

Rehabilitation Nursing Strategies for Older Adults with Frailty: a Qualitative Study

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Abstract

Introduction

Population aging, the prevalence of comorbidities, polypharmacy, dependence in activities of daily living, and the progressive impoverishment of many people, among other factors, have made frailty a public health concern. Implementing rehabilitation programs that can help manage or mitigate this problem is essential.

Objective

To analyze the perceptions of specialist nurses in rehabilitation nursing regarding rehabilitation programs for older adults with frailty.

Methods

We conducted a qualitative study within an interpretivist paradigm. Participants were 11 specialist nurses in rehabilitation nursing with professional experience implementing community-based rehabilitation programs for older adults with frailty. Participants completed written narratives, and we analyzed the data using content analysis following Bardin's framework.

Results

The analysis identified strategies involving physical, cognitive, and social stimulation; empowerment; patient education and skills training; health education; mobilization; and enhancement of adaptive capacity. Exercise programs included motor and respiratory training, activities-of-daily-living training, swallowing training, and toileting training. Participants associated these programs with patient satisfaction, health promotion, prevention of complications, well-being, self-care, fewer hospital admissions, and lower health care costs.

Conclusion

Rehabilitation nurses recognized the importance of tailoring rehabilitation programs to older adults with frailty and reported perceived health benefits that they considered indicative of the quality of specialized rehabilitation nursing care.

Keywords

Older Adults; Rehabilitation Nursing; Frailty; Health Outcomes; Self-care.

Introduction

Longer life expectancy, together with technological and scientific advances and the greater availability of specialized health care, has fostered a new paradigm in how health care professionals respond to health needs. As people live longer, aging has become a key focus in developing strategies to improve quality of life and delay frailty and functional decline.¹

Frailty is characterized by heightened vulnerability to adverse health outcomes, including disability, dependence, falls, and mortality.^{2,3} It involves unintentional weight loss, reduced muscle strength, reduced endurance and energy, slowness, and reduced physical activity. An older adult is considered frail if they meet three or more criteria, prefrail if they meet one or two, and nonfrail or robust if they meet none.^{2,3} According to Faria *et al.*,¹ frailty extends beyond these criteria; sociodemographic factors, traumatic or critical events, and physical, psychological, and social factors may also contribute to its development.

Age-related frailty increases susceptibility to multiple health conditions.⁵ Older adults with frailty are more likely to have chronic comorbidities, insomnia, poor oral health, and balance problems and to experience falls. They also tend to take medications that increase fall risk and to be dependent in performing activities of daily living (ADLs).⁴

The literature indicates that frailty is associated with impairments in gait and dynamic balance, which may increase the risk of falls in this population.⁵ Both fall risk and frailty among older adults can be addressed through prevention, monitoring, and referral for appropriate care, making them priorities for clinical practice and research.^{4,5} Musculoskeletal changes can impair functioning in these individuals, limiting physical activity and social participation.^{6,7}

Frailty is a public health concern, and rehabilitation nurses working in community settings play a key role in identifying older adults with frailty and implementing appropriate strategies to reduce the risk of dependence, disability, and other adverse outcomes.¹

Rehabilitation for older adults with frailty requires a structured, individualized program⁸ that includes motor training and may also incorporate respiratory training, activities-of-daily-living training, and care plans addressing feeding and elimination needs, depending on each older adult's specific condition. Among rehabilitation programs, those involving motor training—such as endurance, strength, balance, and flexibility exercises—have received the most attention in studies of older adults with physical frailty.^{9–16}

Rehabilitation nurses have the competencies required to design and implement these programs for older adults. However, knowledge in this area remains limited. There is therefore a need to understand rehabilitation nurses' perceptions of care for older adults with frailty, particularly the strategies they implement and the health outcomes they perceive to be associated with those strategies. This gap prompted the following research question: What are rehabilitation nurses' perceptions of rehabilitation programs for older adults with frailty?

Accordingly, this study aimed to analyze the perceptions of specialist nurses in rehabilitation nursing regarding rehabilitation programs for older adults with frailty. The findings may help improve rehabilitation nursing care by informing the design of interventions better suited to the Portuguese context and centered on older adults with frailty.

