

NURSING INTERVENTIONS TO ENHANCE DEPENDENT-CARE AGENCY AND SELF-CARE IN POST-STROKE PATIENTS: A SCOPING REVIEW**Sari Dwi Tofani¹, Priyanto Priyanto²***Department of Nursing, Ngudi Waluyo University, Ungaran, Central Java, Indonesia*

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Abstract

Introduction: Stroke is a leading cause of long-term disability worldwide; survivors frequently experience functional, cognitive, and communication impairments that produce a self-care deficit and create dependence on family caregivers. Within Orem's Self-Care Deficit Nursing Theory, optimal recovery depends on strengthening both the survivor's self-care agency and the family caregiver's dependent-care agency, yet the range of nursing interventions targeting these dual capacities has not been systematically mapped. This review aimed to map and synthesise the scientific evidence on nursing interventions designed to enhance dependent-care agency and self-care among post-stroke patients and their family caregivers, and to construct an integrative conceptual framework grounded in Orem's Self-Care Deficit Nursing Theory.

Methods: A scoping review was conducted in accordance with the Joanna Briggs Institute (JBI) methodology and reported following the PRISMA Extension for Scoping Reviews (PRISMA-ScR). Scopus, PubMed, Google Scholar, and CINAHL were searched for studies published between January 2021 and June 2026. Eleven intervention studies (six randomised controlled trials and five quasi-experimental studies) met the inclusion criteria and were analysed using thematic synthesis.

Results: Four themes were identified: (1) structured education and skills training to build dependent-care agency; (2) self-care support and self-efficacy enhancement programmes; (3) hospital-to-home transitional and family-based care; and (4) psychosocial, communication, and resilience-oriented support. Interventions consistently improved caregiver knowledge, skill, self-efficacy, resilience, and quality of life, and enhanced patient self-care ability, functional status, and adherence, while reducing caregiver burden and rehospitalisation.

Conclusion: Nursing interventions that operate as supportive-educative nursing systems strengthen the dyadic capacity for self-care and dependent care after stroke. The integrative framework supports a shift from a patient-only focus toward dyad-centred, agency-building care.

Keywords: stroke; self-care; dependent-care agency; family caregivers; nursing intervention; Orem; scoping review

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Introduction

Stroke remains one of the foremost global health challenges and a leading cause of acquired long-term disability among adults. Survivors commonly live with residual hemiparesis, impaired mobility, swallowing and communication difficulties, and cognitive or emotional changes that substantially reduce their capacity to perform activities of daily living. As a consequence, a large proportion of stroke survivors are discharged home with unmet self-care demands that must be met, at least in part, by family members who assume the role of informal caregiver. The post-stroke period therefore represents not only a clinical and rehabilitative challenge but also a profound nursing challenge centred on rebuilding the patient's capacity for self-care and equipping families to provide competent, sustainable care.

From a nursing-theoretical perspective, this situation is captured precisely by Orem's Self-Care Deficit Nursing Theory (SCDNT). Orem defines self-care as the practice of activities that individuals initiate and perform to maintain life, health, and well-being, and self-care agency as the acquired ability to engage in such activities. A self-care deficit arises when an individual's self-care agency is insufficient to meet the therapeutic self-care demand created by their health condition — a defining feature of the post-stroke state. Where the dependent person cannot meet their own demand, a dependent-care agent (typically a family caregiver) acts on their behalf; the caregiver's corresponding capability is termed dependent-care agency. Nursing agency, expressed through wholly compensatory, partly compensatory, and supportive-educative nursing systems, is mobilised to compensate for deficits and to develop both self-care agency and dependent-care agency over time (Orem, 2001).

A growing body of qualitative work documents how demanding and isolating the caregiving transition can be. Family caregivers frequently describe a sense of “standing alone” while attempting to self-manage the caregiving role during acute care, with limited preparation for the responsibilities that follow discharge (Heim et al., 2024). Their needs cluster around information, involvement in care, attention to their own self-care, and ongoing support (Lobo et al., 2023). The assumption of the caregiver role has been described as a distinct developmental transition requiring the acquisition of new competencies and identity (Saucedo-Pahua et al., 2023), and self-care after stroke is increasingly understood as a dyadic experience in which the survivor and caregiver co-construct routines and mutually influence each other's capacity (Wang et al., 2025). Together, these studies establish that interventions targeting only the patient, or only the caregiver, are unlikely to be sufficient.

