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Psychosocial impact of acute stroke in cancer patients and the role of emergency nursing interventions

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Abstract: Advances in cancer detection and treatment have led to a growing population of individuals living with cancer who increasingly experience complex comorbid conditions. Acute stroke represents a particularly disruptive event within this context, occurring against a background of heightened biological vulnerability, psychological distress, and treatment burden. Although cancer patients face an elevated risk of both ischemic and haemorrhagic stroke, the psychosocial consequences of acute stroke in this population remain insufficiently synthesised, particularly within emergency care settings. This narrative review integrates interdisciplinary evidence from oncology, neurology, psychology, and nursing to examine psychological distress, quality of life implications, and psychosocial care needs among cancer patients presenting with acute stroke, with a specific focus on the role of emergency nursing. Using a structured narrative review framework, findings indicate that acute stroke in cancer patients is associated with intense anxiety, fear, uncertainty, loss of control, and communication barriers, often compounded by time-pressured decision making in emergency environments. Stroke-related impairments further disrupt quality of life, social roles, and continuity of cancer treatment, while families experience substantial emotional and decisional burden. Emergency nurses occupy a critical position in recognising distress, facilitating communication, supporting families, and integrating psycho-oncological principles into acute care. This review highlights the need to move beyond a purely biomedical model of emergency stroke management toward a holistic, patient-centred approach that explicitly addresses psychosocial well-being. Embedding psycho-oncology within emergency nursing practice may improve patient experiences and support adaptive coping during one of the most vulnerable phases of the cancer trajectory.

Keywords: acute stroke; cancer; emergency nursing; psycho-oncology; psychological distress; psychosocial care; quality of life

1. Introduction

Advances in cancer detection and treatment have led to a steadily growing population of individuals living with cancer, many of whom experience complex comorbid conditions that extend beyond the primary malignancy. Among these, acute stroke represents a particularly severe and disruptive event, carrying high risks of mortality, long-term disability, and psychological distress. Epidemiological studies consistently demonstrate that patients with cancer have a significantly higher risk of both ischemic and haemorrhagic stroke compared with the general population, particularly during periods of active malignancy and systemic treatment [1–4]. As cancer survival improves globally, the clinical intersection between oncology, cerebrovascular disease, and psychosocial care has emerged as an increasingly important priority for multidisciplinary research and practice. From a biological perspective, cancer-related stroke is driven by multiple interacting

mechanisms, including tumour-associated hypercoagulability, systemic inflammation, endothelial dysfunction, and treatment-related vascular injury. Malignancies can induce a prothrombotic state through activation of coagulation pathways, release of inflammatory cytokines, and immune dysregulation, contributing to both arterial and venous thromboembolic events [5–7]. In addition, chemotherapy, radiotherapy, and targeted cancer therapies have been shown to accelerate atherosclerosis, impair vascular integrity, and increase the risk of cerebrovascular complications, even in patients without traditional stroke risk factors [3,8,9]. These mechanisms help explain why stroke in patients with cancer often presents abruptly, at younger ages, and with atypical clinical features.

While the biomedical mechanisms of cancer-related stroke are increasingly recognised, the psychological and psychosocial consequences of such events remain comparatively underexplored. For individuals already living with the emotional burden of a cancer diagnosis, the sudden onset of an acute stroke may represent a profound psychological shock. Stroke threatens autonomy, communication, cognition, and bodily integrity, thereby compounding existing fears related to cancer prognosis, treatment uncertainty, and mortality. Extensive psycho-oncology research has demonstrated that cancer patients experience high baseline levels of anxiety, depression, fear, and existential distress, particularly during periods of medical instability or acute deterioration [10,11]. When acute stroke occurs in the emergency context, psychological distress may be further intensified by sudden neurological impairment, time-pressured decision-making, unfamiliar environments, and limited opportunity for emotional processing. Emergency departments are inherently high-intensity settings, often prioritising rapid biomedical intervention over psychosocial assessment. Evidence from acute neurology and emergency care literature indicates that psychological distress, fear, and loss of control are common but frequently under-recognised during emergency stroke presentations [12–14].

Quality of life is frequently and substantially compromised following stroke in patients with cancer. Neurological deficits may interfere with ongoing cancer treatment, disrupt social and family roles, and intensify feelings of dependence and loss of control. Cognitive impairment, speech difficulties, and emotional lability may further hinder communication between patients, families, and healthcare professionals at a time when clear, compassionate interaction is essential. Research in oncology and stroke populations has consistently linked psychological distress with poorer quality of life, reduced treatment adherence, and impaired recovery trajectories [15–17]. Emergency nurses occupy a pivotal position at the interface between urgent clinical management and the human experience of illness. In acute stroke care, nurses are often the first healthcare professionals to establish sustained contact with patients and families, assess distress, provide reassurance, and facilitate communication. In oncology patients, this role is further complicated by pre-existing psychological vulnerability, complex treatment histories, and heightened uncertainty regarding outcomes. Nursing and psycho-oncology literature increasingly emphasises the importance of integrating emotional support, communication, and dignity-preserving care into acute medical settings [18–20].

Despite growing recognition of cancer-related stroke as a distinct clinical entity, existing literature has largely prioritised pathophysiology, diagnosis, and medical

management, with comparatively limited attention to psychological distress, quality-of-life disruption, and psychosocial care needs during the emergency and acute phases. In particular, the role of emergency nursing has rarely been examined through a psycho-oncological lens, despite nurses' central involvement in patient contact, communication, emotional containment, and family support during acute stroke presentations. To address this gap, the present narrative review synthesises current evidence on psychological distress, quality-of-life outcomes, and psychosocial care needs among cancer patients presenting with acute ischemic or haemorrhagic stroke, with a specific focus on emergency and acute care settings [2,8]. By integrating insights from psycho-oncology, neurology, and nursing, this review aims to advance a more holistic understanding of acute stroke as both a neurological emergency and a critical psycho-oncological event, and to inform patient-centred emergency nursing practices that attend to emotional well-being, communication, and dignity alongside urgent clinical intervention. **Figure 1** presents a conceptual framework linking cancer-related stroke risk, acute psychological distress, and longer-term psychosocial outcomes, highlighting the central role of emergency nursing interventions.

