis, cancer patients commonly exhibit emotional reactions such as anxiety, fear, and helplessness. In the

absence of effective psychological intervention, these emotional disturbances may lead to poor treatment adherence, social withdrawal, or even suicidal ideation [22]. Furthermore, mental health issues may indirectly influence the effectiveness and progress of cancer treatment by affecting patients' treatment compliance, decision-making capacity, and health-related behaviors.

On one hand, negative psychological reactions—such as emotional dysregulation and cognitive distortions—may lead patients to refuse surgery, chemotherapy, or radiation therapy, thereby complicating disease management. On the other hand, depression and anxiety not only significantly reduce patients' quality of life and subjective well-being but may also impair their social functioning and work capacity, diminishing both individual productivity and contributions to household economic stability. Todd et al. found that heightened stress and depressive symptoms among cancer patients were positively correlated with treatment discontinuation and relapse rates [23]. These findings suggest that mental health problems are not merely ancillary concerns during the cancer treatment process; rather, they constitute critical variables that can profoundly influence treatment outcomes, prognosis, and overall quality of life.

In addition, empirical studies have shown that a patient's psychological condition is shaped not only by the illness itself but also by contextual factors such as family dynamics, social relationships, and economic status [24]. Wang et al. found that cancer patients' psychological stress levels were strongly associated with feelings of uncertainty about the future, the burden of medical expenses, and access to social resources [25]. Accordingly, the mental health challenges faced by individuals with cancer are highly complex and multifactorial in nature. Standard medical or psychological interventions alone are often insufficient to address the full spectrum of their psychosocial needs.

2.2. The positive effect of social welfare on the mental health of cancer patients

Social welfare constitutes an institutional support mechanism provided by the state, playing a vital role in mitigating the social risks faced by individuals and families when confronting major illnesses. Existing research indicates that a well-developed social welfare system can indirectly improve patients' psychological well-being by alleviating financial strain, enhancing a sense of social connectedness, and fostering greater self-efficacy [26,27]. Social welfare is not merely a form of material assistance; it also embodies institutional justice, providing protection and dignity for vulnerable populations. At the practical level, social security systems encompassing medical insurance, income subsidies, unemployment assistance, and long-term care services are widely regarded as critical sources of support for cancer patients.

For instance, in Nordic countries, universal social protection frameworks have been shown to significantly reduce the incidence of mental health problems among patients with severe illnesses [28]. A comparative study by Ringdal et al. revealed that cancer patients living in countries with higher levels of welfare coverage

reported lower levels of anxiety and depression, underscoring the psychological benefits of comprehensive social protection [29].

In China, the social welfare system has undergone continuous improvement in recent years. Programs such as the Urban-Rural Resident Basic Medical Insurance, the New Rural Cooperative Medical Scheme (NRCMS), and critical illness insurance have provided partial protection for cancer patients. However, limitations remain in terms of coverage breadth, depth, and equity—challenges that are particularly pronounced in rural areas and among low-income populations. These systemic gaps have led some patients into cycles of poverty caused or exacerbated by illness, further intensifying their psychological distress. Therefore, a robust and equitable social welfare system serves not only as an economic foundation for cancer treatment but also as an institutional safeguard essential to the psychological care and mental health intervention of patients.

2.3. The function of medical social work in psychological intervention for cancer

Medical social work is an interdisciplinary practice that applies the principles and methods of professional social work within healthcare settings, with the aim of improving patients' psychosocial well-being and enhancing their capacity to adapt to illness-related life challenges [30,31]. In recent years, with the growing adoption of the holistic care model, medical social work has become an increasingly integral component of cancer treatment systems.

In countries such as the United States and Canada, medical social work has been formally incorporated into the standard service structures of hospitals, with licensed social workers providing patients with a wide range of services, including psychosocial assessments, emotional support, information dissemination, and resource coordination [32,33]. A substantial body of research has demonstrated that the involvement of medical social workers significantly improves patients' quality of life, treatment adherence, and emotional regulation capabilities [34]. Although medical social work is still in its developmental stage in China, emerging studies and practical applications have shown promising outcomes in the field of psychosocial oncology. For example, Xu et al., through a structured group counseling intervention for patients with breast cancer, found that social work participation effectively reduced levels of anxiety while enhancing patients' self-awareness and interpersonal skills [35].

In practical settings, medical social work typically involves a range of intervention strategies such as case management, group therapy, and family counseling. These approaches aim to assist patients in coping with psychological stress, rebuilding family dynamics, and accessing external support resources [36]. More importantly, through the guiding principle of empowerment, social workers help patients regain a sense of control and dignity—an outcome of profound significance in the emotional adjustment processes of individuals living with cancer. Medical social work is an interdisciplinary practice that applies the principles and methods of professional social work within healthcare settings, with the aim of improving patients' psychosocial well-being and enhancing their capacity to adapt to

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2.4. Theoretical basis

This study is primarily grounded in three theoretical perspectives. The first is Social Support Theory, which posits that when individuals are confronted with stressful life events, access to multilayered support systems—from family, friends, social organizations, and institutional structures—can significantly reduce psychological distress and enhance psychological resilience [37]. Within this framework, social welfare programs and medical social work are conceptualized as formal manifestations of social support, and the present study explores their respective and combined roles in alleviating emotional distress among cancer patients.

The second theoretical foundation is the Stress-Coping Model, proposed by Lazarus and Folkman, which emphasizes that individuals, when encountering stressors, engage in processes of cognitive appraisal and coping [38]. The availability of institutional welfare may mitigate cancer patients' perceived stress regarding affordability and treatment uncertainty, while the involvement of medical social workers—through emotional counseling and service coordination—can enhance patients' coping abilities, thereby promoting more adaptive psychological responses.

The third theoretical lens is drawn from Welfare State Theory, which asserts that the state holds a fundamental responsibility in safeguarding the basic well-being of its citizens [39]. From this perspective, cancer patients—as a particularly

vulnerable and disadvantaged group—should be entitled to protections related to their right to survival, access to treatment, and developmental opportunities. This study adopts this lens to examine how welfare institutions, as embodiments of state responsibility, can actively shape the delivery and effectiveness of psychosocial interventions for cancer patients.

In summary, existing domestic and international scholarship on the psychological well-being of cancer patients, the role of social welfare systems, and the application of medical social work provides a solid theoretical and empirical foundation for this research. While prior studies have identified the importance of social support, institutional protection, and professional intervention in improving patients' mental health, relatively few have systematically integrated social welfare and medical social work to examine their combined impact. Accordingly, this study seeks to build upon previous findings by developing an integrated psychosocial intervention model—anchored in institutional welfare and supported by medical social work services—to offer practical recommendations for enhancing China's mental health support system for individuals living with serious illnesses.