In response, a range of nursing interventions has been developed and tested — including structured discharge and caregiver education, skills training, nurse-led health coaching, telephone follow-up, family-based programmes, combined rehabilitation and nutritional support, and psychosocial or communication-based support. However, this evidence is scattered across diverse designs, settings, populations (patient-focused, caregiver-focused, and dyadic), and outcome measures, and it has not been mapped under a unifying theoretical lens. It therefore remains unclear what types of nursing interventions have been used to enhance dependent-care agency and self-care after stroke, how they map onto Orem's concepts, and where the gaps lie.

A scoping review is the most appropriate methodology for this purpose, because the aim is neither to estimate the pooled effect of a single intervention, as in a systematic review or meta-analysis, nor to interpret a homogeneous body of qualitative work, but rather to map the breadth of existing interventions, characterise their components and outcomes, and identify conceptual gaps (Arksey & O'Malley, 2005; Peters et al., 2020; Tricco et al., 2018). Accordingly, this review addresses one principal question: what nursing interventions have been used to enhance dependent-care agency and self-care among post-stroke patients and their family caregivers? This is examined through three sub-questions: (1) what types and components of nursing interventions have been reported?; (2) how can these interventions and their outcomes be mapped onto the self-care agency, dependent-care agency, and nursing-system concepts of Orem's theory?; and (3) what are the implications for the development of holistic, dyad-centred nursing practice? The principal contribution of this review is an integrative

conceptual framework linking nursing agency to the parallel development of self-care agency and dependent-care agency as a foundation for evidence-based post-stroke nursing care.

Method

Research Design

This study employed a scoping review design based on the Joanna Briggs Institute (JBI) methodological framework, which builds on the seminal framework of Arksey and O'Malley, and was reported in accordance with the PRISMA Extension for Scoping Reviews (PRISMA-ScR) guidelines (Arksey & O'Malley, 2005; Peters et al., 2020; Tricco et al., 2018). This approach was chosen because it enables systematic and comprehensive identification and mapping of nursing interventions relating to self-care, self-efficacy, caregiver skill, and dependent-care agency in the post-stroke context.

The PCC (Population, Concept, Context) Framework

Article selection was guided by the PCC (Population, Concept, Context) framework in accordance with the JBI guidelines for scoping reviews, ensuring alignment between the review objective, the population, the concepts explored, and the research context, as presented in Table 1.

Table 1. The PCC Framework

Component	Criteria
Population	Adult post-stroke patients and/or their family (informal) caregivers
Concept	Nursing interventions intended to enhance self-care, self-efficacy, caregiver skill/competence, and dependent-care agency
Context	Acute, rehabilitation, transitional (hospital-to-home), and community/home settings, without geographical restriction

Inclusion and Exclusion Criteria

Inclusion criteria: primary intervention studies (randomised controlled trials or quasi-experimental designs); participants were adult post-stroke patients and/or their family caregivers; the intervention was a nursing or nurse-led intervention targeting self-care, self-efficacy, caregiver skill/competence, or dependent-care agency; reported relevant patient or caregiver outcomes; written in English; published between January 2021 and June 2026; available in full text.

Exclusion criteria: literature reviews, systematic reviews, meta-analyses, study protocols, editorials, and conference abstracts; purely descriptive or qualitative studies without an intervention (used only as background); studies whose population was not stroke-specific; studies without a self-care or dependent-care outcome; and articles not available in full text.

Literature Search Strategy

A systematic search was conducted in June 2026 across four electronic databases (Scopus, PubMed, Google Scholar, and CINAHL), covering publications from January 2021 to June 2026. The search combined terms for the population (stroke), the concept (self-care, self-efficacy, caregiver, dependent care), and the intervention (nursing intervention, education, programme), as summarised in Table 2.