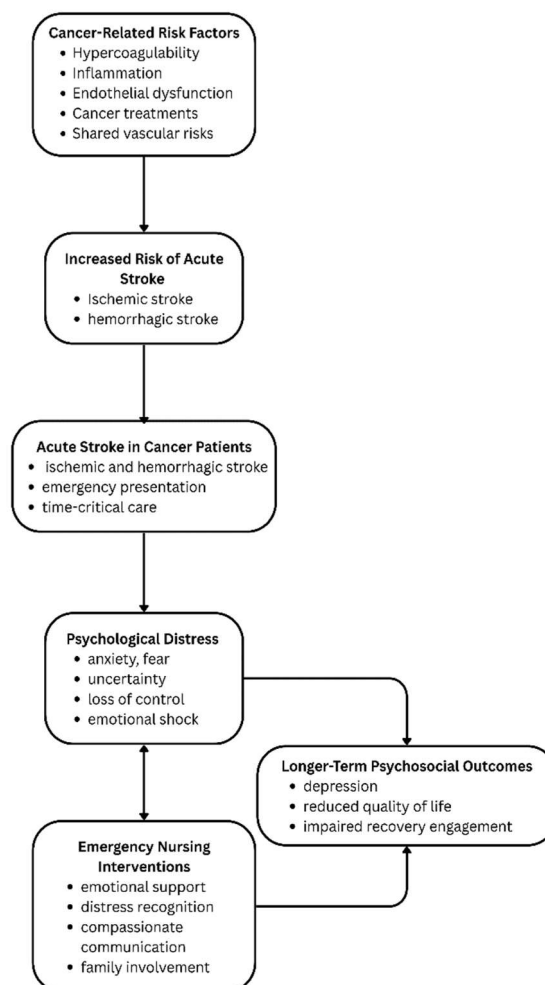


Figure 1. Conceptual framework illustrating the psychosocial impact of acute stroke in cancer patients and the role of emergency nursing interventions.

2. Methods: Narrative review framework

2.1. Review design and rationale

This study employed a narrative review design using a structured framework to synthesise interdisciplinary evidence at the intersection of psycho-oncology, acute stroke care, and emergency nursing. A narrative approach was selected to accommodate heterogeneity across oncology, neurology, psychology, and nursing literature, where study designs, outcomes, and conceptual frameworks vary widely. Rather than estimating pooled effects, the review aimed to integrate clinical, psychosocial, and experiential evidence to clarify how acute stroke affects psychological distress, quality of life, and supportive care needs in cancer patients during the emergency and acute care phase.

2.2. Data sources and search strategy

A comprehensive literature search was conducted across major biomedical and psychosocial databases, including PubMed, Web of Science, Scopus, PsycINFO, and CINAHL. Searches focused on studies published in English from January 2000 to December 2024 to capture both foundational and contemporary evidence. Key search terms and Boolean combinations included “cancer” OR “oncology,” “stroke” OR “cerebrovascular accident,” “acute stroke,” “emergency care,” “psychological distress,” “anxiety,” “depression,” “quality of life,” “psychosocial needs,” and “nursing care.” Reference lists of relevant reviews and key articles were also manually screened to identify additional studies not captured through database searching.

2.3. Eligibility criteria

Studies were included if they examined adult patients with cancer who experienced ischemic or haemorrhagic stroke, or if they addressed psychosocial outcomes, psychological distress, quality of life, or supportive care needs relevant to this population. Eligible study types included quantitative observational studies, qualitative studies, mixed-methods research, clinical reviews, and practice guidelines. Articles focusing exclusively on paediatric populations, non-stroke neurological complications, or purely biomedical stroke mechanisms without psychosocial or care-related relevance were excluded. Given the narrative design, no restrictions were placed on study methodology, provided the findings contributed meaningfully to understanding psychological or psychosocial dimensions of care.

2.4. Study selection and data extraction

Titles and abstracts were initially screened for relevance, followed by full-text review of potentially eligible articles. For each included study, key information was extracted narratively, including study context, patient population, stroke type, cancer characteristics, psychosocial outcomes assessed, and implications for emergency or acute nursing care. Rather than using standardized extraction forms, data were organized thematically to allow comparison across diverse study designs and disciplinary perspectives.

2.5. Thematic synthesis

Findings were synthesized using a thematic analytic approach. Studies were grouped according to recurrent conceptual domains, including psychological distress (such as anxiety, depression, fear, and uncertainty), quality of life, psychosocial and supportive care needs, and the role of emergency nursing interventions. Particular attention was given to how acute stroke intersects with the cancer trajectory to amplify vulnerability, disrupt coping mechanisms, and challenge communication and emotional support in emergency settings. This thematic structure informed the organization of the Results and Discussion sections. The methodological framework guiding this narrative review is summarised in **Table 1**.

Table 1. Structured narrative review framework, scope, and synthesis strategy.