3. Methodology

This study adopts a qualitative research approach, incorporating in-depth interviews, questionnaire surveys, and observational data to explore the underlying mechanisms through which social welfare protection and medical social work contribute to the promotion of psychological well-being among cancer patients. The primary objective is to examine how current institutional frameworks and professional services collaboratively construct a supportive network for psychological recovery, thereby providing both theoretical justification and practical strategies for improving the health support system in China. This chapter outlines the methodological framework of the study, addressing five key components: research design, participant selection, data collection methods, data analysis techniques, and ethical considerations.

3.1. Study design

This study adopts a qualitative research methodology centered on thematic analysis, while also incorporating a comparative experimental design to enhance the breadth and depth of empirical support. The qualitative approach is well-suited to the research objectives, as it allows for an in-depth exploration of participants' subjective experiences, emotional responses, and personal attitudes. Through qualitative methods, the study seeks to uncover how social welfare protection and medical social work jointly influence the psychological well-being of cancer patients within real-life contexts, offering nuanced and context-sensitive insights.

The overall research process, illustrated in **Figure 1**, comprises five key stages: research design, sample selection, data collection, data analysis, and result integration. The qualitative component focuses on examining the lived experiences and perceptions of cancer patients, their family members, and healthcare professionals regarding the roles of social welfare systems and social work services. Meanwhile, the comparative experimental design employs standardized

psychological assessment scales to measure differences in mental health outcomes among cancer patients who did or did not receive medical social work interventions, under varying conditions of welfare support.

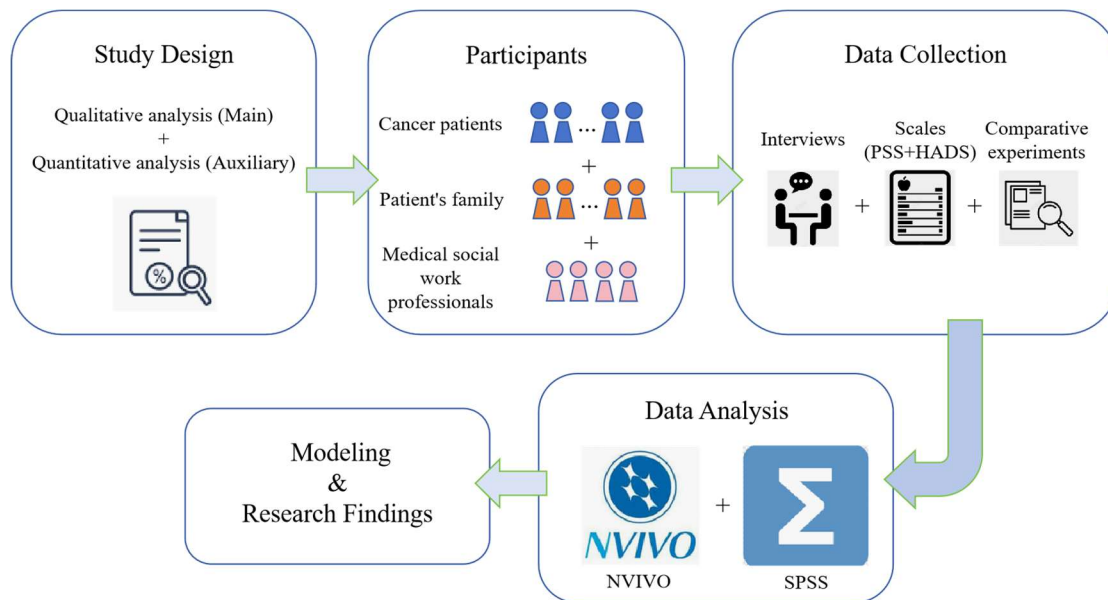


Figure 1. Overall flow chart of the study.

In the comparative experiment component, cancer patients were divided into four groups. By analyzing changes across key psychological indicators—such as anxiety, depression, and perceived stress—this segment of the study examines the combined effects of medical social work and social welfare security on patients' mental health outcomes.

3.2. Study participants

To ensure the validity of the research findings, it was first necessary to clearly define the study participants and establish inclusion criteria. This study recruited three categories of participants: cancer patients, their family members, and relevant healthcare and social work professionals. Cancer patients provide direct insight into their psychological states; family members represent a central component of the caregiving system; and medical social work professionals serve both as implementers of intervention and as observers of the psychosocial mechanisms at play.

Family members were included in the study for several reasons. First, they often bear dual responsibilities—providing both practical caregiving and emotional support—while also shouldering significant economic burdens. Their emotional states and caregiving approaches directly affect patients' psychological recovery. Second, family members are in a position to offer critical supporting information on patients' behavioral changes and evolving needs, thereby enhancing the comprehensiveness of the data. Third, they are directly impacted by institutional support mechanisms (e.g., medical reimbursements, living subsidies), and their feedback provides valuable insight into the accessibility and perceived efficacy of welfare programs. Finally, the attitudes and engagement levels of family members

influence the effectiveness of medical social work interventions. Medical social work professionals were included due to their in-depth knowledge of service procedures and institutional operations. Their perspectives, as service providers, help reduce single-source bias and ensure a more comprehensive understanding of the intervention process. Thus, the inclusion of both family caregivers and medical social work professionals is essential for reconstructing, from multiple perspectives, the operational mechanisms of social welfare and psychosocial support, ultimately enhancing the completeness and credibility of the study and supporting the development of a practice-oriented intervention model.

The inclusion criteria for participants were as follows: (1) cancer patients must have received a confirmed diagnosis and be undergoing treatment or in the recovery stage; (2) participants must be aged 18 or older and capable of basic communication; (3) patients must be willing to share subjective experiences regarding their reception of social support and psychological well-being; (4) patients should represent a range of experiences with welfare access, ensuring variability and typicality; (5) family members must reside with the patient or be actively involved in primary caregiving; and (6) professional participants may include in-hospital social workers, oncology nurses, or physicians.

The primary participant group in this study consisted of cancer patients residing in a mid-sized city in western China. In selecting the sample, efforts were made to ensure diversity in terms of gender, cancer type, treatment phase, and socioeconomic background, in order to enhance the generalizability and applicability of the research findings.