Table 2. Literature Search Strategy

Database	Search Strategy
Scopus	TITLE-ABS-KEY ((Stroke OR "cerebrovascular accident" OR "post-stroke") AND ("self-care" OR "self care agency" OR "self-efficacy" OR caregiver OR "dependent care") AND ("nursing intervention" OR education OR training OR programme OR "health coaching"))
PubMed	(Stroke[tiab] OR "cerebrovascular accident"[tiab]) AND ("self-care"[tiab] OR "self-efficacy"[tiab] OR caregiver*[tiab] OR "dependent care"[tiab]) AND (nursing[tiab] AND (intervention*[tiab] OR education[tiab] OR program*[tiab]))
Google Scholar	(Stroke OR "post-stroke") AND ("self-care" OR caregiver OR "dependent care agency") AND ("nursing intervention" OR education OR program)
CINAHL	(MH "Stroke") AND ("self-care" OR "self-efficacy" OR (MH "Caregivers") OR "dependent care") AND (nursing intervention OR education OR program)

Study Selection

The selection process followed the standard PRISMA-ScR stages of identification, screening, eligibility, and inclusion. The initial search returned 517 records (Scopus: 198; PubMed: 134; Google Scholar: 121; CINAHL: 64). After removal of 131 duplicates, 386 records underwent title and abstract screening, and 68 full-text articles were assessed for eligibility. Following full-text evaluation, eleven studies met the inclusion criteria and were included in the final synthesis. The full selection process is presented in Figure 1.

Figure 1. Study Selection Flowchart Based on PRISMA-ScR

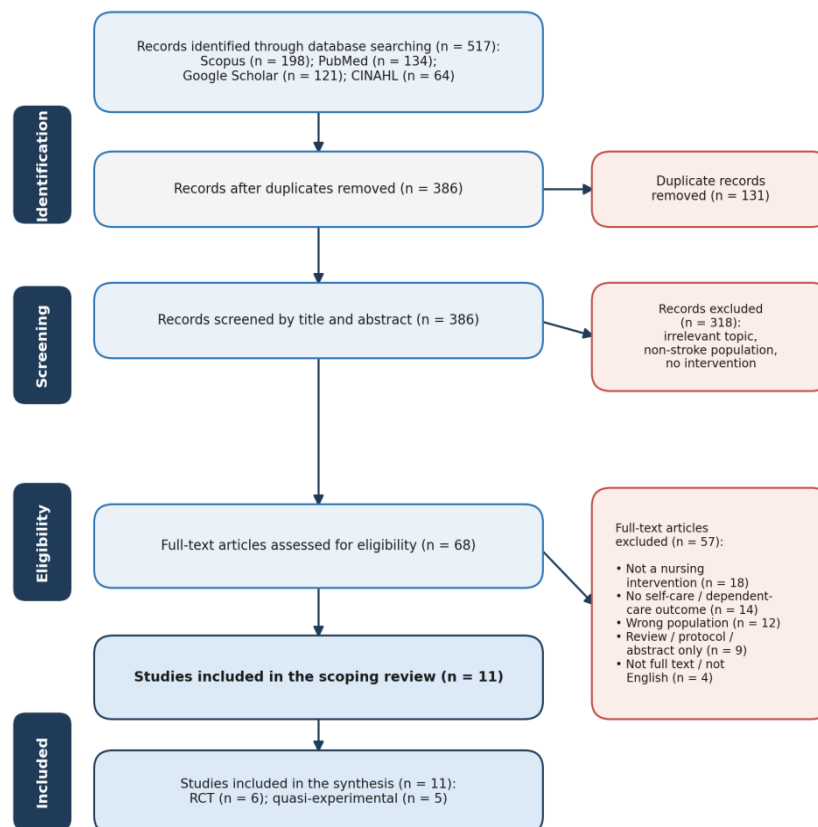


Figure 1. PRISMA-ScR flow diagram of the study selection process

Data Extraction

Data were systematically extracted using a structured charting form, including: author and year, country, study design, participants (patient, caregiver, or dyad) and sample size, intervention type and components, comparison, outcome measures, and key findings relating to self-care, self-efficacy, caregiver skill, burden, resilience, and quality of life.

