VNU Journal of Social Sciences and Humanities
Vol 2, No 2 (2026) 355-374
© The Author(s) 2026

p-ISSN: 3093-3889
e-ISSN: 3093-3900



Factors Influencing the Implementation of Social Work Services for Critically Ill Patients at a Vietnamese Hospital

Pham Tien Nam[*], Tran Thi Mai Huong[*], Duong Minh Duc[*], Le Thi Vui[*], Nguyen Thi Phuong[*], Vu Thi Thanh Mai[*], Nguyen Trong Thien[**], Truong Van Dung[**], Truong Thi Ly[***], Nguyen Khac Liem[*]

Abstract: This article describes the current implementation and analyzes the key factors influencing the provision of social work services for critically ill patients at Da Nang C Hospital in central Vietnam. A mixed-methods research design was employed, and data were collected from April to June 2025. The findings indicated that the hospital's Social Work Unit implemented four major services: emergency assistance; guidance, intervention, and rehabilitation; health education and communication; and resource mobilization. Among these, guidance, intervention, and rehabilitation services demonstrated the highest level of effectiveness, while communication and resource mobilization services were carried out through diverse approaches. In contrast, emergency assistance services were only implemented at a basic level. Several factors were identified as influencing the implementation of social work services, including the limited number and capacity of social work personnel; insufficient funding and the absence of clear mechanisms for multidisciplinary and intersectoral coordination; and inadequate facilities and equipment for the application of digital technology. The article recommends enhancing professional training for social workers, securing stable financial resources, improving infrastructure and equipment, and strengthening emergency support activities to optimize the effectiveness of social work service implementation at Da Nang C Hospital.

Keywords: social work services; critically ill patients; Da Nang C Hospital.

Received: 24th October, 2025; Revised: 26th January, 2026; Accepted: 14th September, 2026

DOI: https://doi.org/10.33100/jossh.2026.2.2.10

1. Introduction

Critical illnesses are characterized by complex clinical progression, prolonged treatment duration, and high treatment-related financial burden. According to Clause 3, Article 8 of Government Decree No. 76/2003/NĐ-CP, dated June 27, 2003, which provides detailed regulations and guidance on the application of measures for placement in educational institutions, "critically ill persons are those suffering from one of the life-threatening diseases such as cancer, poliomyelitis, cirrhosis with

[*] Hanoi University of Public Health, Hanoi;
email: phamtiennam1987@gmail.com
[**]Da Nang C Hospital, Da Nang.
[***]Trade Union University, Hanoi

ascites, leprosy, severe tuberculosis, HIV infection progressed to the AIDS stage, and other diseases designated by the Ministry of Health as critically ill conditions" (Government 2003: 4). In addition, Government Decree No. 134/2016/NĐ-CP, dated September 1, 2016, which details several articles and implementation measures of the Law on Export and Import Taxes, specifies a list of 42 diseases classified as critical illnesses, including cancer and chronic kidney failure (Government 2016). Critically ill patients are considered a vulnerable and disadvantaged group, particularly those with cancer and renal failure, who face severe impacts not only on their physical health but also on their mental and social well-being (Flanagan et al. 2022). Numerous studies document that such patients commonly experience physical symptoms such as fatigue, pain, dry skin, swelling, tingling or numbness in extremities, nausea, and digestive disorders (Kalantar-Zadeh et al. 2022; McFarland et al. 2018). In addition to these physical problems, patients often experience mental health disorders, including anxiety, depression, and chronic stress (Al Naamani et al. 2021; Singer et al. 2010). The meta-analysis by Singer et al. (2010) showed that approximately one-third of cancer patients suffered from mental health disorders during treatment (Singer et al. 2010). Among patients with chronic kidney disease undergoing hemodialysis, 83.5% had poor sleep quality (PSQI > 5) (Huynh Ho Ngoc Quynh et al. 2025).

Beyond the physical and psychological dimensions, critically ill patients also faced substantial social challenges. Economic hardship, unstable housing, limited social support networks, unemployment, and discrimination can delay diagnosis and reduce survival opportunities (Coughlin 2019). Among these, financial difficulties were the most pronounced, causing many patients to postpone or discontinue treatment and leading to a decline in their quality of life (Knight et al. 2018; Vuong Hoang Quan 2015). Moreover, prolonged treatment periods can impair communication abilities and diminish social relationships among critically ill patients (Nguyen Thi Tuyet Mai et al. 2021). Therefore, critically ill patients require holistic and comprehensive support addressing not only the physical but also the psychological and social dimensions.

Within healthcare institutions, social work services have increasingly affirmed their vital role as an integral component of patient care, contributing to improved treatment outcomes (Petruzzi et al. 2023; Zebrack et al. 2025). Social work services are defined as those "provided by qualified organizations or individuals to assist in addressing the social problems of individuals, groups, families, and communities" (Government 2024: 2). According to Ministry of Health Circular No. 51/2024/TT-BYT, social work services in medical facilities target patients and their relatives, and include: (1) emergency assistance services; (2) guidance, intervention, and rehabilitation services; (3) health education and communication services; and (4) resource mobilization for social work services (Ministry of Health 2024). In this study, "guidance" refers to a set of social work activities aimed at supporting patients' navigation of the hospital system, including reception, orientation, and procedural instructions, and administrative guidance related to admission, treatment, and discharge. These activities are primarily informational and facilitative in nature and are designed to help patients access healthcare services and understand their rights and entitlements.

Both international and domestic studies have highlighted the significant demand for

social work services among critically ill patients. Internationally, a recent global health-policy review of psychosocial care in cancer reported that 35–80% of cancer patients experience clinically significant psychological distress, that up to half of highly distressed patients require professional psychosocial support, and that these unmet needs are markedly wider in low- and middle-income countries with limited resources (Bergerot et al. 2024). Domestically, 56% of these patients required psychological support, 14% needed social assistance, and 9.3% needed informational support (Vuong Hong Hanh et al. 2021). Huynh To Nhu et al. (2024) reported that most cancer patients expressed a need for information, particularly concerning their health status (78.2%) and diagnosis (77.3%). These patients also had strong psychosocial needs, including being respected and treated normally by others (88.2%) and receiving reassurance regarding treatment costs (59.1%) (Huynh To Nhu et al. 2024).

