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NURSING INTERVENTIONS TO PROMOTE SELF-CARE IN ELDERLY PATIENTS WITH HEART FAILURE: FROM DISCHARGE TO HOME

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INTRODUCTION

Heart Failure (HF) represents a major public health challenge globally, characterized by high prevalence, significant morbidity, and elevated mortality rates. It is a clinical syndrome resulting from structural or functional cardiac abnormalities, leading to a progressive decline in the patient's functional capacity and quality of life. According to the Portuguese Association of Support for Patients with HF (AADIC, 2022), this pathology predominantly affects the elderly, with approximately 80% of cases diagnosed in individuals over 65 years of age.

In the Portuguese context, the demographic aging process is particularly pronounced. Data from the National Statistics Institute (INE, 2022; 2023) emphasize the growing elderly population, which often presents multiple comorbidities and complex care needs. This demographic shift highlights the urgency of developing specialized nursing interventions, particularly during the hospital-to-home transition—a period recognized as highly vulnerable for clinical safety and therapeutic continuity.

The transition to home requires that the elderly and their family caregivers possess adequate health literacy and self-care skills. Effective self-care management is essential to prevent clinical decompensation and reduce hospital readmissions. In this regard, the theoretical framework of Dorothea Orem (2001) provides a robust foundation for nursing practice. Orem's Self-Care Deficit Nursing Theory emphasizes the nurse's role in identifying self-care demands and implementing “methods of helping”—such as teaching, guiding, and supporting—to empower the patient towards autonomy and health maintenance.

Despite the recognized importance of this theme, there is a need to synthesize the existing evidence on specific nursing interventions that effectively promote empowerment during this transition. Therefore, this integrative literature review aims to identify nursing care interventions that promote the empowerment of elderly individuals with HF for a safe transition to the home environment. By synthesizing recent scientific evidence (2019-2024), this study intends to contribute to the enhancement of clinical practice and the promotion of safety and quality in geriatric nursing care.

1. THEORETICAL FRAMEWORK / LITERATURE REVIEW / STATE OF THE ART / CONCEPTUAL MODEL

To understand the clinical and social impact of this condition, it is fundamental to analyze the specificities of HF in the elderly population and its current expression in the Portuguese demographic context.

1.1. HF in the Elderly

HF is defined as a complex clinical syndrome resulting from structural or functional cardiac abnormalities that impair cardiac output (Associação de Apoio aos Doentes com IC [AADIC], 2022). In Portugal, the pronounced demographic aging is reflected in the prevalence of this pathology, as approximately 80% of diagnosed cases occur in individuals over 65 years of age (Instituto Nacional de Estatística [INE], 2023). In this age group, HF is frequently accompanied by multiple comorbidities and cognitive decline, which hinders the management of the therapeutic regimen and the maintenance of clinical stability following hospital discharge.

1.2. Care Transition and Clinical Safety

The transition from hospital to home is a critical period where discontinuity of care can result in decompensation episodes and early readmissions. Clinical safety during this phase depends on discharge planning that prioritizes health literacy and the empowerment of the client and their family (Van Spall et al., 2019). Person-centered interventions, including medication reconciliation and the recognition of warning signs (such as sudden weight gain or edema), are decisive factors in reducing the “revolving door” phenomenon within healthcare institutions.

1.3. Conceptual Model: Orem's Self-Care Theory

This study is grounded in Dorothea Orem's (2001) Self-Care Deficit Nursing Theory. According to Orem, self-care is the practice of activities initiated and performed by individuals on their own behalf to maintain life, health, and well-being. In the elderly with HF, a self-care deficit frequently arises when the demands of the disease exceed their self-care agency.

Nursing intervention is organized through nursing systems, with the **supportive-educative system** standing out in the context of the transition to home. The nurse employs methods such as teaching, guiding, and supporting to empower the elderly, thereby promoting their autonomy (Orem, 2001). This theoretical approach allows nursing care to be structured not only to treat the pathology but to provide the client with the necessary skills for the self-management of the disease within their family environment.

2. METHODS

To meet the proposed objective, an integrative literature review was conducted. This method allows for a comprehensive understanding of the phenomenon by enabling the inclusion of diverse studies, providing a holistic view of the subject (Whittemore & Knaff, 2005).

The research question was formulated using the PCC mnemonic, where:

- P (Population): Elderly patients (aged 65 and over);
- C (Concept): Nursing care interventions for empowerment and self-care;
- C (Context): Safe transition from hospital to home.

Consequently, the following central research question was defined: “Which nursing care interventions promote the empowerment of elderly patients with HF during a safe transition to the home?”