Assessment of Methodological Quality

Although methodological quality assessment is optional in the JBI scoping review guidelines, it was performed to enhance the rigour and transparency of the synthesis (Peters et al., 2020). Randomised controlled trials were appraised using the JBI Critical Appraisal Checklist for Randomized Controlled Trials (13 items), and quasi-experimental studies using the JBI Critical Appraisal Checklist for Quasi-Experimental Studies (9 items). The appraisal was used to describe methodological strengths and to inform interpretation, not as a basis for excluding studies.

Data Analysis

Data were analysed using a thematic synthesis approach through three sequential stages: open coding (identification of initial codes from intervention components and outcomes), axial coding (grouping similar codes into categories), and selective coding (integration of categories into core themes) (Thomas & Harden, 2008).

Theoretical Interpretation

The themes generated through synthesis were interpreted using Orem's Self-Care Deficit Nursing Theory. Interventions were positioned as expressions of nursing agency (predominantly the supportive-educative nursing system); their targets were mapped onto self-care agency (patient) and dependent-care agency (caregiver); and their outcomes were interpreted as the degree to which the therapeutic self-care demand of the post-stroke dyad was met (Orem, 2001).

Result**Characteristics of the Included Studies**

The eleven included studies originated from eight countries — Indonesia, Brazil, Turkey, Thailand, China, Portugal, India, and Iran — and comprised six randomised controlled trials and five quasi-experimental studies. The interventions targeted family caregivers, stroke survivors, or the patient–caregiver dyad. The full characteristics are presented in Table 3.

Table 3. Characteristics of the Included Studies

No	Author (Year)	Country	Design	Participants / Sample	Intervention & Key Findings
1	Ardidhana et al. (2024)	Indonesia	Quasi-experimental	Stroke patients & family caregivers	Self-care guideline package to optimise family self-efficacy; associated with improved family self-efficacy and reduced rehospitalisation rates.
2	Bierhals et al. (2023)	Brazil	Randomised controlled trial	Caregivers of aged stroke survivors	Nurse-led supportive intervention; improved caregiver quality of life relative to usual care.
3	Bitek & Erol (2023)	Turkey	Randomised controlled trial	Stroke patients & caregivers	Structured discharge training plus telephone counselling; improved patient functional status and reduced caregiver burden.
4	Rodrigues et al. (2021)	Brazil	Quasi-experimental (pilot)	Informal caregivers	Educational intervention; increased caregiver skill and competence in providing care.
5	Deepradit & Powwattana (2023)	Thailand	Cluster randomised controlled trial	Post-stroke patients & families	Family-based programme; improved family management and patient outcomes versus control.
6	Lin et al. (2022)	China	Randomised controlled trial	Stroke survivors	Nurse-led health-coaching programme; improved hospital-to-home transitional care and self-management.
7	Dos Santos et al. (2023)	Portugal	Quasi-experimental	Informal caregivers of dependent older adults	Rehabilitation-nurse training of caregivers; enhanced caregiver knowledge and care competence.
8	Mei et al. (2025)	China	Randomised controlled trial	Elderly stroke patients	Rehabilitation nursing combined with nutritional intervention; improved self-care ability and nutritional status.
9	Niranjan et al. (2025)	India	Quasi-experimental (pilot)	Stroke caregivers	Family intervention package; improved caregiver self-efficacy.
10	Nooreddini et al. (2024)	Iran	Randomised controlled trial	Family caregivers of stroke patients	Self-care support programme; improved caregiver quality of life and resilience.
11	Yao et al. (2026)	China	Quasi-experimental	Family caregivers (perioperative stroke)	Five-tone music intervention with a nursing communication information

system; improved caregiver psychological coping.

Note: RCT = randomised controlled trial. Source: analysis of included studies, 2026. Reported findings are summarised from the study aims and abstracts and should be verified against the full texts.