Although the role of and need for social work services have been well documented, existing studies in Vietnam have primarily focused on describing patients' needs or assessing satisfaction with specific services. By contrast, there remains a lack of in-depth research examining how social work services are implemented within hospital settings, particularly from the perspectives of stakeholders who are directly involved in and benefit from these services. Moreover, empirical evidence regarding organizational conditions, resource availability, and professional capacity influencing the implementation of social work services for critically ill patients remains limited, especially in mid-level hospitals and those in central Vietnam.

The Oncology Center and the Department of Nephrology–Hemodialysis at Da Nang C Hospital treat an average of 70–100 patients per day, primarily those receiving periodic or inpatient treatment (Da Nang C Hospital 2018). The Social Work Unit was established in March 2016 under the Nursing Department, with a workforce of four part-time social workers. Over nearly a decade of operation, the Unit has implemented several fundamental social work services in accordance with Circular No. 43/2015/TT-BYT and Circular No. 51/2024/TT-BYT (Ministry of Health 2015, 2024). However, the effectiveness of these services, particularly those for cancer and renal failure patients, remains limited due to various implementation challenges.

Building on the identified research gaps and the practical context outlined above, this article aims to describe the current implementation of social work services and to analyze factors influencing the delivery of social work services for critically ill patients at Da Nang C Hospital, from the perspectives of relevant stakeholders. The article contributes empirical evidence to the field of hospital-based social work in Vietnam and provides a scientific basis for improving policies and the organization of social work services in a comprehensive, patient-centered care approach.

2. Methods

2.1. Study Design

The research reported in this article employed a mixed-methods design, combining both quantitative and qualitative approaches. The quantitative component described the current status of social work services for critically ill patients, while the qualitative component explored factors influencing the implementation of these services.

2.2. Study Period and Location

Data collection was conducted from April to June 2025 at Da Nang C Hospital.

2.3. Study Subjects

For the quantitative component, the research team collected secondary data on social work services at Da Nang C Hospital, from January 1 to December 31, 2024. The data were extracted from logbooks and activity reports of the Social Work Unit, as well as hospital plans, programs, and other relevant documents officially approved by the Hospital Board of Directors in 2024. These data sources provided information on the scope and implementation of social work service activities during the study period.

For the qualitative component, 13 in-depth interviews were conducted with different groups of participants. Among managerial staff with a minimum of six months of working experience, six in-depth interviews were conducted with one representative of the Hospital Board of Directors, one leader of the Social Work Unit, one leader of the Personnel Department, one leader of the Quality Management Department, one head nurse of the Oncology Center, and one head nurse of the Department of Nephrology–Hemodialysis. In addition, seven in-depth interviews were conducted with service users, including two cancer patients, two patients with renal failure, and three family caregivers. Eligible patients were aged 18 years and older, had a physician-confirmed diagnosis of cancer or renal failure, and had been hospitalized for at least three days. Family caregivers were defined as individuals who directly provided care to critically ill patients during their treatment at the hospital.

Furthermore, two focus group discussions were held. These involved six social workers and six healthcare staff from the Oncology Center and the Department of Nephrology–Hemodialysis, all of whom were members of the hospital's social work collaborator network. These participants were directly involved in the provision of social work services for critically ill patients and shared their practical experiences regarding the current implementation of hospital-based social work services, as well as their perspectives on organizational, resource-related, and professional factors influencing the provision of social work services.

2.4. Study Ethics

The study was granted ethics approval by the Institutional Review Board of the Hanoi University of Public Health (Decision No. 38/2025/YTCC-HD3). All research procedures adhered to ethical principles for scientific research, including voluntary participation and confidentiality of participant information. Participants were fully informed about the purpose of the study and provided informed consent prior to participation. Collected data were used solely for scientific research purposes.

2.5. Data Collection and Analysis

The quantitative data collection form was developed based on Ministry of Health Circular No. 43/2015/TT-BYT on social work functions and organizational forms in hospitals, and Circular No. 51/2024/TT-BYT on implementing social work in medical facilities. The form was designed to collect secondary data on the outputs of social work service implementation at Da Nang C Hospital. The collected variables focused on documenting the scope and frequency of service delivery, including types of social work services, specific activity contents, units of measurement

(such as number of patient visits, number of activities conducted, number of implementation occasions, monetary value, or number of sponsors), and the corresponding annual counts. The data were provided by the Head of the Social Work Unit, based on activity reports, professional logbooks, and other relevant administrative documents, covering the period from January 1 to December 31, 2024. After collection, the data were entered and compiled using Microsoft Excel 2013. The analytical approach was limited to descriptive statistics, including frequency counts and distributions of activities by service category. The results were presented in tabular form to describe the current implementation of social work services at the hospital and did not aim to assess intervention effectiveness or service user satisfaction.

The in-depth interview and focus group discussion guides were developed in accordance with Ministry of Health Circular No. 43/2015/TT-BYT and Circular No. 51/2024/TT-BYT, and informed by previous research conducted by Pham Tien Nam et al. (2020) on social work services at Dak To District Medical Center, Kon Tum Province, Vietnam. The discussion guides focused on exploring facilitators, barriers, and factors influencing the implementation of social work services from the perspectives of hospital managers, service providers, and service users. In-depth interviews lasted 30–45 minutes, while focus group discussions lasted 45–60 minutes. With participants' consent, all interviews and discussions were audio-recorded and transcribed verbatim. Qualitative data were analyzed thematically, with coding conducted in NVivo 7.0 according to the study themes and subsequently exported to Microsoft Word 2013 for citation and presentation in the Results section. The analytical framework encompassed three main thematic groups: (1) social work human resources (staffing levels and professional training); (2) resources for social work services (facilities, equipment, and funding); and (3) organization of social work services (leadership support and coordination between social workers and healthcare staff).

3. Results

3.1. Current Implementation of Social Work Services

3.1.1. Implementation of Emergency Assistance Services

From January to December 2024, the Social Work Unit assessed psychological and social risks and needs for 15 critically ill patients, thereby identifying those who required emergency assistance. Most of these patients were in severe or advanced stages of their illness and required urgent medical intervention due to life-threatening risks such as respiratory failure, post-treatment complications, or unstable living conditions that did not meet their basic needs. Social workers coordinated promptly with healthcare staff to provide emergency support services, including medical treatment assistance, initial psychological stabilization, and patient care. Simultaneously, the Unit mobilized and connected with sponsors to provide meals and essential supplies for patients. During the period of data collection, the Social Work Unit did not identify any critically ill patients who were victims of violence or abuse, nor were there any cases requiring emergency referral to social protection facilities, competent authorities, or other organizations for urgent intervention.