2.1. Sample

The sample selection process followed a rigorous “funneling” strategy. Initially, the electronic search yielded 540 potential results. After applying the inclusion criteria—full-text primary studies published between 2019 and 2024 in Portuguese, English, or Spanish—and removing duplicates, 11 articles were selected for full-text eligibility.

Following a critical reading and assessment of their relevance to the research question, the final sample consisted of 3 articles. These studies were selected because they specifically addressed nursing interventions for elderly patients with HF during the hospital-to-home transition. The sample size reflects the specificity of the inclusion cri-

teria, prioritizing high-quality evidence that directly informs nursing practice within the chosen theoretical framework.

2.2. Data collection instruments

To ensure the systematic and organized extraction of information, a standardized data collection instrument was developed and applied to the final sample. This instrument allowed for the categorization of data into the following domains:

1. Identification: Title, authors, year of publication, and country of origin;
2. Methodological Characteristics: Study design and level of evidence;
3. Core Findings: Main objectives, specific nursing interventions identified, and primary clinical outcomes (e.g., readmission rates, self-care adherence, and health literacy).

The use of this structured instrument facilitated the subsequent stage of data reduction and comparison, ensuring that the synthesis of evidence was grounded in the original data while allowing for an integrated analysis of the results across the different studies.

2.3. Study selection process

The search and selection process was conducted independently by the researchers to ensure objectivity and minimize bias. The flow of studies through the different phases of the integrative review, from the initial identification in databases to the final inclusion, is strictly documented and illustrated in the PRISMA flow diagram (Figure 1). Of the 11 articles assessed for eligibility through full-text reading, 8 were excluded for not meeting the specific PCC criteria,

primarily due to not focusing exclusively on the hospital-to-home transition or the elderly population. Two independent reviewers performed the quality appraisal to minimize bias.

3. RESULTS

The final sample of this integrative review consisted of three primary studies that met all the inclusion criteria. The studies were published between 2019 and 2022, conducted in diverse geographical contexts (Canada, Ethiopia, and China), and utilized different methodological designs, including randomized clinical trials and cross-sectional studies.

Data evaluation was performed using the Joanna Briggs Institute (JBI) critical appraisal checklists, specific to each study design. This process ensured that the evidence integrated into the review maintained high methodological standards, minimizing the risk of bias. The extraction of findings focused on the PCC components, particularly emphasizing nursing interventions that bridge the gap between hospital care and home-based self-management.

The characterization of the included studies and the synthesis of the main findings are presented in Table 1.

3.1. Synthesis of Nursing Interventions for Empowerment

To operationalize the findings, the main nursing interventions identified in the review were categorized into priority intervention areas. This synthesis focuses on the practical application of Orem's supportive-educative system to ensure a safe transition (Table 2).