Methodological Quality Assessment

Methodological quality was appraised with the appropriate JBI checklist for each design. Across the six randomised controlled trials, scores ranged from 9 to 11 of 13, with the items most often rated “unclear” being allocation concealment (Q2) and blinding of outcome assessors (Q6); blinding of participants and personnel (Q4–Q5) was generally not feasible given the educational nature of the interventions. The five quasi-experimental studies scored 7 to 9 of 9, with absence of a concurrent control group (Q4) being the most common limitation in the pilot studies. Overall, all included studies were judged to be of moderate-to-high methodological quality, supporting confidence in the synthesis. Results are presented in Tables 4a and 4b.

Table 4a. JBI Critical Appraisal — Randomised Controlled Trials (13 items)

Author (Year)	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Score	Category
Bierhals et al. (2023)	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	11/13	High
Bitek & Erol (2023)	Y	U	Y	N	N	U	Y	Y	Y	Y	Y	Y	Y	9/13	Moderate
Deepradit & Powwattana (2023)	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	11/13	High
Lin et al. (2022)	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	11/13	High
Mei et al. (2025)	Y	U	Y	N	N	U	Y	Y	Y	Y	Y	Y	Y	9/13	Moderate
Nooreddini et al. (2024)	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	11/13	High

Legend: Y = Yes (met); N = No; U = Unclear. Q1–Q13 = JBI RCT checklist items. High ≥ 10/13; Moderate 7–9/13; Low ≤ 6/13.

Table 4b. JBI Critical Appraisal — Quasi-Experimental Studies (9 items)

Author (Year)	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Score	Category
Ardidhana et al. (2024)	Y	Y	Y	N	Y	Y	Y	Y	Y	8/9	High
Rodrigues et al. (2021)	Y	Y	Y	N	Y	U	Y	Y	Y	7/9	High
dos Santos et al. (2023)	Y	Y	Y	N	Y	Y	Y	Y	Y	8/9	High
Niranjan et al. (2025)	Y	Y	Y	N	Y	U	Y	Y	Y	7/9	High
Yao et al. (2026)	Y	Y	Y	Y	Y	Y	Y	Y	Y	9/9	High

Legend: Y = Yes (met); N = No; U = Unclear. Q1–Q9 = JBI Quasi-Experimental checklist items. High ≥ 7/9; Moderate 5–6/9; Low ≤ 4/9.

Thematic Synthesis

Open, axial, and selective coding of the intervention components and outcomes generated four core themes, summarised in Table 5.

Table 5. Results of Selective Coding and Core Themes

Core Theme	Orem Mapping	Representative Studies & Essence
CT I. Structured education and skills training to build dependent-care agency	Supportive-educative nursing system → dependent-care agency	Rodrigues et al. (2021); dos Santos et al. (2023); Bitek & Erol (2023); Niranjan et al. (2025). Structured education and hands-on training raise caregiver knowledge, skill, and self-efficacy.
CT II. Self-care support and self-efficacy enhancement programmes	Supportive-educative system → self-care agency & dependent-care agency	Ardidhana et al. (2024); Mei et al. (2025); Nooreddini et al. (2024). Programmes build patient self-care ability and family self-efficacy, lowering rehospitalisation.
CT III. Hospital-to-home transitional and family-based care	Partly compensatory → supportive-educative continuity	Lin et al. (2022); Deepradit & Powwattana (2023); Bierhals et al. (2023). Coaching and family-based programmes bridge the discharge gap and sustain the dyad.
CT IV. Psychosocial, communication, and resilience-oriented support	Supportive-educative system → caregiver coping & resilience	Yao et al. (2026); Bitek & Erol (2023); Nooreddini et al. (2024). Counselling, communication systems, and resilience support strengthen caregiver coping and quality of life.