3.1.2. Implementation of Guidance, Intervention, and Rehabilitation Services

This subsection describes the scope and frequency of guidance, intervention, and rehabilitation services provided to critically ill patients at Da Nang C Hospital in 2024.

Table 1: *Summary of the implementation results of guidance, intervention, and rehabilitation services*

Services	**Unit**	**Statistical Data for 2024**
Welcoming and facilitating patients during hospital visits and treatments	Patient visits	760
Visiting patients to collect information on health conditions and socioeconomic difficulties, identifying needs for psychological and social support	Patient visits	450
Conducting initial and comprehensive assessments of patients' psychosocial issues	Patient visits	125
Providing psychological support for patients	Patient visits	125
Counseling and support regarding patients' rights, legal benefits, and responsibilities during treatment	Patient visits	42
Counseling and support on social policies and health insurance benefits	Patient visits	9
Providing information and counseling for patients on hospital transfer or discharge	Patient visits	125
Assisting with discharge procedures and referrals to community support services (if applicable)	Patient visits	30
Assisting in transporting patients between facilities or home	Patient visits	10

The implementation of guidance, intervention, and rehabilitation services for critically ill patients at Da Nang C Hospital in 2024 reflected the most active and effective component within the hospital's social work system. As summarized in Table 1, this group of services encompassed a broad range of activities designed to support patients across multiple dimensions: psychological, social, and practical throughout the treatment process.

During 2024, the Social Work Unit maintained a consistent presence in patient reception and support. A total of 760 patient interactions were recorded in welcoming and facilitating access to medical services. These interactions ensured that critically ill patients were received in a supportive and compassionate environment, enabling smoother admission procedures and helping to alleviate initial feelings of anxiety, confusion, or fear upon arrival at the

hospital. The active engagement of social workers at this stage was crucial in establishing a sense of trust and comfort for patients and their families, thereby improving the overall treatment experience.

In addition to patient reception, social workers conducted 450 visits to patients during hospitalization to collect information on their health conditions, socioeconomic status, and psychological well-being. Through these visits, the Unit identified individuals experiencing significant psychosocial distress or economic hardship and provided timely interventions. These activities reflected the proactive approach of the Social Work Unit in reaching out to patients, rather than waiting for them to seek help.

Following these preliminary assessments, 125 critically ill patients underwent both initial and comprehensive psychosocial evaluations, enabling social workers to systematically identify and analyze the full spectrum of psychological and social challenges. These evaluations not only supported individualized intervention planning but also contributed to the development of a patient-centered service model within the hospital.

In terms of direct intervention and rehabilitation, the Social Work Unit implemented 125 psychological support sessions, providing emotional stabilization and coping guidance to patients facing severe illness-related stress. Furthermore, 42 consultations were organized to inform patients about their legal rights, responsibilities, and entitlements during treatment, ensuring that they could access existing protections and institutional support. In parallel, nine counseling sessions were devoted to social policy and health insurance guidance, helping patients and families navigate administrative procedures related to social welfare, insurance reimbursement, and financial aid programs. These interventions collectively empowered patients to become active participants in the treatment process, enhanced their awareness of available support mechanisms, and reduced the social and economic burdens associated with prolonged illness.

Social workers also played an essential role in facilitating discharge and community reintegration. In 2024, 125 patients received tailored counseling and information regarding hospital transfers and discharge procedures. The Unit provided direct assistance to 30 patients with administrative processes and referrals to community-based support facilities, ensuring continuity of care after hospital discharge. Additionally, 10 cases of patient transportation assistance were coordinated through the hospital's "zero-fare transport" initiative, enabling the safe transfer of patients between medical facilities or back to their homes, particularly for those experiencing financial hardship or poor health conditions.

Overall, the findings illustrated that guidance, intervention, and rehabilitation services were not only the most frequently implemented social work activities but also associated with the broadest range of recorded support activities at Da Nang C Hospital. As clinical or patient-reported outcomes were beyond the scope of this study, these findings primarily reflect the breadth and diversity of social work services delivered to support patients' recovery and care needs. The comprehensive implementation of these services demonstrated a growing institutional commitment to holistic care for critically ill patients, integrating psychological, social, and administrative support into the broader healthcare framework.

3.1.3. Implementation of Health Education and Communication Services

This subsection describes the scope and frequency of health education and communication services implemented for critically ill patients at Da Nang C Hospital in 2024.

Table 2: *Summary of the implementation results of health education and communication services*

Service	**Unit**	**Statistical Data for 2024**
Conducting public communication and providing information to the media	Number of times	1
Developing health communication and education plans for patients and implementing approved plans	Number of times	4
Developing communication materials to promote hospital image, services, and activities through events, programs, and conferences		
Establishing and maintaining official communication channels	Number of times	5
Organizing direct communication sessions organized for patients and caregivers	Number of times	4
Engaging departments and units in communication activities	Departments/Units	43
Producing and publishing news articles and reports on the hospital website	Number of news items/articles	12
Publishing posts on official social media platforms	Number of news items/articles	24
Achieving total digital reach across online platforms	Number of visits	310,217
Utilizing digital tools (Livestreams, chatbots, QR codes)	Number of times	12
Updating and disseminating State healthcare policies and regulations to staff and patients	Number of times	4
Conducting public campaigns to raise awareness and mobilize community support for disadvantaged patients	Number of times	12

In 2024, Da Nang C Hospital implemented a diverse and comprehensive set of health education and communication activities targeting critically ill patients, their caregivers, hospital staff, and the wider community. These initiatives were carried out through both direct communication (in-person sessions, community outreach, and hospital events) and digital communication channels (hospital website, social media, and other online platforms). Together, they formed an integrated approach that not only aimed to promote patients' understanding of healthcare information but also to strengthen

the hospital's visibility, transparency, and connection with the public.

According to the statistical results presented in Table 2, the Social Work Unit developed and executed four health communication and education plans throughout 2024. Each plan was tailored to address key topics relevant to critically ill patients and their caregivers, including patients' rights and responsibilities during treatment, guidance on self-care practices, and dissemination of new governmental policies and regulations in healthcare. These topics were designed to empower patients and families with accurate, practical, and timely information to enhance treatment compliance and psychological readiness during hospitalization.

