



Post-stroke Care in The Community: A Qualitative Study

Exploring Perspectives of Stroke Survivors, Family Caregivers, and Nurses in Northeast Thailand

Juthamart Khotchakhote¹, Patcharaporn Kerdmongkol^{*2}, Kwanjai Amnatsatsue², Plernpit Boonyamalik³

¹Department of Public Health Nursing, Faculty of Public Health, Mahidol University, Thailand

* Correspondence: Patcharaporn Kerdmongkol, Department of Public Health Nursing, Faculty of Public Health, Mahidol University, Address: 420/1 Ratchawithi Road, Thung Phaya Thai, Ratchathewi, Bangkok, Thailand, 10400, E-mail patcharaporn.ker@mahidol.ac.th

Received: 3 June 2026; Revised: 10 August 2026; Accepted: 31 August 2026

Abstract

Background: Stroke remains a formidable global health challenge and is recognized as the second-leading cause of death and the primary cause of long-term disability worldwide including Thailand. **Objective:** This qualitative descriptive study explored the experiences, challenges, and service expectations related to post-stroke care among stroke survivors, family caregivers, and community nurses in Mahasarakham Province, Northeastern Thailand. **Methods:** A purposive sample of 28 participants—10 stroke survivors, 8 family caregivers, and 10 community nurses—was recruited from primary care units in Kantharawichai District. Data were collected between June and September 2024 through 18 individual in-depth interviews, 2 focus group discussions, and 10 participatory observation sessions. Qualitative data were analyzed using Braun and Clarke's reflexive thematic analysis. **Results:** Three themes emerged: (1) inadequate knowledge and preparedness, reflecting gaps in rehabilitation skills and barriers to accessing credible information among caregivers; (2) insufficient and overburdened stroke care personnel, reflecting a shortage of specialized professionals and the need for intermediate care (IMC) guideline and monitoring tools for community nurses; and (3) psycho-cultural services, highlighting the role of spiritual beliefs (karma) in coping and the need for professional reassurance through home visits and financial support. **Conclusion:** The findings suggest a linkage between national IMC policy and its implementation at the community level. Although families demonstrated culturally grounded resilience, the transition to home care was

hindered by systemic gaps and financial strain. These context-specific findings suggest that community stroke care may be strengthened through competency development for community nurses, IMC guideline, and culturally congruent care that integrates spiritual and psychosocial support with clinical rehabilitation.

Keywords: Cerebrovascular disease, Community stroke care, Intermediate care, Stroke service system

What was known: Stroke survivors and their caregivers experience unmet needs during the transition from hospital-to-home. Intermediate care policy has been available but inadequate evidences on implementation and nursing outcome for the rural community in Thailand.

What's New and Next: By triangulating method, the perspectives of stroke survivors, family caregivers, and community nurses within a single rural district were explored as culturally shaped coping through karma and spiritual beliefs, caregivers' economic strain, and the need of IMC guideline and evaluation tools for community nurses. Future research should develop and evaluate context-appropriate, competency-based support for community nurses alongside culturally congruent support for caregivers in a rural community in Thailand.

Introduction

Stroke remains a formidable global health challenge and is recognized as the second-leading cause of death and the primary cause of long-term disability worldwide⁽¹⁾. The incidence of stroke and the number of people living with its consequences have nearly doubled over the past three decades, affecting more than 101 million people globally; the total worldwide cost was estimated at US\$451 billion in 2017⁽²⁾. Effective and continuous post-acute care is essential to mitigate this burden, particularly during the "golden period", the first 3-6 months after stroke which is critical for maximizing neurological recovery and rehabilitation⁽⁵⁾.

In Thailand, stroke is a leading cause of mortality and impairment, with its prevalence increasing from 451.39 per 100,000 population in 2016 to 506.20 per 100,000 in 2018⁽³⁾. Stroke survivors require complex care after hospital discharge, and these care needs may substantially affect their quality of life⁽⁴⁾. To support this transition, the Ministry of Public Health established an Intermediate Care (IMC) service plan that positions community-based primary care as the frontline of post-discharge rehabilitation⁽³⁾.