3.3. Data acquisition

To comprehensively examine the impact of social welfare protection and medical social work on the psychological well-being of cancer patients, this study employed multiple data sources to enhance the credibility and validity of its findings. Three primary methods of data collection were utilized:

(1) Demographic Questionnaire and Psychological Assessment Scales The demographic questionnaire gathered information on participants' gender, age, cancer stage, place of residence, ethnicity, educational background, and income level. Standardized psychological assessment instruments were administered at two time points: at the outset of the study and immediately upon its conclusion. Baseline measurements were conducted to assess initial levels of stress, anxiety, and depression, while follow-up assessments captured any subsequent changes in mental health status. The psychological instruments included the Perceived Stress Scale (PSS) and the Hospital Anxiety and Depression Scale (HADS). The PSS is designed to measure the degree to which individuals perceive their lives as stressful over the past month [40]. The HADS is a validated screening tool for anxiety and depression in non-psychiatric populations and consists of two subscales: HADS-Anxiety and HADS-Depression [41]. Both instruments have been culturally adapted into Chinese and are widely used in oncology populations in China, demonstrating good reliability and validity.

(2) In-Depth Interviews Semi-structured interview guides were developed for each of the three participant groups (patients, family members, and professionals) as shown in **Table 1**, allowing for in-depth exploration of their experiences and perspectives. Each interview lasted approximately 30 to 60 min. All interviews were audio-recorded with participants' consent, transcribed verbatim, and organized into textual data for subsequent thematic analysis.

Table 1. Contents of interviews.

Group	Contents
Cancer patients	Social support acquisition, welfare use experience, emotion regulation methods, perception of social work services, etc.
Family dependents	Caregiving stress, social support, emotional distress and relief pathways.
Medical social work professionals	Practical intervention experience, institutional resistance and service strategies.

(3) Observational Records Supplementary observational data were collected during the interviews and site visits. The researcher documented contextual factors such as patients' engagement with services, participation in therapeutic or support activities, and family interactions. These observational notes provided additional context for the interpretation of both quantitative and qualitative findings.

3.4. Data analysis techniques

The primary analytical approach employed in this study is thematic analysis, which was used to inductively examine the psychological experiences and coping strategies of cancer patients and their families in the context of illness and institutional environments. The analysis process followed five key steps:

- 1) Data familiarization: The researcher repeatedly reviewed interview transcripts and observational notes to form initial impressions.
- 2) Open coding: Keywords, emotional expressions, and significant passages were identified and preliminarily labeled.
- 3) Theme generation: Codes were aggregated into broader thematic categories representing higher-order concepts.
- 4) Theme review and integration: Original data were revisited to verify the representativeness, coherence, and distinctiveness of the identified themes.

For qualitative data analysis, NVivo 12 software was utilized to assist in the systematic organization and thematic extraction of interview materials. As a leading tool for qualitative data analysis, NVivo offers robust features for coding management, theme identification, and textual comparison, thereby enhancing the methodological rigor and analytical depth of the study.

In practice, all transcribed interview texts were imported into NVivo and categorized according to participant type (e.g., cancer patients, family members, medical social workers). During the coding phase, an open coding strategy was adopted to label key phrases and sentences related to perceptions of social welfare, medical social work involvement, and psychological change. These initial codes were then synthesized into higher-level thematic constructs such as perceived

institutional support, resource accessibility, and emotional support mechanisms. Upon completion of thematic coding, the researcher employed NVivo's node comparison tools to analyze variations in perspectives across participant groups and used visualization features—such as coding maps and word frequency clouds—to enhance the clarity and impact of the findings.

The use of NVivo not only facilitated the structured management of complex qualitative data but also strengthened the logical traceability and transparency of the analytical process. This contributed significantly to the academic credibility and theoretical robustness of the research.

In addition, data derived from the standardized psychological scales were subjected to descriptive statistical analysis and paired-sample t-tests using SPSS, in order to support qualitative conclusions and evaluate the trends in intervention outcomes.

3.5. Ethical considerations

This study strictly adhered to the ethical guidelines governing research in the social sciences. Prior to participation, all individuals were required to sign an informed consent form, clearly acknowledging their voluntary involvement in the study. Participants were informed that their personal information and responses would be used solely for academic purposes and would be anonymized in all research outputs, including this thesis. Throughout the interview process, the researcher remained attentive to participants' emotional states, avoiding leading or potentially distressing questions. In instances where participants exhibited signs of emotional distress, interviews were immediately paused, and supportive measures were offered to ensure their psychological well-being.

All data collected were stored on encrypted devices with access restricted to members of the research team. In accordance with ethical guidelines, all data will be securely deleted upon the completion of the study. As the research did not involve medical intervention or the handling of sensitive clinical cases, it did not fall within the formal scope of medical ethics review. Nevertheless, the study was conducted in full compliance with the ethical review principles established by educational institutions and the broader field of social research. Throughout the data collection and analysis process, established ethical standards for qualitative research were rigorously observed to ensure the privacy, dignity, and protection of all participants.

4. Results

4.1. Participant demographics and sample analysis

A total of 40 participants were included in this study, divided into three categories: cancer patients (28), family members of patients (8), and professionals involved in medical social work (4). The demographic information of the patients is shown in **Table 2**. The table is subdivided by gender, age, cancer stage, place of residence, ethnicity, literacy, and income level of the patients, which helps to provide a comprehensive understanding of the basic information about the patients. By analyzing these variables, it is possible to better understand the potential differences

in patients' psychological states, social support needs, and perceptions of welfare, thus providing a contextual explanation for subsequent psychometric scale analysis and theme generalization.

Table 2. Characteristics of cancer patients.

Characteristic	Number of participants	Percentage (%)
Gender		
Male	16	57.14
Female	12	42.86
Age		
≤30	3	10.71
30–55	15	53.57
>55	10	35.72
Nationality		
Han	22	78.57
Others	6	21.43
Cancer Stage		
Early Stage	7	25.00
Mid Stage	12	42.56
Late Stage	9	32.14
Education		
High school or below	9	32.14
Junior college or above	19	67.56
Monthly income (Yuan)		
≤5000	11	39.29
5000–10,000	13	46.43
>10,000	4	14.28

4.2. Comparative analysis of psychological scale data

In the quantitative component of the study, a total of 28 cancer patients were included and divided into four groups ($n = 7$ per group) for a comparative experiment. Group A participants received comprehensive social welfare benefits and medical social work services; Group B received medical social work services but lacked welfare support; Group C had access to welfare benefits but did not receive medical social work services; and Group D, serving as the control group, received neither welfare support nor social work intervention. Each participant completed the Perceived Stress Scale (PSS) and the Hospital Anxiety and Depression Scale (HADS) at two time points: prior to the intervention (T1) and four weeks after the intervention (T2). Quantitative data were analyzed to determine whether there were statistically significant changes in participants' levels of stress, anxiety, and depression. Changes in PSS scores are presented in **Table 3**, and changes in total HADS scores are reported in **Table 4**.

Table 3. PSS score comparison.