The implementation of these activities was marked by extensive collaboration across departments. Specifically, 43 hospital departments and divisions participated in health communication initiatives, ensuring a multidisciplinary approach to information sharing. This cross-departmental coordination facilitated a uniform communication message across various levels of hospital operations, reinforcing the hospital's image as a patient-centered institution that values openness and accountability.

In terms of communication channels, the Social Work Unit successfully developed and maintained five official communication platforms, including the hospital's website, official Facebook page, and internal information boards. These platforms were consistently updated with new content to reach both internal audiences (staff and patients) and external audiences (the general public). In 2024, the Unit produced and published 12 official articles and reports on the hospital's website and 24 social media posts, averaging two to three updates per month. Collectively, these online communication efforts achieved a total digital reach of 310,217, reflecting strong engagement from readers, followers, and community members.

To enhance accessibility and interaction, Da Nang C Hospital integrated digital communication tools such as livestreams, chatbots, and QR codes into its outreach strategies, with 12 recorded applications during the year. These tools enabled the hospital to provide real-time communication, respond promptly to inquiries, and deliver educational materials in a more dynamic and user-friendly format, which was especially valuable during periods when in-person sessions were limited.

Beyond digital communication, the Social Work Unit also carried out 12 public campaigns aimed at raising awareness and mobilizing community support for disadvantaged and critically ill patients. These campaigns aimed to not only to encourage charitable contributions but also to promote a culture of empathy and social solidarity among community members, reinforcing the hospital's role as both a medical and humanitarian institution. In parallel, the Unit organized four sessions to update and disseminate State health policies and regulations to both staff and patients, ensuring that all stakeholders remained informed about current healthcare standards and policy frameworks.

Furthermore, the hospital prioritized transparency in public information by conducting one official media briefing during the year. This activity aimed to ensure accuracy and consistency in the hospital's public communications, to strengthen public trust and to maintain a professional relationship with the media.

In summary, the implementation of health education and communication services at Da Nang C Hospital in 2024 demonstrated a

well-coordinated and multichannel approach. Through effective use of both traditional and digital communication platforms, the Social Work Unit successfully expanded public outreach, enhanced patient education, and mobilized community participation. However, the findings also suggested that while the scope of communication activities was extensive, maintaining their sustainability and ensuring deeper audience engagement would require continued investment in human resources, technology, and long-term strategic planning.

3.1.4. Implementation of Resource Mobilization Activities for Social Work Services

This subsection summarizes the scope and frequency of resource mobilization activities implemented to support social work services for critically ill patients at Da Nang C Hospital in 2024, as presented in Table 3.

Table 3: *Summary of the implementation results of resource mobilization activities for social work services*

Service	**Unit**	**Statistical Data for 2024**
Acting as a focal point for developing resource mobilization plans to implement social work services	Number of times	4
Conducting direct resource mobilization through direct contact	Number of times	2
Conducting indirect resource mobilization through funds, organizations, clubs, and related entities	Number of times	2
Conducting charitable activities and receiving sponsorships to support patients		
Providing financial support for medical examinations and treatment	Patient visits	2
Providing meal support	Patient visits	3,200
Providing transportation assistance	VND	10,000,000
Distributing gifts to patients	Patient visits	220
Receiving in-kind donations	Number of times	220
Receiving non-material donations (human resources, programs, events, and related support)	Number of times	12
Engaging sponsors in resource mobilization activities	Number of sponsors	5

In 2024, Da Nang C Hospital achieved significant progress in the implementation of resource mobilization activities aimed at supporting critically ill patients, particularly those facing financial hardship and prolonged treatment conditions. These efforts played an essential role in complementing the hospital's clinical care by addressing the broader psychosocial and material needs of patients, in alignment with the objectives of hospital-based social work services. The mobilization initiatives not only helped alleviate patients' economic burdens but also fostered stronger collaboration between the hospital and the community.

As shown in Table 3, the Social Work Unit acted as the central coordinating body responsible for developing and implementing four official resource mobilization plans during the year. Among these, two plans involved direct mobilization, in which the Unit personally contacted individual and organizational sponsors to seek assistance. The remaining two plans were implemented indirectly through collaborations with charitable funds, non-profit organizations, and community clubs. This dual approach allowed the Unit to diversify its resource channels, ensuring flexibility and continuity in financial and material support for patients.

Throughout 2024, Da Nang C Hospital maintained cooperation with five consistent sponsors, including both individuals and philanthropic organizations. These partners actively participated in hospital-led charitable activities and social support programs, providing regular contributions in various forms. Over the course of the year, the hospital recorded a total of 220 cases of in-kind donations, such as food, essential goods, and medical supplies, along with 12 instances of non-material contributions, including human resource support, volunteer participation, and social or community-based events. These forms of contribution demonstrated not only generosity but also the growing social awareness and sense of collective responsibility among community members toward patients in need.

In terms of direct patient assistance, the hospital's data reflected several tangible outcomes. Two patients received financial assistance to cover costs associated with medical examination and treatment. Additionally, approximately 3,200 patients benefited from free meal support, helping to improve their daily living conditions during hospitalization. The hospital also successfully mobilized a total of 10 million VND to support travel and transportation expenses for disadvantaged patients, enabling them to access treatment more conveniently and safely. Furthermore, 220 patients received gifts as part of routine charitable and social work activities organized within the hospital. Each of these forms of assistance reflected the hospital's ongoing commitment to ensuring that no patient is left unsupported due to financial or social constraints.

In summary, the 2024 findings showed that Da Nang C Hospital's Social Work Unit implemented a variety of resource mobilization mechanisms, as reflected in the volume and diversity of recorded activities. Qualitative interviews with a small number of patients and caregivers provided some positive accounts of the support received. These achievements underscored the Unit's capacity to link hospital services with community-based support systems, thereby enhancing the comprehensiveness of care for critically ill patients. Nevertheless, the study also identified that the sustainability of resource mobilization remained highly dependent on external sponsorship, signaling the need for the development of more stable, long-term funding mechanisms

and institutionalized support frameworks for hospital-based social work services in the future.

3.2. Factors Influencing the Implementation of Social Work Services

Analysis of the in-depth interviews and focus group discussions indicated a relatively consistent set of perceptions among key stakeholders (hospital managers, healthcare staff, and social work staff) regarding both enabling conditions and constraints affecting the implementation of social work services at the hospital. The factors presented below are intended to reflect how stakeholders interpret and experience conditions that directly shape the scope, quality, and sustainability of social work services in routine hospital practice, rather than to establish causal relationships.