However, continuity across this care pathway is often disrupted during community-level implementation. Gaps and discontinuities in post-stroke care have been documented in community

settings and are often exacerbated by a shortage of specialized personnel for home-based care⁽⁶⁾. Both stroke survivors and family caregivers report substantial unmet needs across physical, psychological, social, and informational domains⁽⁷⁾. Furthermore, primary care nurses key coordinators within this continuum⁽⁸⁾ report limited confidence and insufficient skills to address these complex needs comprehensively^(4,9).

Beyond these systemic and clinical gaps, recovery and caregiving in Thai communities are also shaped by cultural and spiritual frameworks. Stroke survivors and caregivers frequently interpret illness and disability through the Buddhist concept of karma, which influences how they cope with and accept their condition and how they seek support. A care model that overlooks these sociocultural dimensions may therefore be clinically sound but contextually incongruent.

Despite these concerns, in-depth qualitative evidence capturing the experience of post-stroke care from patients, caregivers, and the nurses remains scarce, particularly from a rural community with a high prevalence of stroke and limited resources, in Northeastern Thailand. This lack of culturally contextual understanding is a substantial barrier to developing relevant, competency-based support for community nurses. The present study constitutes the first phase of a broader program aimed at strengthening community nurses' competencies in intermediate stroke care. As a need assessment grounded in the accounts of service users and providers, the study aimed to explore in depth the experiences, challenges, and service expectations related to post-stroke care from the perspectives of three key stakeholder groups: stroke survivors, their family caregivers, and community nurses responsible for home-based care.

Materials and Methods

Study Design

A qualitative descriptive design was used, with Braun and Clarke's reflexive thematic analysis guiding the analysis of post-stroke care circumstances, caregiving challenges, and service expectations from the perspectives of stroke survivors, family caregivers, and community nurses.

Participants and Setting

The participants were purposively recruited from two public health centers (primary care units) in Kantharawichai District, Mahasarakham Province, Northeastern Thailand. Three stakeholder groups included 10 stroke survivors; 8 family caregivers; and 10 community nurses. Stroke survivors were adults who got discharged home within 6 months after stroke, and were able to communicate verbally. Those with severe cognitive or communication impairments that precluded informed

consent or participation in an interview were excluded. Eligible family caregivers were the primary unpaid caregivers responsible for the survivors' daily care. Eligible community nurses were registered nurses who provided home-based or intermediate stroke care in the selected community. In-depth interview with each stakeholder group were continued until data saturation was reached with 28 participants.

Research Instruments

The interview guideline developed by the researcher was used to collect information from stroke survivors and caregivers regarding their needs, clinical conditions, healthcare access, and socioeconomic impacts. In addition, roles, responsibilities, interprofessional collaboration, and perceived barriers to effective care were interviewed among nurses through focus group discussion. Content validity was assessed by a panel of five experts comprising nursing scholars and clinical specialists, yielding a content validity index (CVI) of 0.8. Interviews were conducted in Thai, including the local Isan dialect when preferred by participants. Verbatim transcripts were analyzed in Thai; only the quotations selected for reporting were translated into English by a bilingual researcher and independently cross-checked by a second bilingual member of the research team to preserve the participants' intended meanings.

Data Collection

Data were collected between June and July 2024 by the researcher, who had received training in qualitative interviewing. In-depth interview with 10 individual participants took about 30-60 minutes. Two focus group discussions were conducted separately for 10 nurses and for the patient caregiver group, including 8 survivors and caregivers, which took about 60-90 minutes each. Ten participatory observation sessions were conducted with contextual field notes. All interviews and FGDs were audio-recorded with participants' written informed consent.

To reduce the risk of social desirability bias, particularly among nurses discussing their own competency gaps, these sessions were conducted by the researcher who had no supervisory or evaluative authority over the nurse participants. Participants were assured that their responses would remain confidential and would not affect their employment.