Group	T1 (pre-intervention)	T2 (post-intervention)	Mean difference	<i>t</i> -value	<i>p</i> -value
A	28.7 ± 3.1	18.4 ± 2.8	−10.3	6.42	0.0002
B	29.1 ± 2.9	22.8 ± 3.5	−6.3	3.98	0.0031
C	27.6 ± 3.6	23.9 ± 3.1	−3.7	2.02	0.0712
D	29.4 ± 2.7	28.1 ± 3.0	−1.3	0.83	0.4286

Table 4. HADS total score comparison.

Group	T1 (pre-intervention)	T2 (post-intervention)	Mean difference	<i>t</i> -value	<i>p</i> -value
A	25.2 ± 3.4	15.6 ± 2.9	−9.6	6.87	0.0001
B	26.3 ± 2.8	20.5 ± 3.3	−5.8	3.76	0.0045
C	24.8 ± 3.1	21.9 ± 3.0	−2.9	1.94	0.0813
D	25.9 ± 3.0	25.2 ± 2.6	−0.7	0.56	0.5897

The results of the paired-samples *t*-test showed that in group A, which received both social welfare and medical social work support, the patients' PSS and HADS scores decreased significantly ($p < 0.01$), indicating that the joint intervention had a significant effect on psychological stress and emotional state. group B did not enjoy welfare support, but the psychological state also improved significantly after the intervention of social workers ($p < 0.01$). group C only received welfare support, and the trend of psychological improvement was present but not statistically significant. group D was a control group with no intervention, and the difference was not significant ($p > 0.05$). Group C only received welfare support, and the trend of psychological improvement was not statistically significant, although it existed. group D was the control group without intervention, and the difference between before and after was not significant ($p > 0.05$), suggesting that it is difficult to effectively alleviate the psychological distress caused by cancer by individual self-adjustment alone.

4.3. Analysis of interview data

In this study, a total of 40 participants—including cancer patients, family members, and medical social workers—were interviewed using a semi-structured, in-depth format. NVivo 12 software was employed to facilitate open coding, thematic categorization, and comparative analysis across participant roles. Five core themes were ultimately identified, encompassing perceptions of social welfare, experiences with social work services, challenges in family-based support, disparities in service provision, and processes of individual functional recovery. Together, these themes systematically reflect the synergistic mechanisms through which social welfare systems and medical social work interventions jointly contribute to the psychological well-being of cancer patients.

Based on the NVivo coding results, a thematic framework diagram, word cloud, and coding matrix were constructed to enhance the expression and structural clarity of the qualitative findings. The thematic structure diagram illustrates the logical relationships and pathways of influence among the five key themes, highlighting the multi-level collaboration between institutional support and professional services

within the broader psychosocial support system for patients. The thematic structure is presented in **Figure 2**.

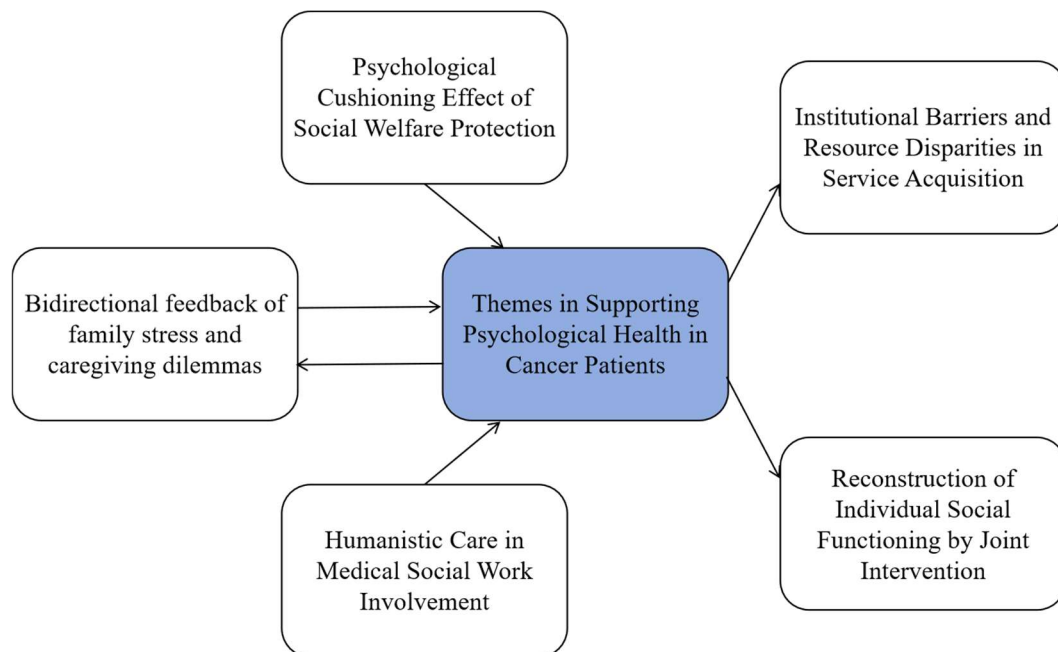


Figure 2. Theme structure diagram.

The word cloud map reveals the most common psychological feelings and social service keywords involved in the interviews between patients, families and social workers through high-frequency word extraction, highlighting core topics such as “emotional support”, “financial pressure”, “health insurance coverage”, etc. “The coding matrix further analyzes the role dimensions of the participants in the interviews. The coding matrix further analyzes the frequency of different topics from the dimensions of participants’ roles, which visually presents the degree of embodiment and importance of each topic in different groups, providing a data basis and empirical support for the subsequent discussion and the construction of the intervention model. The NVivo word cloud and coding matrix are shown in **Tables 5** and **6**.

Table 5. NVivo word cloud map.

High-frequency words (Top 15)	Frequency (times)
Medical insurance/security	38
Medical social worker/social worker	34
Emotion/emotional support	29
Anxiety/stress	27
Accompany/listen	24
Information/acquisition	20
Family/care	19
Gap/unfairness	18
Sense of security	16
Re-engagement/self-efficacy	15

Table 6. Coding matrix.

Coding theme	Cancer patients	Family members	Medical social workers
Social welfare perception	★★★★☆	★★☆	★★★★☆
Emotional support/companionship	★★★★★	★★☆	★★★★★
Family care dilemma	★★★★☆	★★★★★	★★★★☆
Inequality in services	★★★★☆	★★☆	★★★★★
Reconstruction of social functions	★★★★☆	★★★☆☆	★★★★★

4.3.1. Theme 1: Psychological cushioning effect of social welfare protection

The key concepts associated with this theme include health insurance coverage, financial support, perceived institutional security, and the alleviation of life stress. Most cancer patients in this study viewed social welfare—particularly health insurance and critical illness assistance programs—as a psychological safety net that contributes to emotional stability. In interviews, over 80% of participants identified financial burden as one of the primary sources of psychological distress, while health insurance reimbursements and governmental subsidies were perceived as effective in reducing anxieties related to poverty caused by illness.