Component	Operational definition in this review	How it will be used in synthesis
Review type	Narrative review with structured framework (transparent search + thematic synthesis)	Supports Q1 expectations without forcing meta-analysis where heterogeneity is high
Population	Adults with cancer (active or history) presenting with acute ischemic or haemorrhagic stroke	Keeps focus aligned to psycho-oncology + emergency stroke context
Setting	Emergency/acute care phase (ED, acute stroke unit transition)	Ensures nursing role + time-pressured decisions are foregrounded
Phenomena of interest	Psychological distress (anxiety, depression, fear, uncertainty), QoL, psychosocial needs, communication and supportive care	Defines “psycho-oncology lens” explicitly
Study designs eligible	Observational, qualitative, mixed-methods, guidelines, relevant reviews	Allows interdisciplinary capture (nursing + neurology + oncology + psych)
Databases	PubMed, Web of Science, Scopus, PsycINFO, CINAHL (plus reference chaining)	Signals a serious, reproducible approach
Timeframe	2000–2024 (English)	Balances foundational + modern psycho-oncology/stroke practice
Exclusions	Paediatric; non-stroke neuro complications; purely biomedical papers with no relevance to psychosocial care	Prevents “mechanism-only” drift
Data extraction fields	Cancer status/type; stroke type; psychosocial outcomes measured; QoL domains; care implications (ED/nursing)	Ensures every included item contributes to your aims
Thematic domains (sections)	Distress; QoL; longer-term psychosocial impact; nursing support; communication/ethics/family; implications	Mirrors your manuscript structure
Rigor enhancers	Transparent search terms, explicit inclusion criteria, thematic organization	Narrative but “structured,” not opinion-based

2.6. Methodological considerations

While not exhaustive, rigor was enhanced through transparent reporting of search strategies, explicit inclusion criteria, and systematic thematic organisation. This structured narrative approach supports integration across disciplines and yields clinically relevant insights for psycho-oncology, emergency nursing, and multidisciplinary care.

3. Psychological distress in cancer patients experiencing acute stroke

Cancer patients who experience an acute stroke face a compounded psychological burden arising from the intersection of malignancy-related distress and

sudden neurological insult. Beyond the immediate threat to survival, stroke introduces abrupt impairments in mobility, cognition, and communication that may destabilise pre-existing psychological coping mechanisms shaped by the cancer trajectory. Evidence from psycho-oncology literature indicates that cancer patients already exhibit elevated baseline distress, making them particularly vulnerable to acute neuropsychological stressors [12,21].

From a neuropsychological perspective, acute stroke is associated with rapid activation of stress-related neuroendocrine pathways, including hypothalamic–pituitary–adrenal axis dysregulation and inflammatory signalling, both of which have been independently linked to anxiety and depressive symptomatology [5,6]. In cancer populations, these biological stress responses may be further amplified by tumour-related inflammation and treatment-induced immune alterations, contributing to heightened emotional dysregulation during the emergency phase [22,23]. Across diverse study designs, anxiety, fear, and uncertainty consistently emerged during the acute phase (**Table 2**).

Table 2. Psychological distress and emotional responses in cancer patients experiencing acute stroke.

Author (Year)	Population/Context	Key psychological outcomes	Relevance to acute/Emergency phase
Carlson et al. [10] (2012)	Adult cancer patients, mixed stages	High prevalence of distress, anxiety, depression; distress as “6th vital sign”	Supports early distress recognition in acute settings
Zhu et al. [21] (2024)	Cancer patients, systematic review	Anxiety, depression, fear, maladaptation common	Establishes baseline vulnerability prior to stroke
Senf et al. [14] (2020)	Acute care oncology contexts	Acute illness amplifies psychological distress	Relevant to emergency stroke presentation
Rustøen et al. [17] (2021)	Chronic illness populations	Persistent anxiety, uncertainty affect recovery	Explains longer-term distress after acute stroke
Feldstain et al. (2024) [18]	Oncology clinical care	Distress screening feasible in acute care	Supports nurse-led identification
Navi et al. [1] (2015)	Cancer-associated stroke	Psychological burden rarely addressed	Highlights evidence gap
Bang et al. [2] (2020)	Cancer-related stroke review	Severe functional and emotional impact	Supports compounded distress model
Reddin et al. [12] (2022)	Acute neurological illness	Fear, shock, loss of control	Emergency-phase emotional response
Rosell et al. [5] (2022)	Cancer biology	Systemic inflammation linked to distress	Biological–psychological interaction
Abdi et al. [24] (2021)	Acute stroke patients	Anxiety and depression common post-stroke	Extrapolated to oncology populations
Schellekens et al. [25] (2024)	Oncology supportive care	Emotional distress affects treatment adherence	Relevant to post-stroke oncology care
Lacorossi et al. [26] (2024)	Hospitalised cancer patients	Acute stress reactions	Reinforces emergency vulnerability
Zhou et al. [13] (2024)	Stroke patients	Emotional dysregulation post-stroke	Mechanistic relevance
Tonhajzerova et al. [22] (2020)	Neuro-immune stress	Stress–inflammation link	Supports psycho-biological framing
Furie et al. [27] (2011)	Neurological disability	Psychological burden of sudden impairment	Parallel stroke experience
Zahid et al. [19] (2023)	Nursing perspective	Nurses identify unspoken distress	Supports emergency nursing role
Harms et al. [15] (2019)	Cancer QoL	Anxiety linked to clinical instability	Supports acute stress model
Butsing et al. [16] (2024)	Stroke recovery	Depression predicts poorer outcomes	Reinforces early intervention

Table 2. (Continued).

Author (Year)	Population/Context	Key psychological outcomes	Relevance to acute/Emergency phase
Wei et al. [28] (2019)	Multimorbidity	Dual diagnoses worsen mental health	Cancer + stroke interaction
Abdelhadi [20] (2023)	Acute care systems	Psychosocial needs under-prioritised	Structural gap

3.1. Acute psychological responses to stroke in the context of cancer

The sudden onset of stroke symptoms frequently precipitates acute emotional reactions such as shock, panic, fear, and dissociation. Qualitative and observational studies in acute neurological care describe patients' immediate experiences as marked by a profound loss of bodily control and existential threat, particularly when neurological deficits compromise speech or consciousness [12,13]. For individuals with cancer, these reactions are layered upon ongoing fears related to disease progression, treatment toxicity, and mortality, intensifying psychological shock. Importantly, cancer patients may interpret stroke as evidence of systemic bodily collapse or treatment failure. Studies examining illness appraisal suggest that catastrophic interpretations are more common in patients with multimorbidity, where new acute events are perceived as signals of irreversible decline [20,28]. Such interpretations have been associated with acute withdrawal, heightened fear responses, and reduced engagement with emergency care processes.