Data Analysis

Quantitative demographic data were analyzed using descriptive statistics. Qualitative data were transcribed verbatim and analyzed according to Braun and Clarke's six phases of reflexive thematic analysis: familiarization with the data, generation of initial codes, development of themes,

review of themes, definition and naming of themes, and production of the report. Coding was performed independently by researchers; discrepancies were resolved through discussion until consensus was reached. Observational field notes were integrated during theme development to contextualize and corroborate the interview and focus group data. [The analysis was supported by conducted manually.

Trustworthiness and Rigor

Rigor was addressed using Lincoln and Guba's four criteria. Credibility was supported through member checking to validate the findings with participants; dependability, through an audit trail documenting the research process; and confirmability, through data and methodological triangulation across sources. Transferability was supported by a thick description of the participants, setting, and context, enabling readers to assess the applicability of the findings to other rural primary care settings. Given the single-district design, the findings are context-specific rather than statistically generalizable.

Reflexivity: The researcher and nurse practitioners, who were familiar with the Thai primary care system, worked as a team to reduce bias and ensure the trustworthiness of the findings. This insider perspective facilitated rapport and contextual interpretation but also introduced the risk of preconceptions regarding nurses' competency needs. The team maintained reflexive memos throughout data collection and analysis and bracketed prior assumptions during coding to help ensure that the themes were grounded in participants' accounts.

Results

The analysis generated three overarching themes reflecting critical needs and structural gaps in community-based post-stroke care from the perspectives of stroke survivors, family caregivers, and community nurses. Participant characteristics are summarized in Table 1, and the themes, subthemes, and illustrative quotations are summarized in Table 2.

Table 1. Demographic characteristics of the participants (N = 28)

Theme 1: Knowledge and preparedness gaps during the transition home

Knowledge gaps and limited preparedness for home care: Stroke survivors and caregivers initially reported having no prior knowledge and relying on trial and error. Community nurses also reported limited confidence and training in providing specific physical therapy interventions.

“My spouse was ill... How can I tell whether he's improving? If something is wrong, what should I do? That's the hardest part.” (FC2)

"Since being released, I have been having difficulties... I'm afraid about the second stroke or falling." (SP7)

Barriers to accessing information: Rural caregivers encountered barriers related to limited formal education and low digital literacy.

"My educational level is minimal... I do not know how to use the Internet; I do not know where to get the information." (FC7)

Theme 2: Under-resourced and insufficient IMC support system

Shortage of specialized professionals:

"Nurses are required to provide physical therapy care to patients, but we have not received any training in this area." (N3)

Structural gaps in intermediate care guideline:

"Lack of intermediate care recording; I recorded nursing care and outcome in a long-term care system." (N3)

Training need and workload constraints:

"Heavy workload; it is quite difficult to take time off to attend training." (N6)

"Need for the online short course training, available anytime and anywhere." (N7)

Theme 3: Sociocultural, spiritual, and economic recovery

Spiritual care and meaning-making (karma):

"This is my karma. I must pay it off completely, I thought that." (SP7)

Need for professional reassurance through home visits:

"I want the nurse to come visit me. She gave me good information, and I felt confident." (FC4)

Economic strain and respite needs:

"My father's medical expenses appear to be an endless hole. I took out a lot of borrowings from relatives and friends." (FC5)

A notable pattern was that stroke survivors and caregivers raised spiritual and cultural dimensions of recovery (Theme 3), whereas nurses did not. This difference may reflect a gap between clinical and lived-experience framings of recovery.

Table 1 Summary of themes, subthemes, and illustrative quotations

Theme	Subtheme	Illustrative quotation
1. Knowledge and preparedness gaps during the transition home	Skill gaps and limited preparedness	"...How can I tell whether he's improving? If something is wrong, what should I do?" (FC2)
	Barriers to accessing credible information	"My educational level is minimal... I do not know where to get the information." (FC7)
2. Under-resourced and insufficient IMC support system	Shortage of specialized professionals	"Nurses are required to provide physical therapy care... we have not received any training." (N3)
	Structural gaps in intermediate care documentation	"Lack of intermediate care recording; I recorded... in a long-term care system." (N3)
	Training and workload constraints	"Heavy workload; it is quite difficult to take time off to attend training." (N6)
3. Sociocultural, spiritual, and economic recovery	Spiritual care and meaning-making (karma)	"This is my karma. I must pay it off completely." (SP7)
	Need for professional reassurance through home visits	"I want the nurse to come visit me... I felt confident." (FC4)
	Economic strain and respite needs	"My father's medical expenses appear to be an endless hole... borrowings from relatives and friends." (FC5)