Methods

We conducted an exploratory descriptive qualitative study grounded in the interpretivist paradigm. This approach supports the development of health-related knowledge by accounting for the complexity and subjectivity of the phenomena under study. It provides insight into the experiences, feelings, beliefs, behaviors, and attitudes of participants¹⁷ in interactions involving rehabilitation nursing care. Narratives are therefore essential to understanding the complexity of the phenomenon.¹⁷ We followed the Consolidated Criteria for Reporting Qualitative Research (COREQ) in reporting this study.

Participants were 11 specialist nurses in rehabilitation nursing who provided specialized care to older adults with frailty in community settings at different health care institutions in Portugal. The number of participants was determined by data saturation: no new information emerged after the ninth narrative. We therefore obtained narratives from two additional nurses to confirm saturation, without changing the analytic framework. Nurses were eligible if they had participated in rehabilitation programs for older adults with frailty. Nurse managers without direct involvement in program planning or implementation were excluded.

The research team comprised four faculty members with doctoral degrees and experience in qualitative research. Two taught community rehabilitation nursing in the master's program in nursing, and the other two served as experts in reviewing the narrative prompt guide and the coding and categorization stages of the content analysis.

We used written narratives, a widely used data collection method in social and health research, to capture the meanings that specialist nurses in rehabilitation nursing attributed to lived experiences¹⁸ in clinical practice settings. We developed a narrative prompt guide, which two experts reviewed to evaluate the instrument's content validity.

Throughout this process, our primary aim was to ensure that the narratives aligned with the study objectives and allowed participants to reorganize their experiences of providing care to older adults coherently and meaningfully. This allowed them to make sense of those experiences and narrate them as an integrated process within clinical practice.¹⁸

The narrative prompt guide focused on rehabilitation nurses' perceptions of the strategies used in rehabilitation programs for older adults with frailty and the nursing-sensitive outcomes they associated with implementing those strategies.

The research team contacted participants at two points during the study. At the first contact, researchers called potential participants to determine their interest in participating. Those who expressed interest received the narrative prompt guide and informed consent form by email.

All participants prepared their narratives and returned them to the researchers in a read-only format, together with their signed informed consent forms. This process took place from July to November 2024.

Written narratives constitute a primary source of participants' reflections, particularly in educational and research settings.¹⁸

We analyzed the narratives using thematic categorical content analysis following Bardin's framework.¹⁹ The principal investigator oversaw the data analysis process to ensure procedural consistency. In the first stage, we conducted an initial reading of all narratives to determine whether the information collected was relevant to the study objectives. The narratives constituted the corpus for analysis—that is, the material produced for the study and subjected to analysis.¹⁹ In the second stage, we explored the material using three essential procedures: selecting the units of analysis, enumeration, and categorization.¹⁹ The units of analysis comprised recording and context units. We defined the theme as the recording unit.¹⁹ A theme is a statement about a topic that may encompass a wide range of individual formulations. The context unit provided the basis for coding and interpreting the meaning of each recording unit; in this study, it corresponded to each participant's narrative in relation to the topic presented in the narrative prompt guide. During enumeration, we focused on the presence of elements in participants' narratives rather than the frequency with which recording units occurred.¹⁹ During categorization, we defined two main categories *a priori* based on our conceptualization of the phenomenon under study. We derived the indicators through semantic analysis of the manifest content of the coded recording units. This inductive process enabled data-based inferences. These inferences—logical deductions about the meaning of statements¹⁹—were central to defining the indicators within each category¹⁹ and interpreting the meanings conveyed in participants' narratives.

To ensure study rigor, we used the following procedures:

- i. We followed the study protocol and rigorously documented all procedures from planning through data collection;¹⁷
- ii. We described the data collection and analysis procedures, as well as the study's theoretical framework;
- iii. Two subject-matter experts reviewed and validated the content analysis process and recommended improvements;
- iv. The research team used constant comparison of the findings and coding process, thereby enhancing the transparency of the inductive analysis. All team members had experience conducting qualitative research.