3.2.1. Human Resource Factors in Social Work

The study findings revealed that human resources were one of the most critical factors affecting the quality and effectiveness of social work service implementation for critically ill patients at Da Nang C Hospital. Most stakeholders perceived that social work human resources at the hospital remained insufficient in both staffing levels and professionalization, particularly as the support needs of critically ill patients continued to increase. Participants noted that the hospital had not yet established an independent Department of Social Work; instead, the Social Work Unit operated under the Nursing Department. According to respondents, this organizational arrangement substantially affected the Unit's autonomy and professional decision-making in service implementation. Interview data suggested that this structure required social work activities to go through administrative approval processes, while social work was not the specialty of the Nursing Department. Stakeholders described this as a mechanism that could delay responses to emerging patient needs and reduce flexibility in implementing timely social work services, as the following quotes make clear:

"Since there is no Department of Social Work, our work lacks professionalism. Whenever the Social Work Unit wants to organize an activity, we have to submit a plan for approval to the Nursing Department. Only when the department agrees can we proceed. However, the Nursing Department is not specialized in social work, so they sometimes do not understand what activities need to be done." (Focus group discussion, Social Worker 1)

"Currently, the Social Work Unit has four part-time members under the management of the Nursing Department. Every activity requires permission and approval, so sometimes we cannot respond promptly to urgent needs." (In-depth interview, Social Work Leader 1)

Beyond structural limitations, the study also identified a lack of professional training as a significant constraint on the development of hospital-based social work. All four members of the Social Work Unit were nurses assigned to social work duties on a concurrent basis, without formal education or certification in social work, psychology, or case management. This situation limited their ability to provide specialized psychosocial support, implement evidence-based interventions, or manage complex cases effectively. Respondents emphasized the urgent need for professionalization of the social work workforce, suggesting that both foundational and advanced training programs should be institutionalized for existing staff. Consider the following quotes:

"The Social Work Unit has four part-time staff and no full-time social workers. This team has not been trained or certified in hospital social work in a systematic or professional manner." (In-depth interview, Human Resources Manager 1)

"Current social workers are nurses with patient care experience but lack knowledge and professional skills in social work. They have limited experience in organizing social activities, so the effectiveness is not high. Members of the Social Work Unit should receive intensive training in social work knowledge and practice." (In-depth interview, Quality Assurance Head 1)

Despite these constraints, stakeholders also highlighted the Unit's efforts to partly address capacity gaps through training activities and coordination mechanisms. The Social Work Unit organized three training and capacity-building programs focusing on social work knowledge for medical staff and hospital employees. These initiatives contributed to improving the understanding of social work's roles and functions within the hospital system and helped foster interdisciplinary collaboration between healthcare and social work professionals. Moreover, the Unit served as a focal point for four regular meetings of the hospital's social work collaborator network, while also participating in the supervision of social work students from academic institutions.

3.2.2. Resource Factors for Social Work Services

Stakeholders perceived that resources – particularly financing and infrastructure – directly affected the continuity and sustainability of social work services.

Financial Resources: Financial resources were a major determinant influencing the sustainability and scope of social work services for critically ill patients at Da Nang C Hospital. Several respondents reported that the hospital did not allocate a dedicated budget for social work activities, nor did it receive stable financial support from government sources. Instead, almost all social work operations relied on donations and sponsorships mobilized from private enterprises, philanthropic individuals, and community organizations. This heavy dependence on external funding made the activities vulnerable to fluctuation, short-term planning, and inconsistency in implementation. As a result, the scope of support often varied from month to month, depending on the success of mobilization efforts and available resources. Some of these points are highlighted in the following quote:

"There is no government or hospital funding for social work services. All activities depend on the Social Work Unit's ability to mobilize private and corporate resources through personal connections. Therefore, a permanent social work fund is necessary so that activities can be organized regularly to support poor patients and diversify social work programs." (In-depth interview, Quality Assurance Head 1)

Facilities and Equipment: Perceptions regarding facilities and equipment were not fully consistent across participant responses. Some participants considered the hospital's general infrastructure adequate for implementing social work services. Others emphasized the lack of a dedicated workspace for the Social Work Unit and, in particular, limitations in information technology infrastructure needed to support digital applications in social work. Because the Unit operates under the Nursing Department and all staff are concurrently assigned, the team lacked a separate office and mainly worked in a shared nursing area. Stakeholders perceived these limitations as directly affecting the Unit's ability to reach patients, interact effectively, and mobilize

resources – especially for counseling, communication, and remote support activities. The following quotes make clear some of the differences in participant responses:

"The current hospital infrastructure is sufficient to provide social work services for patients. There are no major problems." (In-depth interview, Quality Assurance Head 1)

"At present, the hospital has not yet applied digital technology in providing social support for cancer and kidney patients, so the connection and information sharing are still very limited." (In-depth interview, Social Work Leader 1)

While the physical facilities met basic requirements, the lack of digital transformation in social work practices remained a significant constraint, particularly as online counseling, information sharing, and virtual coordination become increasingly important in post-pandemic healthcare systems.

3.2.3. Organizational Factors of Social Work Services

Most participants reported strong support from the hospital's Board of Directors, which was perceived as an important enabling factor for maintaining and developing social work services. Stakeholders noted that leadership support helped position social work as a key component of comprehensive patient care and created favorable conditions for implementing social work programs and resource linkage within the hospital. In the words of participants:

"The Board of Directors always pays close attention to and supports the social work services of the Social Work Unit, because we understand that treating patients is not only about physical healing but also about taking care of their emotional and social well-being. We facilitate the Unit to organize social work programs such as connecting with charitable organizations and bringing music to the hospital, among others." (In-depth interview, Hospital Board of Directors 1)

"The Board of Directors of the hospital is very supportive of the social work services of the Social Work Unit." (Focus group discussion, Social Worker 1)

However, when discussing coordination mechanisms, stakeholders perceived that collaboration between social work staff and healthcare staff – along with intersectoral coordination beyond the hospital – remained insufficiently systematic and had not been standardized through specific procedures. Although some multidisciplinary collaboration had taken place in patient care and treatment, these activities were described as situation-based rather than routinely institutionalized. Participants attributed these limitations to the heavy clinical workload of healthcare staff, the concurrent role of social work collaborators, and the absence of clear regulations governing responsibilities and intersectoral coordination mechanisms. As perceived by stakeholders, these constraints reduced the effectiveness of mobilizing external resources to address complex social problems experienced by critically ill patients. These themes are evident in the following quotes:

"The hospital has established a network of social work collaborators who cooperate to support disadvantaged patients, such as compiling lists of critically ill patients, organizing donations, and distributing gifts and supplies. However, members of this network are quite busy with medical duties, so they have little time to participate in social work services for critically ill patients." (In-depth interview, Human Resources Manager 1)

"The multidisciplinary coordination among the treatment team (doctors, nurses, social workers, and other relevant professionals) is not yet synchronized or regular, and there is no specific protocol. The intersectoral collaboration (with health facilities, the Department of Labor, Invalids and Social Affairs, insurance agencies, and local authorities) faces similar limitations." (In-depth interview, Social Work Leader 1)

These findings suggest that while internal coordination had improved, the absence of formalized external collaboration frameworks limited the hospital's ability to address the full spectrum of psychosocial issues affecting critically ill patients. Strengthening intersectoral linkages and developing clear coordination protocols were identified as essential steps for the sustainable and effective integration of social work into the hospital's service system.

4. Discussion

The findings of this research revealed that, in 2024, social work services for critically ill patients at Da Nang C Hospital were implemented in a relatively comprehensive manner across four key domains: emergency assistance; guidance, intervention, and rehabilitation; health education and communication; and resource mobilization for service delivery. However, these services were not implemented evenly across domains, and substantial differences in effectiveness were observed, indicating that the development of hospital-based social work was strongly influenced by organizational structures, resource availability, and professional capacity rather than solely by patient needs.

Among the four domains, guidance, intervention, and rehabilitation services emerged as the most frequently implemented and effective. This can be explained by the relative ease with which these services can be integrated into routine clinical workflows, as well as their alignment with the existing capacities of part-time social work staff. Activities such as patient reception, procedural guidance, hospital navigation, information provision, and basic psychosocial support do not require highly specialized resources or complex intersectoral coordination and therefore tend to be prioritized in practice. These findings are consistent with previous studies in Vietnam, which have shown that administrative support, information provision, and basic counseling services are among the most adequately delivered and highly valued social work services in hospital settings (Bui Tuan Khoa et al. 2020; Nguyen Thi Hoai An and Dang Kim Khanh Ly 2024; Tran Van Vui et al. 2023). Tran Van Vui et al. (2023) found that 80.7% of patients had their need for inquiries about health conditions met, and 72.7% received guidance and administrative support when visiting the hospital (Tran Van Vui et al. 2023). Similarly, Bui Tuan Khoa et al. (2020) reported that 52.7% of inpatients were very satisfied with social work counseling and problem-solving services, ranking as the highest among all social work services implemented at the 108 Military Central Hospital in Hanoi (Bui Tuan Khoa et al. 2020).

With regard to health education and communication services, the findings indicated a notable shift toward digital platforms, accompanied by a high level of online engagement. This reflects the Social Work Unit's adaptive capacity in the context of digital transformation in healthcare, as well as patients' increasing demand for accessible and diverse sources of health-related information. In comparison with previous studies, the level of responsiveness

in providing health information and education at Da Nang C Hospital appears consistent with broader national trends, in which patients demonstrate substantial needs for information related to treatment, self-care, and healthcare entitlements. The findings of Tran Tho Nhi et al. (2024) revealed similar outcomes, showing a high response rate for information and health education needs: 75.4% for information on treatment side effects and 71.5% for counseling on physical care and nutrition (Tran Tho Nhi et al. 2024).

The resource mobilization domain highlighted the important role of social work in alleviating the economic burden faced by critically ill patients, particularly through tangible forms of support such as free meals, transportation assistance, and gift packages. The prioritization of material support, especially free meal programs, has been consistently documented in previous studies as both feasible and meaningful in hospital settings. At Hue University of Medicine and Pharmacy Hospital, 42.6% of patients received free meal support, the highest proportion, followed by 6.5% receiving treatment cost support and 3.5% receiving living expense support (Tran Van Vui et al. 2023). These findings suggested that free meal programs were among the most feasible and meaningful forms of support for hospitalized patients, contributing significantly to patient satisfaction. Indeed, 47.5% of patients reported satisfaction with hospital-led sponsorship activities (Bui Tuan Khoa et al. 2020). However, the heavy reliance on external donations from individuals and organizations raises concerns regarding the sustainability of these services and increases the risk of disruption when social resources become unstable.

Emergency assistance services for critically ill patients were initially implemented at Da Nang C Hospital, focusing mainly on those without stable housing and with unmet basic needs. Social workers conducted initial risk assessments and provided urgent medical and psychosocial support. The absence of identified cases involving violence, abuse, or the need for emergency referral to social protection agencies may be attributable to limitations in early detection, risk assessment, and specialized intervention capacity. This result aligned with the findings of Nguyen Tuan Minh et al. (2024), who reported that only 1.6% of patients who were victims of violence received emergency social support. These results underscore the urgent need for specialized training in risk assessment, patient protection, and intersectoral coordination for hospital-based social workers.

Overall, the analyses demonstrate that human resources constitute a decisive factor influencing both the scope and quality of social work service implementation. Persistent shortages of specialized personnel, reliance on part-time staff, and limited formal training in medical social work significantly constrain the development of advanced and professionalized services. This challenge is not unique to Da Nang C Hospital but reflects a broader systemic issue within Vietnam's hospital system, highlighting a gap between policy expectations and implementation capacity (Nguyen Thi Hoai An 2024; Nguyen Thi Thai Lan 2019; Pham Tien Nam et al. 2025). The findings of this study reflected a similar situation, where all members of the Social Work Unit were concurrently employed nurses without formal social work education, which constrained the professionalization of service delivery. Although collaboration between social workers and healthcare professionals existed, it was not yet well-

coordinated, primarily due to the absence of formal regulations specifying the roles, responsibilities, and workload of social work personnel, as well as limited partnerships with external community-based support organizations.

The hospital's facilities and equipment supporting social work services – particularly information technology infrastructure for case management, digital counseling, communication, and resource linkage – were still underdeveloped. This remains a common challenge for most healthcare institutions in Vietnam, where hospital-based social work has not been sufficiently prioritized in terms of investment and development. As a result, there is still a shortage of appropriate facilities and specialized equipment to effectively deliver social work services for patients (Pham Tien Nam et al. 2021). Funding for social work activities mainly depended on donations from enterprises and individuals, without a stable budget from the government or hospital funds. Other studies also identified financial and infrastructural constraints as critical factors influencing the effectiveness of social work services for critically ill patients (Pham Tien Nam 2020; Pham Tien Nam et al. 2020).