Discussion

This qualitative descriptive study explored the experiences, challenges, and service expectations related to post-stroke care among stroke survivors through the triangulated perspectives

of stroke survivors, family caregivers, and community nurses in one rural Thai district. Three interrelated findings were prominent: a pervasive gap in knowledge and preparedness during the hospital-to-home transition (Theme 1); an under-resourced IMC system with limited standardization at the primary care level (Theme 2); and sociocultural, spiritual, and economic needs extending beyond clinical rehabilitation (Theme 3). Together, these findings illustrate how the implementation of national IMC policy may be weakened at the community level.

Knowledge and preparedness gaps during the transition home (Theme 1) Both stroke survivors and caregivers described entering home care with no prior knowledge and relying on trial and error, whereas nurses reported limited confidence in providing rehabilitation guidance. This finding is consistent with the broader literature documenting substantial unmet informational and skill-related needs among stroke survivors and caregivers during care transitions⁽⁷⁾. The resulting caregiving burden can be emotionally and physically demanding and may be intensified by variations in caregiver knowledge and discontinuous professional support. These accounts reinforce calls for structured, accessible caregiver education and psychological support beginning at discharge rather than after problems emerge⁽¹²⁾. This pattern is also reflected in recent qualitative research. A longitudinal study of Chinese stroke survivor–caregiver dyads found that caregivers with limited education and low digital literacy struggled to obtain and appraise stroke-care information during the transition home⁽²⁰⁾, while an integrative review concluded that inadequate education for patients and caregivers during discharge planning increases the risk of deterioration and avoidable readmission⁽¹⁹⁾. The shared sense among nurses and caregivers of being unprepared to provide rehabilitation also mirrors findings that caregivers were compelled to assume the role of rehabilitation therapists without adequate training or confidence, while stroke survivors were reluctant to accept care they perceived as nonprofessional⁽²²⁾. The need for trustworthy, curated information is also consistent with stroke patients' preference for credible health information provided or regulated by hospitals rather than fragmented internet sources⁽²¹⁾.

Under-resourced and insufficient IMC support system (Theme 2) Nurses described assuming rehabilitation roles, particularly physical therapy, for which they felt inadequately prepared because of a shortage of specialized professionals in the community. This finding is consistent with evidence that community-based stroke care in rural Thailand is often discontinuous and constrained by workforce shortages^(6,14). Participants also identified the absence of documentation and evaluation tools specific to the intermediate care period, with nursing outcomes recorded in general long-term

care systems that do not adequately capture stroke recovery. This finding provides direct evidence of a policy-implementation gap: a nationally mandated IMC continuum may be difficult to monitor or sustain when frontline providers lack standardized instruments, coordination structures⁽¹¹⁾, and training pathways for implementation. Nurses' preference for flexible, on-demand online training further suggests that current professional development formats may not align with community workload demands⁽¹⁷⁾. Comparable service-level gaps have been reported elsewhere. Stroke survivors and caregivers have described fragmented post-discharge services, abrupt follow-up, and community facilities with limited rehabilitation capacity⁽²⁰⁾, with such discontinuities attributed to organizational and resource constraints across the care system⁽¹⁹⁾. Notably, a recent study in this journal found that a structured, nurse-led continuing-care model linking a hospital stroke team with commune health stations significantly improved stroke survivors' quality of life and self-care agency⁽²³⁾. This evidence suggests that the disconnect may be addressed through coordinated, competency-based community nursing rather than through additional acute-care resources alone. The preference for flexible learning also aligns with evidence that digital health and telerehabilitation tools can extend limited specialist capacity into the community⁽²¹⁾.