To further understand the psychological buffering effects of social welfare coverage, the study conducted a statistical analysis of the perceived psychological benefits reported by cancer patients who were beneficiaries of such programs. The results are presented in **Table 7**.

Table 7. Statistics on the psychological effects of cancer patients with social welfare protection.

Psychological benefits	Number of Participants (<i>n</i> = 14)	Percentage (%)
Feeling less financially burdened	12	85.71
More emotionally stable	10	71.43
Increased confidence in treatment	10	71.43
Improved sleep quality	8	57.14
Reduce financial conflicts with family members	9	64.29

As shown in **Table 7**, the majority of patients (85.71%) explicitly stated that the social welfare system helped alleviate their economic burdens and served as a foundational source of emotional reassurance. Notably, 71.43% of respondents reported feeling emotionally more stable and less anxious about financial strain following receipt of health insurance reimbursements and critical illness subsidies. Additionally, 64.29% indicated that reduced financial pressure led to fewer conflicts with family members, thereby fostering a more harmonious household environment. Approximately 60% of respondents also reported improved sleep quality, suggesting that the welfare system plays a significant role in supporting the psychological–physiological–behavioral pathway. These findings further substantiate the hypothesis that social welfare functions as an infrastructure for emotional stabilization and offers an institutional framework for psychosocial intervention.

Feedback obtained during interviews also reinforced the psychological buffering role of social welfare. Representative quotes include:

“What I fear the most isn’t that the illness can’t be cured, but that I can’t afford the treatment... The health insurance and critical illness assistance programs gave me a sense of security.” (Female, 45, breast cancer, advanced stage)

“After receiving the subsidy, I was finally able to sleep through the night.” (Male, 52, gastric cancer)

Throughout these accounts, participants frequently referred to reimbursement ratios, cost thresholds, and the ease of application, indicating that the social welfare system serves not only an economic function but also provides significant psychological reassurance. This effect was particularly evident among low- and middle-income patients, for whom welfare benefits formed the basis for emotional stability and treatment confidence, effectively reducing feelings of helplessness and uncertainty regarding the future.

4.3.2. Theme 2: Humanistic care in medical social work involvement

The core concepts associated with this theme include active listening, companionship, psychological support, and the establishment of trust-based relationships. Most patients described medical social workers as “the people most willing to listen to them.” In contrast to physicians, whose primary focus lies in diagnosis and treatment, social workers emphasize patients’ emotional well-being and daily life experiences, adopting a person-centered rather than a disease-centered approach. This allows for the development of supportive relationships that address patients’ psychological and relational needs.

To further assess the psychological benefits of medical social work services, the study collected data on cancer patients who had received such interventions. The statistical results are presented in **Table 8**.

Table 8. Statistics on the psychological effects of cancer patients with medical social work services.

Psychological benefits	Number of participants (<i>n</i> = 14)	Percentage (%)
Emotions are understood and resonated with	13	92.86
Anxiety is relieved	9	64.29
Feeling accompanied/no longer lonely	12	85.71
Easier to express inner thoughts	8	57.14
Enhanced sense of trust and security	10	71.43

As shown in **Table 8**, 92.86% of participants reported that their emotions were understood and empathized with, and 85.71% expressed that the social worker’s presence alleviated feelings of loneliness. These findings underscore the central role of humanistic care in psychological interventions. Through attentive listening, empathy, and non-judgmental communication, social workers create a psychologically safe environment in which patients feel encouraged to express inner stressors and emotional concerns. Furthermore, 71.43% of participants reported an enhanced sense of trust and psychological security, reflecting the unique role of social workers in providing emotional support beyond the clinical scope of doctor-patient interactions. These results highlight that social work intervention is not

merely a technical or procedural function; rather, it forms a relationally driven system of psychosocial support.

Interview narratives further reinforced the positive impact of medical social work services on patients' psychological well-being. Representative quotations include:

"They're willing to listen to me, to talk with me—I feel genuinely happy. (Male, 60, lung cancer)

"She didn't prescribe any medicine, but after talking to her, I felt much better." (Female, 39, cervical cancer)

The content of the interviews reveals that patients commonly regard medical social workers as providers of "non-functional support"—that is, support not directly tied to clinical outcomes, but essential to emotional regulation, the alleviation of loneliness, and the reconstruction of self-worth. The "trust space" established by social workers is viewed as a vital outlet for emotional expression and acceptance, which plays a constructive role in mitigating symptoms of anxiety and depression.

4.3.3. Theme 3: Bidirectional feedback of family stress and caregiving dilemmas

The key concepts associated with this theme include caregiving burden, familial guilt, emotional contagion, and psychological resonance. In dyadic interviews with patients and their family members, phrases such as "I don't want to burden them" frequently emerged, indicating a strong emotional interdependence within the family context during the course of illness. On one hand, patients often suppress expressions of suffering in an attempt to shield their loved ones from additional stress; on the other hand, family members' own anxiety and emotional suppression may inadvertently exacerbate the patient's psychological distress, creating a negative feedback loop.

Representative statements from family members illustrate this emotional reciprocity:

"I don't dare cry in front of my mother—she gets too upset. If I break down, she won't be able to hold it together." (Female, 26, daughter of a thyroid cancer patient)

"I know my dad cries secretly at night, so I pretend to be strong all day." (Female, 21, daughter of a liver cancer patient)

Table 9 presents the statistical findings on the emotional interplay between patients and their families.

Table 9. Statistics of psycho-emotional interaction effects between patients and family members.

Psychological phenomenon	Number of participants (<i>n</i> = 28)	Percentage (%)
Unwilling to express emotions to avoid worrying family members	21	75.00
Family members' anxiety affects their own mental state	19	67.86
Feeling guilty and burdened by family members	22	78.57
Hope family members can also get psychological support	24	85.71
Tense family care relationship	17	60.71

As shown in **Table 9**, a substantial proportion of patients (78.57%) reported experiencing guilt toward their families following diagnosis. Many also indicated a reluctance to outwardly express their anxiety, contributing to the formation of what

may be termed an “emotional silence zone” within the household. In addition, 67.86% stated that their own psychological state was “strongly influenced by the emotional condition of family members,” particularly when caregivers exhibited signs of anxiety or depression themselves. Notably, 85.71% of respondents expressed a desire for their family members to receive support from social workers or psychological services, underscoring the need for psychosocial interventions to extend beyond the individual patient and into the broader family system.

These findings affirm the theoretical premise that the family operates as an emotional intermediary in the transmission of psychological states. They also suggest that effective medical social work interventions must move from an individual-based approach to a family-centered model. In this bidirectional feedback mechanism, the emotional environment within the family constitutes a latent yet critical dimension of psychosocial care. If the emotional needs of family members are overlooked during intervention, the efficacy of psychological support for the patient may be significantly compromised. This theme highlights the necessity of expanding the target of intervention from the individual to the familial system to achieve more comprehensive and sustainable outcomes.