3.2. Anxiety, depression, and fear in the emergency phase

Anxiety and depressive symptoms are among the most frequently reported psychological sequelae following stroke, often emerging within the first hours to days of hospital admission. Stroke-specific literature consistently reports high rates of post-stroke anxiety and depression, even before rehabilitation begins [16,24]. When combined with cancer-related distress, these symptoms may coexist synergistically, producing intensified emotional burden rather than additive effects. Fear occupies a central role in the emotional experience of cancer patients with acute stroke. Beyond fear of death, patients commonly report fears related to permanent disability, loss of independence, disruption of cancer treatment, and becoming a burden to family members [25,26]. Empirical studies suggest that unmanaged fear during the acute phase predicts poorer psychological adjustment and reduced quality of life during recovery [17,27].

3.3. Uncertainty and loss of control

Uncertainty is a defining psychological construct shared by both cancer and stroke experiences. Acute stroke introduces sudden unpredictability into an already uncertain cancer trajectory, often eroding patient's perceived sense of agency. The emergency setting, characterised by rapid decision-making and limited information exchange, may further exacerbate this loss of control [20]. Psycho-oncology research highlights uncertainty as a key driver of sustained distress, existential anxiety, and maladaptive coping in cancer populations [15,21]. When neurological deficits impair communication or cognition, patients may be excluded from decision-making, intensifying feelings of helplessness and existential threat. These dynamics underscore the psychological vulnerability of cancer patients during acute stroke

events.

3.4. Communication barriers and psychological vulnerability

Communication impairment is a common consequence of acute stroke and represents a critical psychological stressor. Aphasia, dysarthria, and cognitive deficits can prevent patients from articulating fear, pain, or preferences, leading to frustration, anxiety, and emotional isolation [13]. In oncology patients, communication difficulties are particularly consequential, as care decisions often involve complex discussions regarding prognosis, treatment continuation, and goals of care. Nursing and health-services research indicates that unrecognised communication barriers are associated with increased emotional distress and perceived loss of dignity in acute care settings [19,20]. The inability to participate meaningfully in conversations may exacerbate psychological suffering during emergency stroke management.

3.5. Implications for psycho-oncology-informed emergency care

available evidence suggests that psychological distress in cancer patients experiencing acute stroke is biologically, emotionally, and contextually mediated. Distress should therefore be conceptualised as a clinically relevant outcome requiring early recognition rather than an unavoidable by-product of acute illness. Psycho-oncology frameworks emphasise distress screening, emotional validation, and communication support as essential components of high-quality cancer care, principles that remain highly relevant in emergency stroke settings [18,19]. Early, nurse-led recognition of anxiety, fear, and uncertainty, supported by brief observational or conversational strategies may mitigate psychological escalation and support emotional stabilisation during the acute phase. Importantly, addressing distress does not require prolonged intervention but rather intentional, empathic engagement that acknowledges the patient's dual illness experience.

3.6. Interaction between biological vulnerability and psychological distress

Emerging evidence suggests that psychological distress in cancer patients experiencing acute stroke cannot be fully understood without considering the bidirectional interaction between biological vulnerability and emotional response. Cancer-related hypercoagulability, systemic inflammation, and immune dysregulation not only increase stroke risk but may also contribute to heightened stress reactivity and mood disturbances through neuro-immune pathways [5,6,22]. Acute cerebrovascular injury may further exacerbate inflammatory responses, creating a physiological milieu that amplifies anxiety, depressive symptoms, and emotional dysregulation in the immediate post-stroke period. This psycho-biological interplay is particularly relevant in oncology populations, where pre-existing inflammation, treatment-related toxicity, and cumulative illness burden may lower psychological resilience. Stroke occurring against this background may therefore precipitate disproportionately severe emotional reactions compared with non-cancer populations, reinforcing feelings of vulnerability, bodily threat, and loss of

coherence. Recognising this interaction underscores the need for integrated models of care that address psychological distress as both a psychosocial and biological phenomenon during acute stroke events.

3.7. Temporal persistence of distress beyond acute stabilisation

Although psychological distress is most visible during the emergency presentation, evidence indicates that emotional sequelae frequently persist beyond acute stabilisation. Anxiety, depressive symptoms, and fear of recurrence may continue into inpatient care and early recovery, particularly when neurological deficits interfere with communication, autonomy, or cancer treatment continuity [16,17]. For cancer patients, the stroke event may represent a critical turning point in illness perception, shifting focus from survivorship or disease control toward uncertainty and perceived fragility. Importantly, distress experienced during the emergency phase may shape longer-term psychological trajectories. Studies in stroke and oncology populations suggest that early untreated distress is associated with poorer adjustment, reduced engagement with rehabilitation, and diminished quality of life over time. This highlights the emergency setting as a crucial window for early psychosocial containment, rather than a phase in which emotional responses are deferred or minimised.

3.8. Summary of key psychosocial features in the acute stroke phase

Taken together, the literature synthesised in this section indicates that psychological distress in cancer patients with acute stroke is characterised by several recurring features: intense fear and shock at symptom onset, heightened anxiety and depressive reactions, profound uncertainty regarding prognosis and treatment continuity, and significant vulnerability arising from communication barriers and loss of control. These responses are shaped by both the sudden neurological insult and the broader cancer trajectory, resulting in a compounded emotional burden that is frequently under-recognised in emergency care. Understanding these features provides a critical foundation for examining how acute stroke affects broader domains of quality of life and psychosocial functioning, which are explored in the following section.