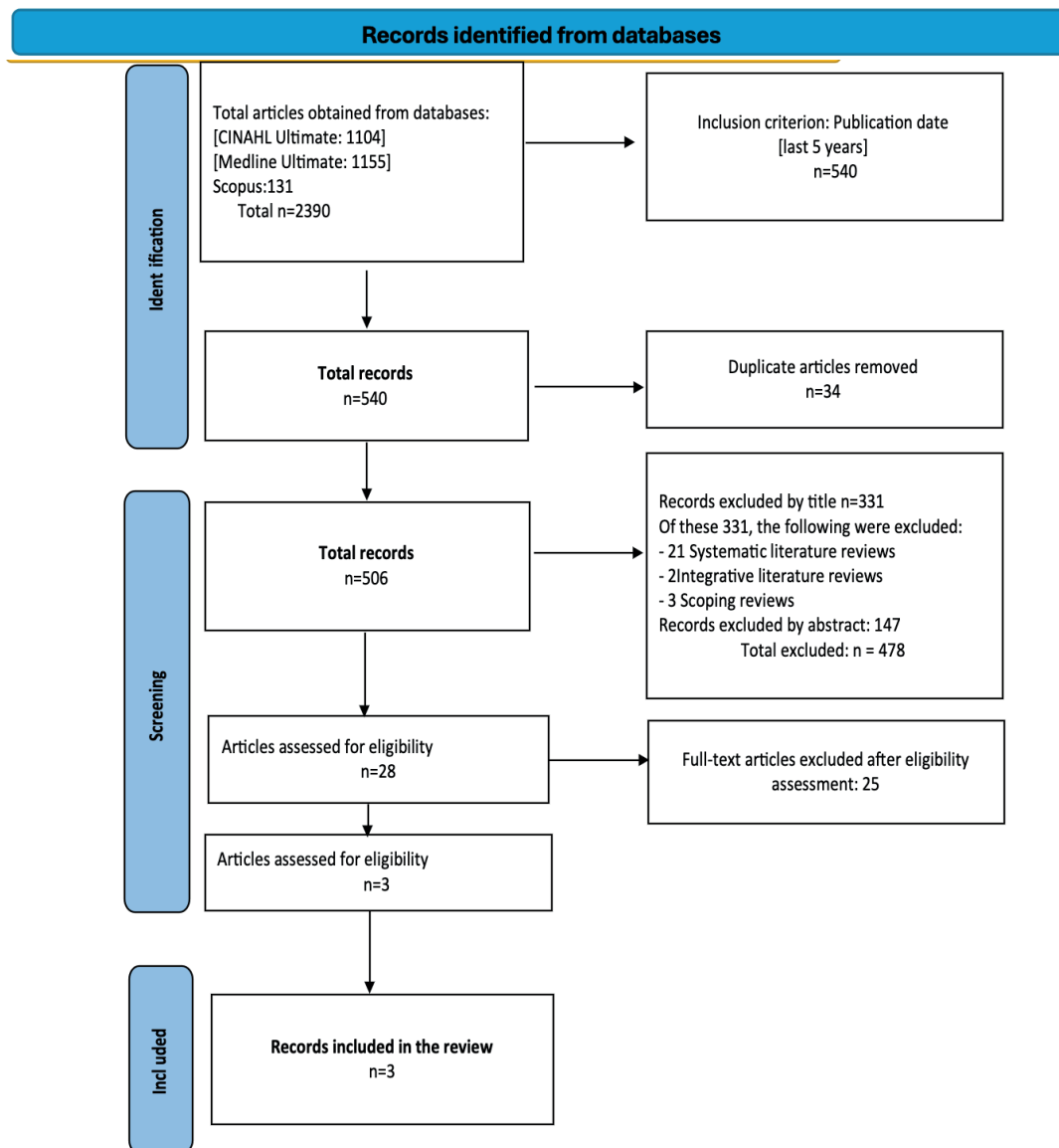


Figure 1 – Prisma Flow Diagram.

Table 1 Synthesis of the studies included in the review

Author (Year)	Title	Study Design	Population	Objectives	Nursing Care Interventions for Empowerment	Quality Analysis (JBI)
Van Spall et al. (2019)	Effect of Patient-Centered Transitional Care Services on Clinical Outcomes	Randomized Clinical Trial (RCT)	Patients hospitalized for HF (mean age 77)	To evaluate the impact of transitional care on readmission and mortality.	Structured discharge planning; early post-discharge follow-up; medication reconciliation; person-centered education.	High Quality (Meets all RCT checklist criteria)
Seid et al. (2022)	Adherence to self-care behaviors and associated factors among adult HF patients	Cross-sectional Study	Adult patients with HF (high prevalence of elderly)	To assess adherence to self-care and identify barriers.	Caregiver involvement in health education; adaptation to cognitive impairment levels; literacy-based guidance.	Good Quality (Meets cross-sectional criteria)
Chen et al. (2020)	Transition experience and self-care needs of elderly patients with HF	Descriptive Qualitative Study	Elderly patients (≥ 65 years) in transition to home	To explore self-care needs and transition experiences.	Teach-back method ; telephone follow-up; continuous emotional support; symptom recognition training.	High Quality (Meets qualitative checklist criteria)

Table 2 Nursing Interventions for the Empowerment of the Elderly with HF

INTERVENTION DOMAIN	SPECIFIC NURSING ACTIONS	OBJECTIVE / RATIONALE
COGNITIVE & LITERACY ASSESSMENT	Screening for cognitive impairment (e.g., Mini-Mental State Exam). Identification of the primary family caregiver as a “co-agent” of care.	To adapt the teaching language and complexity to the patient’s actual “self-care agency.”
SYMPTOM MANAGEMENT & “RED FLAGS”	Training for daily weight monitoring and edema check. Recognition of Red Flags: Sudden weight gain (>1.5kg in 2 days), increased dyspnea (shortness of breath), orthopnea, or worsening fatigue.	To empower the patient for early detection of cardiac decompensation and timely contact with the health team.
HEALTH EDUCATION (TEACH-BACK)	Application of the Teach-back method for salt/fluid intake. Use of visual aids (pictograms) for symptom and medication recognition.	To confirm that the elderly/caregiver can explain the care plan in their own words, ensuring effective learning.
THERAPEUTIC MANAGEMENT	Medication reconciliation and organization (pillboxes). Education on purpose and side effects of diuretics and beta-blockers.	To reduce medication errors and improve adherence in polypharmacy contexts.
TRANSITIONAL CONTINUITY	Early telephone follow-up (ideally within 72 hours). Structured discharge summary provided to both the patient and the primary care nurse.	To bridge the gap between hospital and home, providing a safety net during the most vulnerable period.