Sociocultural, spiritual, and economic recovery (Theme 3) This study also highlights sociocultural needs that clinical models often overlook. Stroke survivors and caregivers frequently interpreted their condition through the Buddhist concept of karma. For many participants, this belief provided a way to make sense of and accept a sudden, life-altering disability rather than representing passive fatalism. At the same time, uncritical reliance on such interpretations may delay help-seeking. Culturally congruent care therefore involves engaging respectfully with these beliefs and recognizing spiritual and emotional support as legitimate components of care, rather than dismissing or over-romanticizing them. Caregivers also expressed a strong need for regular home visits from nurses to provide confidence and professional reassurance during changes in symptoms. In addition, they reported severe economic strain, including high medical expenses and the need to borrow from relatives. These findings are consistent with evidence concerning caregiver burden and the value of remote and respite support for informal caregivers in resource-limited settings^(13,15), and they indicate that financial protection and respite provision should be considered integral to sustainable community stroke care. Although expressed in this study through the concept of karma, the use of spiritual belief as a resource for acceptance and resilience parallels findings in which faith served as a coping strategy that sustained caregivers during the transition⁽¹⁹⁾. This parallel suggests that the

psychological function of spiritual meaning-making may extend across religious traditions. The reported economic strain, including high medical costs met through borrowing, also closely mirrors accounts from other resource-limited settings, where families characterized treatment costs as a seemingly endless expense met through borrowing⁽²⁰⁾, and where caregiver burden was compounded by financial hardship and limited social support⁽²²⁾.

Clinical context. The high prevalence of functional impairments such as hemiplegia reported in the broader stroke literature⁽¹⁰⁾ provides important context for understanding why community nurses require advanced competencies in neurological assessment and rehabilitation. However, the prevalence of hemiplegia was drawn from background evidence and was not measured as a finding of the present qualitative study.

Strengths and limitations. A key strength of this study is the triangulation of three stakeholder groups and three data collection methods, which enabled convergent and complementary perspectives on the same care system to be examined. The study also identifies context-specific and culturally grounded findings that are rarely captured in the stroke literature. Several limitations should be acknowledged. First, the study was conducted in a single district in one province; therefore, the findings are context-specific and are intended to support transferability through thick description rather than statistical generalization. Second, the data were self-reported and therefore subject to recall and social desirability bias, which the research team sought to mitigate through assurances of confidentiality and the use of nonsupervisory interviewers. Third, the research team's insider familiarity with the nursing context may have influenced the interpretation, although it also enhanced rapport. Reflexive memos and consensus coding were used to limit this influence. Finally, spiritual and cultural dimensions were raised primarily by stroke survivors and caregivers rather than by nurses, which may itself reflect a gap between clinical and lived-experience framings of recovery.

Implications for practice and policy. These findings suggest, rather than establish, several directions for strengthening community stroke care. They indicate a need to equip public health nurses (PHNs) with core competencies in neurological assessment, evidence-based rehabilitation guidance, and multidisciplinary care coordination, enabling the PHN role to evolve from basic care provision toward the facilitation of evidence-based rehabilitation in the community⁽¹⁶⁾. The findings also indicate the potential value of standardized IMC documentation, culturally congruent caregiver and spiritual support, and mechanisms for financial assistance and respite care⁽¹⁸⁾. Consistent with these findings, a competency- and model-based continuing-care intervention delivered by trained

community nurses during the early post-discharge period improved patient outcomes⁽²³⁾. This evidence reinforces the potential value of the competencies and standardized documentation proposed for the next phase of this work. Given the qualitative, single-site design, these implications should be treated as hypotheses for the next phase of program development and evaluation.

Conclusion

This qualitative study provides in-depth, context-specific insight into how intermediate stroke care is experienced in one rural area of Northeast, Thailand. The delivery of community-based post-stroke care is challenged by an interrelated set of issues: substantial care needs and caregiver burden, discontinuity across the care system, and competency gaps among public health nurses (PHNs). The findings suggest that the current decentralized public health nursing model, although essential to primary care, may not yet be sufficiently specialized to address the complex and sustained rehabilitation needs of stroke survivors during the critical 3-6-month period after discharge.