Core Theme I: Structured Education and Skills Training to Build Dependent-Care Agency

A central strand of evidence concerns structured educational and skills-training interventions that directly target the caregiver's dependent-care agency. Educational programmes delivered to informal caregivers improved their practical caregiving skill and competence, equipping them to meet the post-stroke patient's therapeutic self-care demand (dos Santos et al., 2023; Rodrigues et al., 2021). Training delivered by rehabilitation nurses was particularly effective in translating knowledge into competent practice for caregivers of dependent older adults (dos Santos et al., 2023). Structured discharge training, reinforced by follow-up counselling, both improved patient functional status and reduced caregiver burden (Bitek & Erol, 2023), while a family-focused intervention package raised caregiver self-efficacy (Niranjan et al., 2025). From Orem's perspective, these interventions operate as supportive-educative nursing systems that build dependent-care agency where the survivor's own self-care agency is insufficient.

Core Theme II: Self-Care Support and Self-Efficacy Enhancement Programmes

A second strand focuses on programmes that strengthen self-efficacy and self-care ability across both members of the dyad. A self-care guideline package designed to optimise family self-efficacy was associated with reduced rehospitalisation among stroke patients, illustrating how strengthened agency translates into hard clinical outcomes (Ardidhana et al., 2024). On the patient side, rehabilitation nursing combined with nutritional intervention improved the self-care ability and nutritional status of elderly stroke patients (Mei et al., 2025), and a structured self-care support programme improved caregivers' quality of life and resilience (Nooreddini et al., 2024). These findings demonstrate that self-efficacy is a modifiable mechanism through which nursing agency simultaneously develops patient self-care agency and family dependent-care agency.

Core Theme III: Hospital-to-Home Transitional and Family-Based Care

A third strand addresses the vulnerable transition from hospital to home. A nurse-led health-coaching programme improved transitional care and self-management for stroke survivors, smoothing the shift from professional to family-supported care (Lin et al., 2022). A family-based programme delivered as a cluster trial improved family management capacity and patient outcomes (Deepradit et

al., 2023), and a supportive intervention for caregivers of aged stroke survivors improved their quality of life across the transition (Bierhals et al., 2023). In Orem's terms, these interventions manage the shift from a partly compensatory nursing system in hospital toward a supportive-educative system that sustains the dyad at home.

Core Theme IV: Psychosocial, Communication, and Resilience-Oriented Support

A fourth strand targets the psychological and relational dimensions of caregiving. A five-tone music intervention combined with a nursing communication information system improved the psychological coping of family caregivers during the perioperative stroke period (Yao et al., 2026). Telephone counselling added to discharge training contributed to reduced caregiver burden (Bitek & Erol, 2023), and self-care support enhanced caregiver resilience (Nooreddini et al., 2024). These interventions show that dependent-care agency is not only a matter of technical skill but also of psychological capacity — coping, resilience, and effective communication with the care team — which supportive-educative nursing can strengthen.

An Integrative Conceptual Framework Based on Orem's Self-Care Deficit Nursing Theory

Figure 2. Integrative Conceptual Framework of Nursing Interventions Enhancing Dependent-Care Agency and Self-Care in Post-Stroke Patients