5. Conclusion

The findings of this research showed that, in 2024, the Social Work Unit of Da Nang C Hospital implemented four main groups of social work services for critically ill patients: emergency assistance; guidance, intervention, and rehabilitation; health education and communication; and resource mobilization. This service structure reflects a comprehensive care orientation, in which hospital-based social work extends beyond clinical treatment to address patients' psychological, social, and economic needs arising during the course of severe illness.

Of the four groups, guidance, intervention, and rehabilitation services stood out as the most frequently implemented and most effective, facilitating patient access to healthcare, stabilizing psychological well-being, and improving coping capacity during treatment. This finding suggests that hospital-based social work at Da Nang C Hospital has been operating in relative alignment with a person-centered care approach, emphasizing information provision, psychosocial support, and continuous accompaniment of patients throughout the treatment process.

In addition, health education and communication activities, together with resource mobilization efforts, contributed to expanding support beyond the immediate clinical setting by strengthening the involvement of families, communities, and social resources in the care of critically ill patients. However, the uneven development across service groups – particularly the limited implementation of emergency assistance services – reveals notable gaps in protecting patients from complex social risks such as violence, abuse, or acute psychosocial crises. These gaps reflect systemic constraints related to professional capacity, service organization, and mechanisms for multidisciplinary collaboration, which are essential components of comprehensive hospital care. With regard to factors influencing critically ill patients, the study highlights that shortages of specialized social work personnel, limited access to advanced professional training, and unclear coordination mechanisms between social workers and healthcare staff have reduced the effectiveness of service implementation. Furthermore, the heavy reliance on externally mobilized funding, combined

with the lack of stable institutional budgets and insufficient investment in facilities, equipment, and information technology infrastructure, has constrained both the sustainability and scalability of hospital-based social work services.

Based on these findings, the research suggests that to improve the effectiveness of hospital-based social work services, it is essential to enhance the recruitment, training, and capacity-building of qualified social work personnel, ensuring sufficient staffing ratios relative to patient demand. Moreover, hospitals should develop and institutionalize detailed guidelines and procedures for implementing specific social work services, especially those requiring multidisciplinary and intersectoral collaboration, to ensure comprehensive support for critically ill patients and other vulnerable groups. Additionally, hospitals should allocate stable financial resources for social work units to ensure the sustainability of their activities, invest in infrastructure, equipment, and information technology systems, and strengthen emergency support mechanisms through the establishment of response protocols and on-duty social workers to promptly assist patients in urgent situations.

Acknowledgements

This research is funded by Vietnam National Foundation for Science and Technology Development (NAFOSTED) under grant number: 504.05-2023.04.

Declaration of AI Use

The authors used ChatGPT (OpenAI) to assist with English translation and language editing during the preparation of this manuscript. All AI-assisted content was carefully reviewed and verified by the authors, who take full responsibility for the accuracy and integrity of the final manuscript.

References

Al Naamani, Zakariya, Kevin Gormley, Helen Noble, Olinda Santin, and Mohammed Al Maqbali. 2021. “Fatigue, Anxiety, Depression and Sleep Quality in Patients Undergoing Haemodialysis.” *BMC Nephrology* 22(1):157. https://doi.org/10.1186/s12882-021-02349-3.

Bergerot, Cristiane B., Paul B. Jacobsen, William E. Rosa, et al. 2024. “Global Unmet Psychosocial Needs in Cancer Care: Health Policy.” *eClinicalMedicine* 78:102942. https://doi.org/10.1016/j.eclinm.2024.102942.

Bui Tuan Khoa, Nguyen Thi Thuy Linh, Nguyen Bich Phuong, Le Thi Que, Trinh Thi Huyen, and Nguyen Thi Hue. 2020. “Assessment of Inpatients’ Satisfaction with Social Work Activities at the 108 Military Central Hospital in 2019.” *Journal of 108 - Clinical Medicine and Pharmacy* 15(6):127–34.

Coughlin, Steven S. 2019. “Social Determinants of Breast Cancer Risk, Stage, and Survival.” *Breast Cancer Research and Treatment* 177(3):537–48. https://doi.org/10.1007/s10549-019-05340-7.

Da Nang C Hospital. 2018. “The Process of Establishment and Development of the Hospital.” https://bvcdn.org.vn/gioi-thieu/qua-trinh-hinh-thanh-va-phat-trien-benh-vien/.

Flanagan, Mark William, Heather H. Goltz, John W. Henson, and Matthew Lee Smith. 2022. “Associations of Practical, Emotional, and Physical Problems with Psychosocial Distress among Cancer Patients.” *Journal of Psychosocial Oncology* 40(1):98–114. https://doi.org/10.1080/07347332.2021.1899353.

Government. 2003. “Decree No. 76/2003/ND-CP Dated June 27, 2003, Stipulates and Provides Specific Guidance on the Application of Measures to Place Individuals in Educational Institutions.”

Government. 2016. "Decree No. 134/2016/ND-CP Dated September 1, 2016, Provides Detailed Regulations on Certain Articles and Measures for the Implementation of the Law on Export and Import Taxes."

Government. 2024. "Decree No. 110/2024/ND-CP Dated August 30, 2024 on Social Work."

Huynh Ho Ngoc Quynh, Mau Van Hieu, and Le Truong Vinh Phuc. 2025. "Sleep Quality and Related Factors Among Chronic Kidney Disease Patients Undergoing Hemodialysis at Trưng Vương Hospital in 2024." *Vietnam Medical Journal* 548(2). https://doi.org/10.51298/vmj.v548i2.13417.

Huynh To Nhu, Nguyen Thi Ngoc Luyen, and Vo Thi Thuy Linh. 2024. "Support needs of cancer patients at the oncance department of Tra Vinh general hospital." *Can Tho Journal of Medicine and Pharmacy* (73):212–19. https://doi.org/10.58490/ctump.2024i73.2119.