Importantly, the experiences reported in this study extend beyond clinical and structural gaps. Recovery and caregiving were deeply shaped by sociocultural and spiritual meaning-making, particularly the concept of karma, and were constrained by economic strain. Efforts to strengthen community stroke care in this context should therefore consider integrating culturally congruent spiritual and psychosocial support and financial and respite assistance for caregivers alongside clinical rehabilitation.

Rather than prescribing a fixed solution, this study provides a foundational, context-specific basis for developing competency-based support for PHNs. Future research should build on these findings by co-developing and rigorously evaluating such a competency framework. For example, quantitative studies could assess its effects on nurses' confidence and patients' functional outcomes, while action research could pilot an intermediate care system in other rural areas to examine its feasibility and transferability.

Recommendations

1) Competency development for PHNs: The Ministry of Public Health could consider supporting a certificate or advanced training program focused on neurological assessment, standardized rehabilitation strategies, and care coordination for PHNs to strengthen stroke management in primary care.

2) Seamless intermediate care system: An electronic data system for intermediate care should be shared by hospital discharge planners and PHNs to improve continuity and monitoring nursing outcome.

3) Caregiver support programs: Formal caregiver support, including scheduled home-based training¹⁰ and respite provision, may help mitigate severe caregiver burden.

Ethics Approval Statement

This study was approved by the Ethical Review Committee for Human Research, Faculty of Public Health, Mahidol University (Approval No. MUPH 2024-010), and by the Ethical Committee Review Board of the Mahasarakham Provincial Public Health Office. Written informed consent was obtained from all participants before data collection, following a clear explanation of the study's purpose, procedures, and their right to decline participation or withdraw at any time without consequence. Participation was voluntary and audio recordings were made only with explicit consent. All data were anonymized, with participants identified only by group codes (e.g., SP, FC, and N), and were stored securely in password-protected files accessible only to the research team. The study is reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ), and the completed checklist is provided as a supplementary file.

Author Contributions

The first author contributed to the conception and design of the study, data collection, statistical analysis, and manuscript drafting. The co-authors provided academic supervision, contributed to refining the study design, and critically revised the manuscript for important intellectual content. All authors approved the final version of the manuscript and agreed to be accountable for all aspects of the work.

Acknowledgments

The authors gratefully acknowledge all participants for their time and cooperation in this study.

Source of Funding

The study received partial funding from the Faculty of Graduate Studies and the Graduate Studies of Mahidol University Alumni Association, Mahidol University, Thailand.

Conflicts of Interest

All authors declare that they have no conflicts of interest.

References

1. American Heart Association. 2020 heart disease and stroke statistical update fact sheet [Internet]. 2020 [cited 2025 Dec 13]. Available from: <https://professional.heart.org/>
2. World Stroke Organization. Global stroke fact sheet [Internet]. 2022 [cited 2025 Dec 13]. Available from: <https://www.world-stroke.org/>
3. Ministry of Public Health. Public health statistics A.D. 2020 [Internet]. 2021 [cited 2025 Dec 13]. Available from: [<https://dmsic.moph.go.th/index/detail/8900>]
4. Adunwatanasiri P, Sindhu S, Wanitkun N, Viwatwongkasem C. A causal relationship of home care services on the quality of life among survivors of stroke in Thailand. *Walailak J Sci Technol*. 2021;18(5):9049. DOI:10.48048/wjst.2021.9049
5. Bernhardt J, Godecke E, Johnson L, Langhorne P. Early rehabilitation after stroke. *Curr Opin Neurol*. 2017;30(1):48-54. DOI:10.1097/WCO.0000000000000404
6. Intamas U, Rawiworrakul T, Amnatsatsue K, Nanthamongkolchai S, Palmer MH. Care of stroke survivors in community: a case study of rural Thai community. *J Health Res*. 2021;35(1):77-87.
7. Zawawi NSM, Aziz NA, Fisher R, Ahmad K, Walker MF. The unmet needs of stroke survivors and stroke caregivers: a systematic narrative review. *J Stroke Cerebrovasc Dis*. 2020;29(8):104875. DOI:10.1016/j.jstrokecerebrovasdis.2020.104875
8. Jarva E, Mikkonen K, Tuomikoski AM, Kääriäinen M, Meriläinen M, Karsikas E, et al. Healthcare professionals' competence in stroke care pathways: a mixed-methods systematic review. *J Clin Nurs*. 2021;30(9-10):1206-35. DOI:10.1111/jocn.15612
9. Saengngam T, Siripanumas P. A model of stroke competency development for nurses at sub-district health promoting hospital. *J Buddhist Educ Res*. 2016;2(2):60-8.
10. Ruttawongsa A. The development of case management guideline on home care for new stroke patients, Kosumpisai Hospital, Mahasarakham. *J Boromarajonani Coll Nurs Nakhonratchasima*. 2018;21(1):22-39.
11. Walker MF, Pound K. The scope for community-based intervention in stroke rehabilitation. *Br J Community Nurs*. 2000;5(4):176-80.