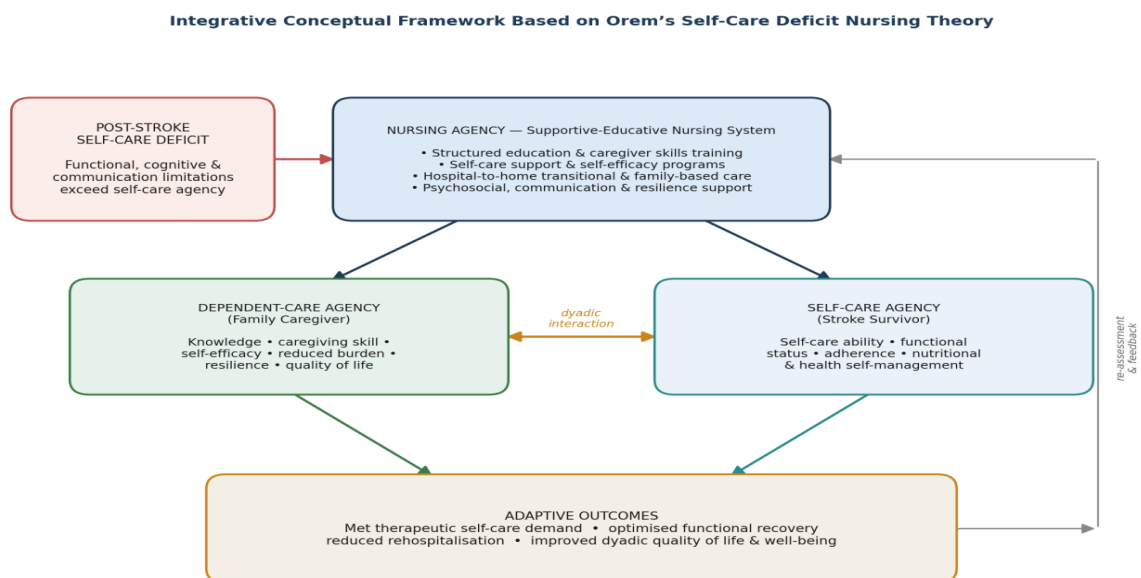


Figure 2. Integrative conceptual framework of nursing interventions enhancing dependent-care agency and self-care in post-stroke patients (adapted from Orem's Self-Care Deficit Nursing Theory)

Drawing on the four themes, an integrative conceptual framework was developed to depict how nursing interventions operate within Orem's Self-Care Deficit Nursing Theory (Figure 2). The post-stroke self-care deficit — arising when functional, cognitive, and communication limitations exceed the survivor's self-care agency — is the focal stimulus that activates nursing agency. Nursing agency is expressed predominantly through the supportive-educative nursing system and encompasses the four intervention families identified in this review: education and skills training, self-care and self-efficacy support, transitional and family-based care, and psychosocial, communication, and resilience support. These interventions act on two parallel and interacting targets: the survivor's self-care agency (self-care ability, functional status, adherence, and health self-management) and the family caregiver's dependent-care agency (knowledge, skill, self-efficacy, reduced burden, resilience, and quality of life). Because self-care after stroke is dyadic (Wang et al., 2025), the two capacities continually influence one another. When developed together, they enable the therapeutic self-care demand of the dyad to be met, producing

adaptive outcomes — optimised functional recovery, reduced rehospitalisation, and improved dyadic quality of life — which feed back into ongoing nursing re-assessment.

Discussion

Education and Skills Training as the Foundation of Dependent-Care Agency

This review confirms that structured education and skills training are foundational nursing strategies for building dependent-care agency after stroke. The consistent improvements in caregiver skill, competence, and self-efficacy reported across studies (dos Santos et al., 2023; Niranjan et al., 2025; Rodrigues et al., 2021) align closely with Orem's proposition that the supportive-educative nursing system develops the capability of the dependent-care agent. These findings are especially salient given qualitative evidence that caregivers often feel unprepared and isolated during the acute phase (Heim et al., 2024) and that their needs centre on information and involvement (Lobo et al., 2023). Education that is structured, hands-on, and reinforced after discharge appears to directly address this preparation gap.

Self-Efficacy as a Mechanism Linking Intervention to Outcome

A recurring mechanism across the included studies is self-efficacy. Programmes that explicitly targeted family self-efficacy not only raised caregivers' confidence but were also associated with reduced patient rehospitalisation (Ardidhana et al., 2024) and improved caregiver resilience and quality of life (Nooreddini et al., 2024). This positions self-efficacy as a key intermediary between nursing agency and both self-care and dependent-care outcomes. The parallel improvement in patient self-care ability following combined rehabilitation and nutritional nursing (Mei et al., 2025) reinforces the view that the survivor's self-care agency and the caregiver's dependent-care agency are best developed together rather than in isolation.

Bridging the Hospital-to-Home Transition

The transition from hospital to home is a recognised point of vulnerability, and the reviewed interventions show how nursing can bridge it. Nurse-led health coaching improved transitional care and self-management (Lin et al., 2022), while family-based programmes strengthened the family's collective management capacity (Deepradit et al., 2023) and improved caregiver quality of life (Bierhals et al., 2023). These results reflect the assumption of the caregiver role as a developmental transition that requires structured nursing support (Saucedo-Pahua et al., 2023), and they demonstrate the value of continuity that carries the dyad from a partly compensatory hospital system into a sustainable supportive-educative system at home.