To comply with the ethical principles applicable to this type of study, we submitted the research protocol to the ethics committee of the higher education institution. We then contacted specialist nurses in rehabilitation nursing. The Ethics Committee of the Polytechnic Institute of Beja approved the study under Process No. 4/2024 on February 27, 2024. Participants were informed that participation was strictly voluntary and that they could withdraw at any time without having to provide a reason and without affecting any future care they might receive. We assured participants of anonymity and the confidentiality of their data, in keeping with the professional duty of confidentiality. All participants provided written informed consent.

Results

Eleven specialist nurses in rehabilitation nursing participated in the study. Of these, 8 were female, and 3 were male. Ten participants worked in the Algarve region and 1 in Beja.

The analysis was structured around two categories: “Perceptions of professional intervention strategies” and “Perceived health outcomes associated with the implementation of care strategies.” Table 1 presents these categories and the indicators derived from the analysis.

Table 1 – Categories and indicators

Category	Subcategory	Indicator
Perceptions of professional intervention strategies	Strategies	– Physical, cognitive, and social stimulation – Patient education and skills training – Patient empowerment – Health education – Patient mobilization – Enhancement of adaptive capacity
	Exercise programs	– Motor training program – Activities-of-daily-living training program – Respiratory training program
Perceived health outcomes associated with the implementation of care strategies		– Prevention of complications – Health promotion – Patient education and skills development – Well-being and self-care – Hospital admissions

Source: Study data, 2025.

Perceptions of professional intervention strategies

This category comprised two subcategories: “Strategies” and “Exercise programs.”

Strategies

The Strategies subcategory encompassed the following indicators: physical, cognitive, and social stimulation; patient and caregiver education and skills training; patient empowerment; health education; patient mobilization; and enhancement of adaptive capacity.

Three participants emphasized physical, cognitive, and social stimulation in their narratives. They described this strategy as key to mitigating the adverse effects of aging and improving functional capacity and quality of life among older adults with frailty.

The strategies used include cognitive, social, and physical stimulation. (P2)
[...] in the service where I work, my interventions tend to focus more on prevention than on direct intervention. This is extremely important because prevention is fundamental to maintaining and enhancing older adults' physical and psychological abilities. Prevention grounded in physical and mental health stimulation may therefore help mitigate the adverse effects of aging and contribute to improved functional capacity and quality of life among older adults. (P9)

Six participants emphasized patient and caregiver education and skills training as a professional intervention strategy. They described this process as person-centered and involving collaborative goal setting with everyone engaged in the older adult's care. One participant particularly emphasized education and skills training aimed at preventing falls.

As far as possible, our strategies include educating and training caregivers to care for older adults with frailty, raising awareness among caregivers and older adults about preventing complications, and clarifying the distinction between fully or partially taking over the older adult's activities of daily living and supervising their performance. (P1)

We provide education and skills training to older adults and their caregivers. We then reassess the older adult to monitor their condition and, if necessary, adjust the care plan or discharge them from care. Our focus in home care is education and skills training. (P4)

Empowerment of older adults, their families, and caregivers was considered essential to the rehabilitation process. One participant strongly emphasized this strategy as the first requirement for successful rehabilitation nursing care.

The older adult, family, and caregiver are—or should be—at the center of care. Therefore, the first strategy is to involve the older adult and family as integral members of the care process and work with them to develop a rehabilitation care plan with tangible goals through a multidisciplinary and interdisciplinary approach, while ensuring that they—the older adult, family, and caregiver—understand the plan. We usually ask them,

"What do you want? What are your goals?" I often tell them, "Fifty percent of the success of the rehabilitation process depends on them, and the other 50% depends on us as health care professionals." (P8)

Health education was highlighted as a key strategy for promoting physical exercise to prevent functional decline and falls among older adults with frailty. The following statements illustrate this strategy.