4.3.4. Theme 4: Institutional barriers and resource disparities in service acquisition

The key concepts underpinning this theme include welfare disparities, urban–rural inequality, information gaps, and the scarcity of professional social work personnel. Issues related to unequal service provision were particularly prominent in interview narratives. Many patients mentioned having “heard” about certain services available in other areas but were unclear about how to access them. In some grassroots medical institutions, there were no established positions for medical social workers, or such services existed in name only, with little to no actual implementation. The following quotations illustrate patients’ perceptions of service availability:

“I’ve only heard that there are medical social work services in big cities—do we have that in our county?” (Male, 54, colon cancer)

“I only found out about the subsidies through social media; the hospital never mentioned anything.” (Female, 47, lymphoma)

Table 10 summarizes the difficulties cancer patients face in accessing psychosocial resources and institutional support.

Table 10. Statistics on resource disparities and difficulties associated with access to services for cancer patients.

Service barriers or resource shortages	Number of participants (<i>n</i> = 28)	Percentage (%)
Lack of access to medical social work services	19	67.86
Unclear about the social welfare application process/information opacity	17	60.71
Perceived disparities in welfare between urban and rural areas or regions	20	71.23
Says that resources “exist in name but are not actually available”	18	64.29
Missed subsidies/services due to missing information	11	39.29

As shown in **Table 10**, structural barriers to service access constitute a significant limitation to intervention equity. Approximately 60.71% of participants

reported a lack of clarity when applying for welfare benefits, and 71.23% perceived significant disparities in resource allocation between urban and rural areas. Notably, formal social work services were nearly inaccessible in lower-tier or community hospitals. Furthermore, 39.29% of respondents indicated that they missed opportunities to apply for subsidies due to insufficient information, reflecting serious gaps in information dissemination and structural exclusion during policy implementation. These findings suggest that effective psychological intervention must address not only the content and quality of services but also the broader institutional mechanisms and distributional fairness underpinning access. Expanding coverage and improving accessibility should be central to efforts aimed at building a more inclusive support network.

The challenges associated with service disparities and access pathways appear to be closely tied to variations in information transparency and the physical availability of resources. Significant differences in patients' awareness of available benefits reveal an underlying "cognitive divide" compounded by "geographical inequality." This theme underscores the need for social welfare and medical social work systems to strengthen both the depth of service coverage and the equity of resource allocation, in order to ensure that psychosocial interventions are both widely accessible and meaningfully impactful across diverse populations.

4.3.5. Theme 5: Reconstruction of individual social functioning by joint intervention

The key concepts related to this theme include self-efficacy, life goals, reintegration into social roles, and a sense of empowerment. A number of patients, following sustained support through medical social work services and stable welfare assistance, gradually began to move beyond the identity of "patient" and actively engaged in community life. This included participation in volunteer work, vocational retraining programs, and rehabilitation support groups—behaviors indicative of a notable trend toward "re-living" and social reintegration. Representative quotations from patients include:

"She [the medical social worker] encouraged me to keep a journal and find something meaningful to do. Now I regularly take part in volunteer activities." (Male, 49, gastric cancer)

"I've started teaching my grandson to read again—it makes me feel useful." (Female, 63, lung cancer)

The empirical data regarding the role of integrated interventions in facilitating the restoration of cancer patients' social functioning are presented in **Table 11**.

Table 11. Performance statistics of combined intervention to promote social function recovery in cancer patients.

Functional improvement performance	Number of participants (<i>n</i> = 28)	Percentage (%)
More stable emotions, able to actively participate in family affairs	25	89.29
Recover daily social skills	21	75.00
Participate in community activities/volunteer services	19	67.86
Feel the return of self-worth	22	78.57
Says "life has a new goal"	23	82.14

As illustrated in **Table 11**, the combined intervention not only stabilized patients' emotional states but also significantly enhanced their capacity for social engagement. A total of 82.14% of patients reported "renewed life goals," such as caring for grandchildren or joining community service initiatives. Additionally, 75.00% of participants regained social confidence, suggesting a recovery in interpersonal functioning and a willingness to reengage with the outside world. Notably, 78.57% of patients indicated that, with encouragement from social workers, they had "rediscovered their sense of personal value," reflecting a transition from passive treatment recipients to active participants in life. This functional empowerment, brought about by the integrated intervention, plays a crucial role in long-term rehabilitation and psychological resilience, while also offering strategic direction for future social work practices.

Such transformations reflect the practical efficacy of the "empowerment" paradigm in social work. The goal of the intervention extends beyond emotional regulation to include the reconstruction of social roles and the restoration of psychological functioning. These outcomes have long-term implications for improving patients' quality of life and sustaining stability during recovery, and they provide strong empirical support for the theoretical application of empowerment-oriented models in medical social work.

4.4. Joint mechanism of action

This study adopts a mixed-methods approach, predominantly qualitative with supplementary quantitative analysis, to explore the comprehensive impact of social welfare and medical social work on the psychological health of cancer patients. The research examines two dimensions: changes in psychological scale scores and thematic analysis of in-depth interviews. By integrating these two types of data, the study further uncovers the synergistic logic between institutional support and professional services, providing empirical evidence for the construction of an actionable psychological intervention model.

In the paired sample t-test results of Section 4.2, Group A (with social welfare and social work intervention) showed an average decrease of over 10 points in both the PSS and HADS scores, with high statistical significance ($p < 0.01$). Other groups, such as Group B (without welfare but with social work), and Group C (with welfare but without social work), also demonstrated varying degrees of psychological improvement, though the effects were less pronounced than in Group A. Group D (without both social work and welfare) exhibited almost no change in psychological status, indicating that, in the absence of institutional and human interventions, emotional distress in patients tends to persist long-term. These results clearly indicate that optimal psychological intervention outcomes can only be achieved through the combined effects of social welfare and medical social work.

Additionally, the NVivo thematic analysis of the qualitative interviews identified five main themes, further revealing the mechanisms through which the joint intervention of social welfare and medical social work impacts the psychological health of cancer patients. These include: social welfare alleviating economic anxiety, providing an institutional basis for emotional stability; medical

social work fostering trust-based relationships, creating a human-centered environment for emotional guidance and psychological companionship; emotional resonance within the family system influencing psychological recovery, necessitating simultaneous attention to both patients and their families; the fairness and transparency of institutional implementation determining the coverage and accessibility of services; and, finally, psychological intervention promoting the shift from dysfunction to social reintegration, enabling the reconstruction of self-worth. These mechanisms, validated by patients' genuine statements and cross-role verification, not only support the improvements in scale scores but also deepen the interpretation of the intervention pathways.