The Psychosocial Dimension of Caregiving Capacity

The evidence also highlights that dependent-care agency has an essential psychosocial dimension. Interventions addressing coping, communication, and resilience — including a music-based programme integrated with a nursing communication system (Yao et al., 2026), telephone counselling (Bitek & Erol, 2023), and resilience-oriented self-care support (Nooreddini et al., 2024) — improved caregivers' psychological capacity to sustain the caregiving role. This complements the dyadic nature of post-stroke self-care (Wang et al., 2025), in which the emotional well-being of one member shapes the other's capacity, and indicates that holistic nursing must attend to the caregiver's psychological resources alongside technical skill.

Implications for Nursing Practice

The findings indicate that post-stroke nursing should be conceived as dyad-centred and agency-building rather than patient-only. Nurses are well placed to deliver structured, staged education that begins before discharge and continues through telephone or digital follow-up; to embed self-efficacy

enhancement and self-care goal-setting into routine care; to coordinate transitional and family-based programmes that bridge hospital and home; and to provide psychosocial, communication, and resilience support for caregivers. Routine assessment of both the survivor's self-care agency and the caregiver's dependent-care agency — together with the dyad's therapeutic self-care demand — could be adopted as a practical application of Orem's framework, enabling nurses to tailor the intensity of the nursing system to the dyad's evolving needs.

Strengths and Limitations of the Study

This review has several strengths. It applied a systematic, transparent scoping review methodology consistent with JBI and PRISMA-ScR guidance, including a staged selection process and design-appropriate JBI critical appraisal of all included intervention studies. It synthesised eleven intervention studies from eight countries with diverse health systems, and it interpreted them through a single coherent theoretical lens, yielding an integrative conceptual framework not previously articulated for post-stroke care.

Several limitations should be noted. First, the review was restricted to English-language publications from 2021 to 2026, which may have excluded relevant evidence in other languages or timeframes. Second, the included studies were heterogeneous in intervention content and outcome measures, and several were pilot or small-sample studies, which limits comparability; as a scoping review, this study maps the breadth of interventions rather than estimating pooled effects. Third, blinding was generally not feasible in these educational interventions, a recognised constraint of behavioural nursing trials. Finally, because full numerical results were not pooled, the magnitude of effects should be confirmed against the primary studies before clinical application.

Conclusion

Nursing interventions to enhance dependent-care agency and self-care in post-stroke patients can be organised into four complementary families: structured education and skills training, self-care and self-efficacy support, hospital-to-home transitional and family-based care, and psychosocial, communication, and resilience-oriented support. Interpreted through Orem's Self-Care Deficit Nursing Theory, these interventions function as supportive-educative nursing systems that develop, in parallel, the survivor's self-care agency and the family caregiver's dependent-care agency. Because self-care after stroke is dyadic, the two capacities are mutually reinforcing, and interventions that address them together are associated with improved self-care ability, functional status, caregiver self-efficacy, resilience, and quality of life, as well as reduced caregiver burden and rehospitalisation.

The integrative conceptual framework proposed here supports a paradigm shift from patient-only, deficit-focused care toward dyad-centred, agency-building care. Further research is recommended to develop and rigorously test theory-based, dyadic nursing interventions — particularly larger randomised trials with standardised self-care and dependent-care agency outcomes — across acute, rehabilitation, and community settings.

Abbreviations

SCDNT: Self-Care Deficit Nursing Theory

JBI: Joanna Briggs Institute

PRISMA-ScR: Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews

PCC: Population, Concept, Context

RCT: Randomised Controlled Trial

CT: Core Theme

Ethical Statement

This study is a scoping review that synthesises secondary data from openly published, publicly accessible articles. In accordance with applicable regulations, specific ethical approval is not required for research based on secondary-data synthesis (ethical clearance not required for literature review).

Conflicts of interest

The authors declare that there are no conflicts of interest in the conduct or reporting of this study.

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