4. Quality of life implications and longer-term psychosocial impact

4.1. Disruption of physical and functional quality of life

Acute stroke superimposed on cancer frequently results in a marked decline in physical functioning, with consequences that extend beyond neurological impairment alone. Stroke-related deficits such as hemiparesis, dysphagia, and impaired coordination often interact with cancer-related fatigue, cachexia, and treatment toxicity, producing cumulative functional vulnerability [27]. Evidence from multimorbidity research suggests that patients with coexisting cancer and cerebrovascular disease experience poorer functional recovery and higher dependency compared with those with stroke alone [13,28]. Functional decline following stroke may directly interfere with the continuation of anticancer therapies,

including chemotherapy adherence, radiotherapy scheduling, and outpatient follow-up, thereby indirectly influencing oncological outcomes [18,24]. In this context, quality of life becomes inseparable from treatment feasibility and overall illness trajectory rather than a secondary outcome. Stroke-related deficits intersect with cancer-specific vulnerabilities across multiple quality-of-life domains (**Table 3**).

Table 3. Quality-of-life impairments following acute stroke in patients with cancer.

QoL domain	Stroke-related impact	Cancer-specific amplification
Physical functioning	Mobility loss, fatigue, dependence	Interrupts cancer treatment tolerance
Cognitive functioning	Attention, memory, executive deficits	Complicates consent and decision making
Emotional well-being	Anxiety, depression, fear of recurrence	Reinforces cancer-related existential distress
Social functioning	Reduced participation, isolation	Dual stigma of disability and cancer
Role identity	Loss of independence	Shift from “survivor” to “dependent patient”
Treatment continuity	Rehabilitation delays	Oncology care disruption
Communication	Aphasia, dysarthria	Limits expression of fears and preferences
Autonomy	Loss of control	Heightened helplessness in cancer trajectory

4.2. Psychological dimensions of quality of life

Psychological well-being represents a core determinant of quality of life in cancer patients experiencing acute stroke. Emotional sequelae such as anxiety, depressive symptoms, emotional lability, and fear of recurrence frequently persist beyond the acute phase and exert independent effects on perceived health status [15,16]. Neuropsychiatric studies demonstrate that post-stroke affective disturbances are closely linked to inflammatory activation and neuroimmune dysregulation, mechanisms already heightened in oncological disease [5,6]. Importantly, distress in this population is not merely reactive but often cumulative, reflecting layered illness experiences. Research in oncology quality-of-life assessment shows that acute medical instability significantly amplifies pre-existing existential distress and illness-related uncertainty, contributing to sustained reductions in emotional well-being [20,26]. As illustrated in **Figure 2**, psychological distress often evolves across emergency admission, inpatient stabilisation, and early recovery phases rather than resolving after neurological stabilisation alone.

4.3. Social roles, identity, and relational impact

Stroke-related disability may profoundly alter patients’ social roles, self-concept, and relational identity. Qualitative studies in stroke survivorship indicate that sudden loss of independence frequently disrupts employment, caregiving roles, and social participation, leading to social withdrawal and identity fragmentation [12,27]. For cancer patients, this disruption occurs within an already fragile psychosocial context shaped by illness stigma, uncertainty, and treatment burden. Families may experience role strain as caregiving responsibilities intensify abruptly, often without adequate preparation or support. Evidence from psychosocial oncology highlights that caregiver distress is strongly associated with patient-reported quality of life, particularly in contexts involving neurological impairment and communication loss [19,25].

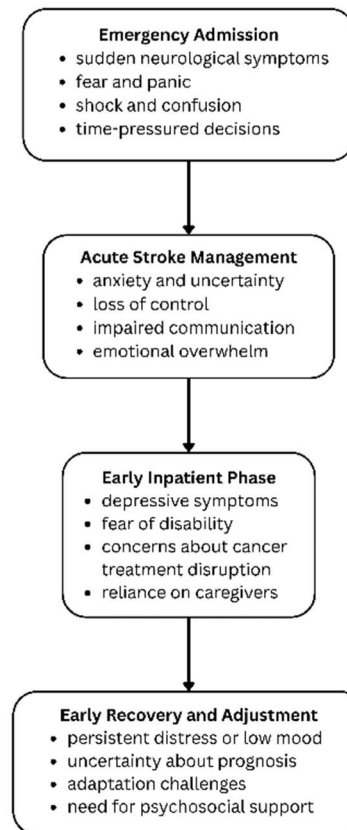


Figure 2. Psychological trajectory of cancer patients experiencing acute stroke across emergency and early recovery phases.

4.4. Communication barriers and their impact on well-being

Communication impairments such as aphasia, dysarthria, and cognitive dysfunction are among the most distressing consequences of acute stroke and represent a critical determinant of post-stroke quality of life [13,22]. In cancer patients, impaired communication may further limit participation in complex discussions regarding prognosis, treatment options, and goals of care, increasing feelings of exclusion and vulnerability. Studies in acute care communication demonstrate that patients with neurological impairment often report frustration, emotional isolation, and diminished trust when communication needs are inadequately addressed [20,26]. These barriers underscore the importance of communication-sensitive care models, particularly during emergency encounters where time constraints and cognitive overload are pronounced.

4.5. Long-term psychosocial consequences and adjustment

The psychosocial impact of acute stroke in cancer patients frequently extends into long-term survivorship or end-of-life trajectories. Persistent anxiety, depressive symptoms, fear of recurrence, and reduced confidence in bodily integrity have been documented months to years after stroke, particularly among patients with ongoing oncological disease [16,28]. Adjustment to dual diagnoses requires significant

psychological adaptation, often complicated by uncertainty regarding prognosis and functional recovery. Longitudinal studies suggest that early psychological distress is predictive of poorer long-term quality of life, reduced engagement in rehabilitation, and increased healthcare utilisation [24,27]. Without timely psychosocial intervention, distress may become entrenched, contributing to chronic suffering rather than transient crisis response.