By integrating quantitative trends and qualitative mechanisms, the study constructs the following model of the combined effects of social welfare and medical social work, as shown in **Figure 3**.

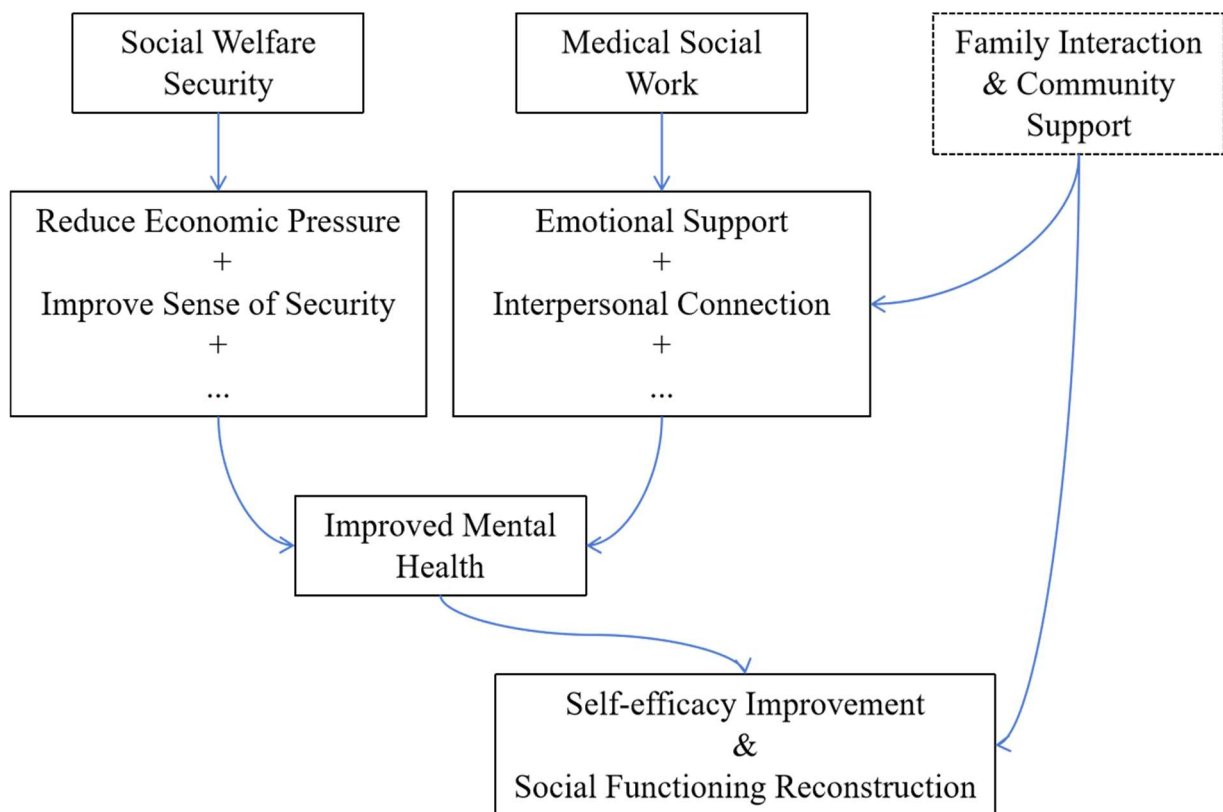


Figure 3. Model of the joint role of social welfare & medical social.

This model, with a dual-pathway approach (institutional support + professional services) at its core, positions emotional regulation mechanisms in the middle layer and social function restoration and family system support at the base layer, ultimately contributing to the sustained improvement of patients' psychological status. This collaborative intervention model not only enhances the reliability of the study through empirical evidence but also offers a practical foundation for its implementation in clinical and community settings.

5. Discussion

5.1. Combined analysis based on demographic characteristics and changes in scale scores

In the present study sample (**Table 2**), males accounted for 57.14% and females for 42.86%. Gender may play a significant role in shaping both the manifestation of psychological stress and the strategies used to cope with it. Existing literature suggests that male patients tend to suppress emotions and are less likely to seek help actively, whereas female patients are generally more expressive and more inclined to engage in supportive services [42]. Consequently, the design and delivery of medical social work interventions should incorporate gender sensitivity, with particular attention to encouraging emotional expression and proactive resource engagement among male patients.

Patients aged between 30 and 55 years comprised 53.57% of the sample, representing the dominant demographic group. Individuals in this age range typically bear dual responsibilities related to family and economic obligations, rendering them particularly vulnerable to heightened psychological distress and loss of social functioning following a cancer diagnosis. Combined analysis of the PSS and HADS results (**Tables 3** and **4**) indicates that this cohort experiences relatively elevated levels of anxiety and stress, underscoring the urgent need for dual interventions—namely, institutional support (such as financial assistance and caregiving resources) and emotion regulation services.

Han Chinese patients constituted 78.57% of the sample, while ethnic minority patients accounted for 21.43%. Interview data revealed that some minority patients faced barriers in language communication, awareness of medical policies, and access to social work services, contributing to an increased sense of institutional marginalization. Thus, medical social work services should enhance cultural adaptability to ensure equitable access to psychological support and resources for patients from diverse ethnic backgrounds.

Patients in the middle (42.56%) and late stages (32.14%) of cancer accounted for more than 70% of the sample, indicating that the majority were navigating a critical phase marked by disease-related stress, prognostic uncertainty, and the threat of mortality. Psychological states during this phase are often highly unstable, representing a key “window of opportunity” for social support interventions. Several late-stage patients reported feelings of abandonment and concern regarding inadequate institutional support, highlighting their particular reliance on sustained social work accompaniment and foundational social welfare assistance.

In terms of educational background, 67.56% of the participants had attained a college-level education or higher. This group is typically more capable of accessing information, understanding institutional frameworks, and utilizing available services, and is more likely to proactively seek social work support. In contrast, the remaining 32.14% with lower levels of education may find themselves excluded from services due to informational barriers, rendering them an “invisible vulnerable group.” Medical social work must actively identify and bridge such institutional inequalities.

With respect to income, 39.29% of the patients reported a monthly income below 5000 RMB, 46.43% between 5000 and 10,000 RMB, and only 14.28% earned more than 10,000 RMB. These figures suggest that the study sample was predominantly composed of individuals from low- to middle-income backgrounds, who often face substantial financial burdens related to medical care. Interview data revealed that some patients experienced psychological distress even prior to the commencement of treatment, with one respondent stating, “The stress arrived before the therapy even started.” In the absence of effective financial assistance, this demographic is more prone to negative emotions such as anxiety and despair, highlighting the critical role of social welfare as an institutional buffer to stabilize psychological well-being.