The strength of these recommendations is supported by the high methodological quality of the evidence analyzed, particularly the randomized clinical trial (Level II), which, according to the hierarchy proposed by Melnyk and Fineout-Overholt (2019), provides a robust basis for clinical decision-making in nursing.

4. DISCUSSION

The results of this integrative review highlight that nursing interventions for the elderly with HF (HF) must transcend technical clinical management, focusing on the empowerment of both the patient and the family caregiver. Analyzing these findings through Dorothea Orem's Self-Care Deficit Nursing Theory (2001), it is evident that the hospital-to-home transition represents a period where the "self-care demand" often exceeds the "self-care agency" of the elderly.

The high prevalence of cognitive impairment (63%) identified by Seid et al. (2022) is a critical factor. In Orem's framework, this requires a shift from a "supportive-educative system" to a "partly compensatory system," where the nurse must necessarily include the family caregiver as an extension of the patient's self-care agency. The evidence suggests that empowerment is only effective when health literacy is adapted to these cognitive limitations, ensuring that the therapeutic regimen is not only prescribed but understood. In the context of the elderly with HF, the management of polypharmacy emerges as a central focus of nursing intervention. The complexity of medication regimens, often exacerbated by comorbidities, represents a significant 'self-care demand' that can jeopardize clinical safety. Within Orem's supportive-educative

system, the nurse must implement strategies such as medication reconciliation and the use of visual aids to simplify the therapeutic plan. By acting as a mediator, the nurse enhances the patient's and caregiver's agency, ensuring they are not just compliant, but competent in managing medications, which is a decisive factor in preventing decompensation and subsequent hospital readmission.

The high prevalence of cognitive impairment identified in this population (63%) poses a significant challenge to the development of self-care agency. Within Orem's conceptual framework, health literacy is not merely an individual attribute but a foundational pillar of the power components of self-care agency. Therefore, the transition to home requires nursing interventions that transcend traditional verbal education. The evidence suggests a critical need for 'partly compensatory' strategies, such as the use of visual aids, pictograms for medication management, and the simplification of the therapeutic regimen. These tools act as cognitive prostheses, enabling the elderly to recognize 'red flags'—such as sudden weight gain or edema—and ensuring that the supportive-educative system effectively bridges the gap between clinical knowledge and home-based safety.

The Teach-back method and early telephone follow-up, highlighted by Chen et al. (2020), emerge as gold-standard nursing interventions. These strategies align with Orem's "methods of helping," specifically "guiding" and "supporting." By asking the elderly to explain the care instructions in their own words, nurses can identify gaps in understanding and intervene before discharge, significantly reducing the risk of the "revolving door" phenomenon described by Van Spall et al. (2019).

Furthermore, the transition to the home environment requires structured discharge planning that includes medication reconciliation and the recognition of „red flags“ (symptom monitoring). These interventions empower the elderly to transition from a passive recipient of care to an active agent in managing their chronic condition, which is essential for clinical safety and the reduction of avoidable hospital readmissions.

CONCLUSION

This integrative review identified that the most effective nursing interventions for the empowerment of elderly patients with HF during the transition to the home are structured discharge planning, the use of the Teach-back method, early post-discharge follow-up, and the active involvement of family caregivers. The study concludes that applying Orem's Self-Care Theory provides a robust structure for transitional care. By focusing on enhancing the patient's self-care agency, nursing care effectively bridges the gap between hospital discharge and home safety.

Despite the rigor in the selection process, this study has limitations that must be acknowledged. Firstly, the final sample size is small (n=3), which reflects the scarcity of primary studies focusing exclusively on the nursing perspective regarding the hospital-to-home transition for the elderly with HF. Secondly, the geographical diversity of the studies (Canada, Ethiopia, and China) and the different methodological designs may limit the direct generalization of the results to the specific context of the Portuguese healthcare system. However, these limitations do not diminish the clinical relevance of the

findings, as they provide a consistent map of priority interventions for nursing practice.

For clinical practice, it is recommended that healthcare institutions standardize transitional care protocols that prioritize health literacy and cognitive assessment, ensuring that the elderly and their families are truly prepared for the challenges of home-based management of HF. Future research should focus on longitudinal studies within the national context to validate these interventions and their impact on reducing readmission rates.

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