12. Hounsri K, Zhang J, Kalampakorn S, Boonyamalik P, Jirapongsuwan A, Wu VX, Klainin-Yobas P. Effectiveness of technology-based psychosocial interventions for improving health-related outcomes of family caregivers of stroke survivors: a systematic review and meta-analysis. *J Clin Nurs*. 2024;33(11):4207-4226.
13. Zhang L, Yan YN, Sun ZX, Yan DR, Chen YW, Lin KC, et al. Effects of coaching-based teleoccupational guidance for home-based stroke survivors and their family caregivers: a pilot randomised controlled trial. *Int J Environ Res Public Health*. 2022;19(23):16355. DOI:10.3390/ijerph192316355
14. Sawatphol C, Pengpinit T, Senanikorn A, Srisuraphol W. Care for elderly dependents in the Northeast of Thailand. *J MCU Peace Stud*. 2017;5(Sp1):387-405.
15. World Health Organization. Community-based rehabilitation: CBR guidelines. Geneva: WHO; 2010.
16. Byrne D, et al. The role of a stroke specialist nurse in early supported discharge and secondary prevention in the community: a scoping review. *Nurs Open*. 2025;12:e70358. DOI:10.1002/nop2.70358
17. Bing-Jonsson PC, Førsund LH, Hansen Stålesen J, Vabo Nesland B, Lindholm IC, Rugsland Espegren O, et al. Lifelong learning in community healthcare: testing competence after learning activities in a blended learning space. *Scand J Caring Sci*. 2023;37:1057-66. DOI:10.1111/scs.13180
18. Rochmah TN, Rahmawati IT, Dahlui M, Budiarto W, Bilqis N. Economic burden of stroke disease: a systematic review. *Int J Environ Res Public Health*. 2021;18(14):7552. DOI:10.3390/ijerph18147552
19. Chen LD, Xiao LD, Chamberlain D. An integrative review: challenges and opportunities for stroke survivors and caregivers in hospital to home transition care. *J Adv Nurs*. 2020;76(9):2253-65. DOI:10.1111/jan.14446
20. Lin S, Wang C, Wang Q, Xie S, Tu Q, Zhang H, et al. The experience of stroke survivors and caregivers during hospital-to-home transitional care: a qualitative longitudinal study. *Int J Nurs Stud*. 2022;130:104213. DOI:10.1016/j.ijnurstu.2022.104213

21. Bally ELS, Cheng D, van Grieken A, Ferri Sanz M, Zanutto O, Carroll A, et al. Patients' perspectives regarding digital health technology to support self-management and improve integrated stroke care: qualitative interview study. *J Med Internet Res*. 2023;25:e42556. DOI:10.2196/42556
22. Lee JJ, Tsang WN, Yang SC, Kwok JYY, Lou VWQ, Lau KK. Qualitative study of Chinese stroke caregivers' caregiving experience during the COVID-19 pandemic. *Stroke*. 2021;52(4):1407-14. DOI:10.1161/STROKEAHA.120.032250
23. Tran TH, Amnatsatsue K, Kerdmongkol P, Le CN, Ross R, Kantharadussadee Triamchaisri S. Effects of a continuing care model for older adults with stroke in Can Tho City, Vietnam. *Thai J Public Health*. 2026;56(1):1795-807.