5.2. Findings and theoretical responses

This study centers on the theme of “The Impact of Medical Social Work and Social Welfare on the Mental Health of Cancer Patients,” employing a combination of qualitative interviews, psychological health scales, and comparative experiments to systematically analyze the pathways through which institutional support and professional services contribute to psychological interventions in oncology settings. By triangulating quantitative validation with in-depth thematic analysis, the study not only demonstrates the effectiveness of integrated interventions but also elucidates the underlying mechanisms.

(1) Validation and Expansion of Social Support Theory The findings indicate that, across both quantitative and qualitative data, cancer patients consistently regard social welfare systems and medical social work as integral components of their external support networks. This aligns with the concept of formal support emphasized in social support theory. Institutional financial assistance, medical security, and the interpersonal engagement provided by social workers all play significant roles in emotional regulation, stress alleviation, and the formation of coping beliefs.

However, the study further identifies that disparities in the structural equity and accessibility of support systems significantly affect the perceived intensity of that support. For example, variations in the implementation of welfare programs between urban and rural areas and the uneven distribution of social work resources serve as critical factors that distort patients’ perception of support availability. This finding extends a core assumption of social support theory: it is not only the existence of support that matters, but also whether that support is perceived and accessible to the recipient.

(2) Empirical Support for the Stress-Coping Theory According to Lazarus and Folkman’s stress-coping model, individuals’ coping outcomes under major stress events depend on the integration of cognitive appraisal and available resources. The study shows that when patients are equipped with social welfare and channels for emotional regulation, they are more likely to reframe cancer from an “uncontrollable fate” to a “manageable chronic condition.” This cognitive reappraisal facilitates the adoption of constructive coping behaviors, affirming the foundational role of medical social work and institutional support in fostering psychological resilience.

Moreover, some patients, following integrated interventions, began to engage proactively in family responsibilities and community activities—demonstrating a shift from passive acceptance to active reconstruction. This positive transformation is emblematic of effective psychological adaptation mechanisms.

(3) Practical Manifestation of Empowerment Theory and Social Work Values The results of this study also support the applicability of empowerment theory in the context of psychosocial oncology. Through accompaniment by medical social workers, goal restructuring, and information empowerment, patients regained avenues for self-expression, affirmed their self-worth, and re-engaged in social participation. This transition—from being perceived as “vulnerable” to acting as “agents of change”—represents not only an improvement in psychological well-being but also a re-establishment of social functioning. This phenomenon highlights the dual role of medical social work: providing emotional support while simultaneously facilitating structural empowerment at the societal level.

5.3. Policy recommendations

Based on the study’s findings and the proposed mechanism model, the following three policy recommendations are advanced:

(1) Enhance the Equity and Transparency of Social Welfare Systems It is recommended to expand both the coverage and reimbursement rates of medical insurance, with particular attention to the accessibility of welfare benefits for rural, low-income, and non-local patients. Simultaneously, a multi-channel platform for welfare information dissemination and application should be developed to reduce cognitive barriers in accessing and navigating institutional support.

(2) Strengthen the Professional Development of Medical Social Work Systems It is advised that dedicated social work positions be established within medical institutions at all levels. Furthermore, training, assessment, and resource allocation related to major illness interventions should be enhanced to improve social workers’ competencies in the interdisciplinary “medical-psychological-social” domain.

(3) Promote the Policy Integration of a “Family-Supportive” Intervention Model It is recommended that family members be included as target recipients of medical and community-based services. This approach would not only extend support to patients but also alleviate the psychological burden and stress experienced by caregivers. Institutional mechanisms such as “family mental health assessments” and “caregiver support groups” could be explored to provide structured support for families.

6. Conclusion

This study incorporates three key stakeholder groups—cancer patients, their family members, and medical social work professionals—to systematically examine the impact of medical social work and social welfare systems on the mental health of individuals living with cancer. Adopting a mixed-methods approach that emphasizes qualitative inquiry supplemented by quantitative analysis, alongside a comparative experimental design, the research investigates how institutional support and

professional services interact to facilitate psychological recovery among cancer patients.

Findings reveal that social welfare systems and medical social work offer stable psychological support networks through structural and emotional dimensions, respectively. The synergy of these two interventions demonstrates a clear compound effect in alleviating stress, reducing anxiety and depression, and enhancing self-efficacy. Quantitative results indicate that patients in the integrated intervention group experienced the most significant reductions in Perceived Stress Scale (PSS) and Hospital Anxiety and Depression Scale (HADS) scores, with high statistical significance. Qualitative analysis further reveals patients' sense of security derived from welfare support, the emotional companionship provided by social workers, and the influential role of family systems in emotional resonance.

At the theoretical level, this research both responds to and extends key frameworks, including Social Support Theory, the Stress-Coping Model, and Empowerment Theory. Social welfare provisions function not only as tangible support mechanisms but also influence patients' perceived support strength through factors such as accessibility and institutional transparency. Medical social work contributes not only short-term emotional interventions but also plays a critical role in long-term recovery and social reintegration, thus embodying the core values of empowerment. The proposed intervention model—comprising “Social Welfare – Medical Social Work – Psychological Buffering – Functional Restoration”—integrates these mechanisms into a comprehensive, multi-layered framework, offering theoretical insight into the systemic pathways that support mental health improvement in cancer patients.

The practical contributions of this study are threefold:

- It highlights the advantages of coordinated institutional and service-based interventions, advocating for a joint model of “institutional safety net + social work empowerment”;
- It underscores the importance of service equity and information accessibility for intervention effectiveness, providing actionable policy recommendations;
- It emphasizes the crucial role of family support in patients' psychological reconstruction, calling for the establishment of integrated, family-centered support systems.

These findings hold significant implications for the advancement of cancer care services, humanistic healthcare practices, and the institutionalization of social work in China.

Nonetheless, the study is subject to certain limitations, including a relatively small sample size, regional concentration, and a short intervention period, which may constrain the generalizability of its conclusions. Future research should aim to expand the sample scope, incorporate cross-regional comparisons, and extend the follow-up period to further examine the sustainability of integrated interventions. Additionally, greater emphasis should be placed on analyzing variables such as policy implementation pathways and the efficiency of resource integration.

In sum, this study offers both theoretical grounding and empirical insight into cross-sector collaboration models for psychosocial interventions in serious illnesses,

with the ultimate aim of providing institutional security, professional support, and emotional comfort for a broader population of cancer patients.

Funding: None.

Ethical approval: Not applicable.

Informed consent statement: Informed consent was obtained from all subjects involved in the study.

Conflict of interest: The author declares no conflict of interest.

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