4.6. Implications for supportive and person-centred care

Recognising the multidimensional nature of quality of life in cancer patients with acute stroke highlights the necessity of integrated supportive care approaches. Emergency and acute care settings represent a critical window for identifying psychological distress, initiating supportive communication, and facilitating referral to psychosocial services [19,20]. Addressing quality of life should therefore be conceptualised as an essential clinical outcome rather than an adjunct to biomedical stabilisation. Emergency nurses play a pivotal role in bridging acute neurological care with longer-term psychosocial recovery by recognising distress, mitigating communication barriers, and preserving dignity during crisis encounters. Embedding psycho-oncological awareness into emergency stroke pathways aligns with contemporary models of person-centred care and responds directly to the complex needs of this vulnerable population.

4.7. Integrative summary: From quality-of-life disruption to nursing-sensitive care needs

Acute stroke represents a profound disruption to quality of life for patients with cancer, affecting physical functioning, psychological well-being, social roles, communication, and long-term adjustment. The convergence of cancer-related vulnerability and sudden neurological impairment creates a unique psychosocial context in which distress, uncertainty, and loss of control are amplified.

Understanding quality of life in this population therefore requires a psycho-oncological lens that acknowledges both immediate and longer-term consequences of acute stroke. Integrating this perspective into emergency and acute care practice is essential for supporting patient adaptation, maintaining personhood, and improving overall care experiences at a critical juncture in the cancer trajectory.

5. Role of emergency nursing in psychosocial and emotional support

5.1. Emergency nurses as the first point of psychosocial contact

In emergency stroke care, nurses frequently function as the primary and most continuous point of contact for patients and families during the acute phase. Evidence from acute neurological and emergency nursing literature indicates that nurses play a crucial role in recognising emotional distress, responding to fear and confusion, and establishing a sense of psychological safety in highly time-pressured environments [12,19]. For cancer patients, who often enter emergency care with pre-existing emotional vulnerability and cumulative illness burden, this early nursing

contact is particularly influential in shaping the psychosocial experience of acute stroke.

Studies in emergency and acute care settings demonstrate that patients often communicate distress non-verbally through agitation, withdrawal, or emotional lability, especially when neurological deficits limit speech or cognition [13]. Emergency nurses are uniquely positioned to detect these subtle cues and provide immediate emotional containment, even when formal psychological assessment is not feasible. In this regard, emergency nursing care serves as a foundational psychosocial intervention rather than a secondary adjunct to biomedical treatment. Identified psychosocial needs and corresponding nursing actions are summarised in **Table 4**.

Table 4. Psychosocial and supportive care needs in emergency stroke care for oncology patients.

Domain	Identified needs	Nursing-relevant actions
Emotional containment	Fear, panic, shock	Presence, reassurance, validation
Information needs	Understanding stroke + cancer interaction	Clear, paced explanations
Decision support	Rapid treatment choices	Advocate patient values
Family support	Caregiver distress	Family-inclusive communication
Dignity preservation	Loss of control	Respect, privacy, autonomy
Continuity of care	Fragmented services	Early referral pathways
Cultural sensitivity	Diverse coping styles	Individualised communication

5.2. Recognition and assessment of psychological distress

Research in oncology-supportive care and acute neurological illness highlights that psychological distress is frequently under-recognised in emergency settings due to competing clinical priorities [20,26]. However, nursing-led observation remains one of the most reliable mechanisms for identifying distress during acute events. Studies suggest that brief observational assessment of affect, behaviour, and interaction patterns can meaningfully identify patients at risk of significant emotional distress [16]. In cancer populations, distress is further compounded by uncertainty regarding prognosis, treatment disruption, and survival expectations. Emergency nurses therefore play a critical gatekeeping role in initiating psychosocial referrals once acute stabilisation is achieved, ensuring that emotional needs identified early are not lost during care transitions [18].

5.3. Communication and emotional support in time-critical environments

Effective communication in emergency stroke care requires balancing urgency with empathy. Nursing research consistently demonstrates that clear, paced explanations and emotionally attuned communication can significantly reduce anxiety and improve patient trust, even in high-acuity contexts [22,27]. For oncology patients, communication must additionally acknowledge prior illness experiences and fears related to disease progression. Neurological impairment following stroke often disrupts verbal communication, increasing the risk of emotional isolation. Nursing-led strategies such as simplified language, repeated reassurance, and non-verbal support have been shown to mitigate distress and enhance perceived support

during emergency care encounters [13].

5.4. Supporting families and caregivers during acute stroke events

Family members of cancer patients experiencing acute stroke frequently experience intense psychological distress, including shock, anticipatory grief, and decisional burden. Evidence from emergency nursing and acute care studies indicates that family-centred nursing interventions, such as timely updates and emotional validation, can reduce caregiver anxiety and improve satisfaction with care [15,26]. Emergency nurses often act as intermediaries between medical teams and families, particularly when patients are unable to participate fully in decision-making. This role is especially critical in cancer-related stroke, where treatment decisions may intersect with broader oncological goals and ethical considerations. **Figure 3** depicts the central coordinating role of emergency nurses within a multidisciplinary emergency care model that integrates psychosocial and oncology support.