Kalantar-Zadeh, Kamyar, Mark B. Lockwood, Connie M. Rhee, Ekamol Tantisattamo, Sharon Andreoli, Alessandro Balducci, Paul Laffin, Tess Harris, Richard Knight, Latha Kumaraswami, Vassilios Liakopoulos, Siu-Fai Lui, Sajay Kumar, Maggie Ng, Gamal Saadi, Ifeoma Ulasi, Allison Tong, and Philip Kam-Tao Li. 2022. "Patient-Centred Approaches for the Management of Unpleasant Symptoms in Kidney Disease." *Nature Reviews Nephrology* 18(3):185–98. https://doi.org/10.1038/s41581-021-00518-z.

Knight, Thomas G., Allison M. Deal, Stacie B. Dusetzina, Hyman B. Muss, Seul Ki Choi, Jeannette T. Bensen, and Grant R. Williams. 2018. "Financial Toxicity in Adults With Cancer: Adverse Outcomes and Noncompliance." *Journal of Oncology Practice* 14(11):e665–73. https://doi.org/10.1200/JOP.18.00120.

McFarland, Daniel C., Kelly M. Shaffer, Amy Tiersten, and Jimmie Holland. 2018. "Prevalence of Physical Problems Detected by the Distress Thermometer and Problem List in Patients with Breast Cancer." *Psycho-Oncology* 27(5):1394–1403. https://doi.org/10.1002/pon.4631.

Ministry of Health. 2015. "Circular No. 43/2015/TT-BYT Dated November 26, 2015 on the Functions and Organizational Forms for Implementing Social Work Tasks in Hospitals."

Ministry of Health. 2024. "Circular No. 51/2024/TT-BYT Dated December 31, 2024 on Regulations on the Implementation of Social Work in Healthcare Facilities."

Nguyen Thi Hoai An. 2023. "Current State of Practitioners Delivering Social Work Services in Provincial Hospitals in Vietnam." *International Journal of Religion* 5(11):4677–81. https://doi.org/10.61707/tmrtxx24.

Nguyen Thi Hoai An and Dang Kim Khanh Ly. 2024. "Needs for Social Work Services among Inpatients at the Southwestern Nghe An Regional General Hospital." *VNU Journal of Social Sciences and Humanities* 9(2b):170–82.

Nguyen Thi Thai Lan. 2019. "Social Work Human Resources in Vietnam: Current Situation and Recommendations." *VNU Journal of Social Sciences and Humanities* 5(6):728.

Nguyen Thi Tuyet Mai, Nguyen Thi Thanh Nha, Nguyen Tri Cong, and Cao Thi Anh Sao. 2021. "Assessment of Quality of Life among Hemodialysis Patients in Hanoi." *The Journal of Scientific Human Resources* 7(98).

Nguyen Tuan Minh, Nguyen Trung Hai, and Le Thi Anh. 2024. "Evaluating Patient Utilization and Satisfaction of Social Work Services in a Hospital Setting." *ASEAN Journal of Psychiatry* 25(3):1–10.

Petruzzi, Liana, Bonnie Ewald, Elle Covington, Walter Rosenberg, Robyn Golden, and Barbara Jones. 2023. "Exploring the Efficacy of Social Work Interventions in Hospital Settings: A Scoping Review." *Social Work in Public Health* 38(2):147–60. https://doi.org/10.1080/19371918.2022.2104415.

Pham Tien Nam. 2020. "Factors affecting the provision of social work services for cancer patients at the Vietnam National Cancer Hospital." *HNUE Journal of Science* 11(65):132–132.

Pham Tien Nam, Hoang Long Quan, Dao Duy Khanh, Nguyen Khac Liem, Ha Thi Thu, Trinh Tung, and Nguyen Hanh Dung. 2021. "Social Work Services at Dakto District Health Center, Kon Tum Province, Vietnam: Challenges and

Policy Recommendations." *Social Work in Public Health* 36(1):54–67. https://doi.org/10.1080/19371918.2020.1856748.

Pham Tien Nam, Nguyen Hanh Dung, Nguyen Tuan Hung, Vu Thi Minh Nguyet, Le Thi Thu, Nguyen Van Trung, and Nguyen Khac Liem. 2025. "Addressing Shortages of Hospital Social Workers in Vietnam: Findings from a National Survey." *Social Work in Health Care* 64(1–3):34–49. https://doi.org/10.1080/00981389.2025.2456029.

Pham Tien Nam, Nguyen Hong Son, Hoang Long Quan, and Hoang Van Minh. 2020. "Social Work in Hospitals in Vietnam: Achievements and Challenges." *Journal of Health and Development Studies* 4(1):12–14.

Singer, S., J. Das-Munshi, and E. Brahler. 2010. "Prevalence of Mental Health Conditions in Cancer Patients in Acute Care—a Meta-Analysis." *Annals of Oncology* 21(5):925–30. https://doi.org/10.1093/annonc/mdp515.

Tran Tho Nhi, Bui Thi Tuyet Trinh, Nguyen Gia Hung, Dang Giao Linh, Pham Thi Quynh, and Pham Do Minh Nhat. 2024. "The Current Implementation of Social Work Activities for Inpatients at Pho Noi General Hospital, Hung Yen Province, First Quarter of 2024." *Journal of Community Medicine* 65(5). https://doi.org/10.52163/yhc.v65i5.1407.

Tran Van Vui, Nguyen Thi Dang Thu, Duong Thi Dieu Huong, and Nguyen Thi Thuy Nga. 2023. "Social Work Support Needs of Inpatients at Hue University of Medicine and Pharmacy Hospital in 2023." *Vietnam Medical Journal* 533(2). https://doi.org/10.51298/vmj.v533i2.7966.

Vuong Hoang Quan. 2015. "Be Rich or Don't Be Sick: Estimating Vietnamese Patients' Risk of Falling into Destitution." *SpringerPlus* 4(1):529. https://doi.org/10.1186/s40064-015-1279-x.

Vuong Hong Hanh, Nguyen Hai Anh, Hoang Duc Thanh, Luu Quang Hoi, and Nguyen Thi Thu Thuy. 2021. "The current situation of supportive care needs among breast cancer patients at K hospital in 2020 and related factors." *Vietnam Medical Journal* 498(1). https://doi.org/10.51298/vmj.v498i1.137.

Zebrack, Brad, Anao Zhang, Lauren V. Ghazal, Nina Francis-Levin, and Rachel E. Brandon. 2025. "The Essential Nature of Social Work in Cancer Control." *Cancer Control: Journal of the Moffitt Cancer Center* 32:10732748251353081. https://doi.org/10.1177/10732748251353081