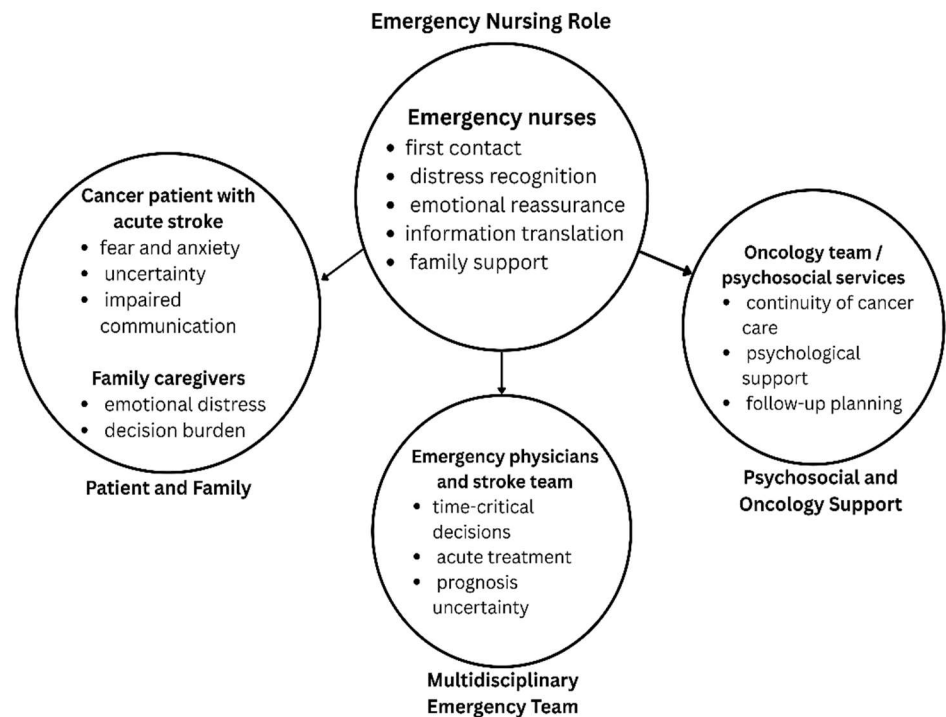


Figure 3. Multidisciplinary model of emergency nursing support for cancer patients with acute stroke.

5.5. Integrating psycho-oncology principles into emergency nursing practice

Although psycho-oncology is traditionally embedded within outpatient and supportive care settings, emerging literature supports its relevance within acute and emergency care contexts [18,19]. Nursing practices that emphasise dignity, emotional validation, and patient-centred communication align closely with psycho-oncological principles and can be feasibly implemented even during emergency stroke management. Integrating these principles does not require extensive

psychological intervention but rather an intentional focus on the emotional dimensions of care. Studies in acute neurological settings demonstrate that brief, compassionate nursing interactions can have lasting effects on patients' psychological adjustment and perceived quality of care [27].

5.6. Challenges and opportunities for practice development

Despite their central role, emergency nurses frequently report limited training and institutional support for addressing psychosocial needs in high-acuity settings. System-level studies highlight gaps in service design, including lack of formal referral pathways and insufficient integration between emergency, oncology, and psychosocial services [20]. Addressing these challenges requires targeted education, interdisciplinary collaboration, and organisational recognition of psychosocial care as a core component of emergency nursing practice. Strengthening this dimension of care is essential for improving outcomes and experiences for cancer patients facing acute stroke.

6. Communication, ethical considerations, and family involvement in emergency stroke care

6.1. Communication challenges in acute stroke emergencies for cancer patients

Communication during emergency stroke care is inherently difficult because time is limited, symptoms can impair speech or comprehension, and decisions must often be made quickly. In oncology patients, these barriers are intensified by prior distress, complex treatment histories, and heightened sensitivity to “bad news” conversations. Evidence from oncology nursing shows that clinicians frequently struggle with empathic responding, handling difficult questions, and discussing prognosis or end of life issues, pressures that become even more acute when a sudden neurological crisis occurs [29,30]. In this setting, communication must be more than rapid information delivery; it should also preserve emotional safety through calm tone, simple wording, and acknowledgment of fear and Hagerly uncertainty, which aligns with established principles for communicating prognosis and uncertainty in cancer care [31].

6.2. Ethical complexity and decision making in cancer-related acute stroke

Emergency stroke care often requires urgent decisions (e.g., thrombolysis eligibility, escalation of monitoring, ICU transfer) that may occur before teams fully understand the patient's cancer trajectory, treatment intent, or previously stated goals. In cancer care, shared decision making is widely recommended but is challenging even in routine settings; these challenges are magnified when patients have stroke related communication deficits or fluctuating capacity [31,32]. Oncology nurses also report discomfort and variability in prognosis related communication, which can contribute to uneven discussions of risks, benefits, and realistic outcomes during crisis decisions [30]. A practical ethical approach in the emergency phase is

“proportionate care” grounded in what is known about the patient’s values, while transparently naming uncertainty and documenting the rationale for urgent decisions, consistent with broader stroke guideline expectations for organized, evidence-based care pathways [27].

6.3. Family involvement and emotional support during emergency stroke events

When stroke impairs speech, cognition, or consciousness, family members often become essential communication partners and surrogate informants. Families facing a “double crisis” of cancer plus stroke may experience shock, anticipatory grief, guilt, and decisional burden, particularly when choices feel irreversible or rushed. Qualitative evidence from stroke caregiving highlights how communication problems after stroke can create misunderstanding and distress, while the practical load of care can rapidly become overwhelming, affecting family health and functioning [33]. In parallel, oncology nursing literature emphasizes that families need active support and clear guidance, especially when patients are seriously ill and emotionally vulnerable [34,35]. In emergency settings, structured family updates, short repeated explanations, and explicit emotional validation can reduce panic and improve trust, even when prognosis remains uncertain [29]. Emergency nurses occupy multiple psychosocial and ethical roles during acute stroke events (**Table 5**).

Table 5. Emergency nursing roles in psycho-oncology–informed acute stroke care.

Nursing role	Psycho-oncological contribution
First contact clinician	Establishes emotional safety
Distress observer	Identifies non-verbal anxiety and fear
Communicator	Translates medical urgency with empathy
Advocate	Represents patient values during rapid decisions
Family liaison	Supports relatives during crisis
Care coordinator	Bridges emergency, oncology, and psychosocial teams
Ethical supporter	Assists with proportional, dignity-centred care

6.4. Integrating psycho-oncology principles into emergency communication practice

Within the constraints of emergency care, nurses can still deliver high impact psychosocial support through brief, repeatable behaviours: (1) orienting the patient and family to what is happening and what will happen next; (2) checking understanding using simple teach back; (3) acknowledging fear directly; (4) supporting values-based choices when time allows; and (5) escalating complex conversations to senior clinicians while staying present at the bedside. Oncology literature also suggests that communication skills training can improve clinicians’ confidence and consistency in difficult conversations—relevant for ED teams repeatedly facing emotionally charged situations [29,30]. When families are distressed, nurses can use short empathic statements, involve them appropriately in calming routines, and ensure privacy and dignity, reflecting supportive behaviours emphasized in end of life and serious illness nursing care [34,36].

7. Implications for practice and future research

7.1. Implications for clinical practice

Acute stroke in patients with cancer should be recognised as a complex event arising from intertwined biological, neurological, and psychosocial processes. Cancer-associated hypercoagulability, inflammation, and treatment-related vascular injury increase stroke risk while simultaneously heightening vulnerability to psychological distress during acute neurological events [5,6]. These biological stressors interact with emotional responses such as fear, helplessness, and uncertainty, reinforcing the need for psychosocially informed emergency care. From a clinical perspective, emergency stroke care for oncology patients should integrate awareness of cancer-related stroke mechanisms, such as malignancy-associated thrombosis and immune dysregulation, which may influence both prognosis and patient anxiety [8,37]. Explicit acknowledgement of these mechanisms during patient and family communication may help contextualise the event, reduce self-blame, and support psychological coping during crisis. Emergency nursing practice should therefore incorporate both clinical vigilance and psychosocial sensitivity. Evidence from neurological and oncology settings indicates that early emotional reassurance, clarity of information, and preservation of dignity during acute neurological deterioration can influence patient's perceived control and emotional stability [12,13].

7.2. Implications for education and training

Emergency nurses increasingly encounter patients with multimorbidity, including cancer-related cerebrovascular complications. Educational frameworks must therefore expand beyond traditional stroke protocols to include cancer-specific risk factors, treatment sequelae, and psychosocial vulnerability [2,27]. Training programmes should integrate concepts from psycho-neuro-immunology, highlighting how systemic inflammation, stress responses, and neurovascular injury interact to shape emotional outcomes following acute stroke [22,23]. Such knowledge can help nurses better understand emotional dysregulation and distress reactions observed in oncology patients during emergency presentations. Simulation-based education combining acute stroke management with emotionally complex oncology scenarios has been recommended as an effective strategy to prepare clinicians for both technical and relational challenges [19,20]. This approach aligns with trauma-informed care models increasingly endorsed across oncology and emergency medicine.

7.3. Implications for policy and service design

At the policy level, stroke services should formally recognise cancer as a high-risk condition requiring integrated neurological and psychosocial care pathways. International stroke guidelines increasingly acknowledge cancer-related stroke as a distinct entity, yet psychosocial considerations remain underrepresented in acute protocols [1,27]. Service models that promote early multidisciplinary collaboration between emergency care, oncology, neurology, and supportive care teams may

reduce fragmentation and improve continuity of care [13,18]. Embedding psychosocial screening and referral mechanisms within emergency stroke pathways may be particularly beneficial for patients experiencing dual diagnoses. Health system research further suggests that failure to address psychosocial needs during acute hospitalisation contributes to poorer long-term adjustment, reduced adherence to treatment, and increased caregiver burden [26,28]. These findings support policy-level investment in psychosocial infrastructure within acute stroke services.

7.4. Directions for future research

Despite growing recognition of cancer-related stroke, substantial gaps remain in understanding its psychosocial sequelae. Qualitative studies exploring patient's lived experiences of sudden neurological decline during cancer treatment are urgently needed to capture dimensions of fear, loss of identity, and existential distress not reflected in biomedical metrics [15,21]. Longitudinal research examining trajectories of anxiety, depression, and quality of life following acute stroke in oncology populations would help clarify how early emotional responses influence rehabilitation outcomes and cancer care engagement [16,27]. Comparative studies between cancer-associated and non-cancer stroke populations may further elucidate unique psycho-oncological mechanisms. Finally, intervention research evaluating brief, nurse-led psychosocial interventions during emergency and early acute care phases is needed. Evidence from neuro-oncology and supportive care suggests that even low-intensity emotional interventions may yield meaningful improvements in patient experience and family adjustment [20,25].

8. Conclusions

Cancer patients who experience acute stroke face a convergence of life-threatening illness, sudden neurological disruption, and profound psychological vulnerability. While advances in oncology and stroke medicine have improved survival, the emotional and psychosocial dimensions of this clinical intersection remain insufficiently addressed, particularly during the emergency and acute care phase. This narrative review underscores that acute stroke in cancer patients is not solely a neurological or vascular event but also a psychologically destabilising experience that can intensify anxiety, fear, uncertainty, and loss of control. Quality of life may be significantly compromised, and communication challenges, ethical complexity, and family distress are frequently amplified in emergency settings.

By adopting a psycho-oncological lens, this review highlights the critical role of emergency nurses in recognising distress, providing emotional support, facilitating communication, and preserving dignity during acute stroke care. Integrating psychosocial awareness into emergency nursing practice represents a necessary step toward more holistic, patient-centred care for oncology patients. Ultimately, addressing the psychological and psychosocial needs of cancer patients with acute stroke requires a shift from disease-focused emergency care toward a multidisciplinary model that values emotional well-being alongside clinical outcomes. Strengthening this integration has the potential to improve patient experiences, support families, and advance the quality of care at one of the most

vulnerable points in the cancer trajectory.

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