This is where rehabilitation nurses play an important role in health literacy, particularly in fall prevention among older adults. And why fall prevention? Because we receive many patients referred by the hospital to the Integrated Continuing Care Team after sustaining an intertrochanteric hip fracture in a fall in the community, whether at home or on the street. (P3)

[...] when it comes to frailty among older adults, prevention is essential. This includes encouraging physical exercise, such as upper- and lower-extremity mobility exercises, to preserve mobility and thereby prevent age-related functional decline. (P9)

Motor training programs tailored to older adults' abilities were among the strategies rehabilitation nurses used to maintain functional capacity. The following statements illustrate this strategy.

Whenever possible, we help patients stand, transfer, and move in bed, and sometimes perform passive, active-assisted, active, and resisted exercises [...]. (P1)

We implement exercises tailored to older adults' abilities and limitations to improve muscle strength, balance, mobility, and other aspects of physical function. (P4)

Rehabilitation nurses should foster adaptive capacity in older adults and their families. Their active involvement is essential to developing adaptive strategies suited to their abilities and limitations. The following statement illustrates this point.

In home care, there are countless strategies I can use. I am working in the patient's own environment, outside a hospital or any other health care facility. Above all, I have to respect the patient's wishes and space. For example, I cannot expect the patient to remove the rug from the hallway—which caused them to trip—when it has always been part of their home décor. Nor can I expect them to start using a walking aid overnight because they have gait and balance impairments. Behaviors do not change overnight. We have to negotiate care with the patient and reach a compromise that works for both of us. (P3)

Exercise programs

The "Exercise programs" subcategory comprised the following indicators: motor training program, respiratory training program, and activities-of-daily-living training program.

Eight participants highlighted motor training programs in their narratives. No participant reported exercise intensity. One participant reported exercise frequency but did not specify session duration. Regarding exercise type, most statements emphasized balance and muscle-strengthening exercises. One participant also described a training volume of 3 sets of 10 repetitions. One rehabilitation nurse reported using adaptive strategies when implementing the program. The following statements illustrate this indicator.

Usually, 3 sets of 10 repetitions are performed.

Warm-up: *Breathing exercises [breathing pattern awareness and control, diaphragmatic strengthening, and thoracic expansion]; isometric gluteal contractions; ankle dorsiflexion exercises; and standing heel and toe raises while holding the back of a chair.*

Strengthening and balance: *Hip abduction and adduction, hip flexion and extension, and knee flexion and extension while holding the back of a chair; unsupported sit-to-stand exercises; seated upper-extremity flexion and extension exercises with 0.5 kg dumbbells; walking with a walker; and stair ascent and descent training.*

Cool-down: *Breathing exercises [breathing pattern awareness and control] and stretching. (P2)*

[...] the exercise program implemented for older adults with frailty [...] includes balance exercises, upper- and lower-extremity strengthening, endurance training, and range-of-motion exercises, all aimed at promoting independence in self-care. (P4)

Breathing retraining was among the strategies used in the rehabilitation of older adults with frailty. The following statement describes a set of rehabilitation nursing interventions and adaptive strategies used in home care.

The exercise program implemented for these older adults may include [...] respiratory rehabilitation and pacing and energy conservation. [...] Respiratory rehabilitation may include breathing pattern awareness and control, breathing exercises to increase lung volumes, airway clearance through directed and assisted coughing, thoracic expansion exercises to improve chest wall mobility and facilitate deep breathing, pacing and energy conservation, and muscle-strengthening exercises. (P5)

Rehabilitation nurses also used activities-of-daily-living training when caring for older adults with frailty, with caregivers participating in the process. The following statement illustrates how this strategy supported skills development among older adults and their caregivers.

In the exercise program, we prioritize [...] ADL training: walking and toileting. (P3)

Perceived health outcomes associated with the implementation of care strategies

This category included the following indicators: prevention of complications, health promotion, patient education and skills development, well-being and self-care, and hospital admissions.

Participants perceived rehabilitation nursing interventions as helping prevent complications among older adults with frailty. Several statements emphasized the role of these strategies in preventing a range of potential complications.

Benefits related to preventing complications [...]. (P1)

Nursing-sensitive outcomes are reflected in indicators such as fewer falls, pressure injuries, and respiratory conditions, including aspiration pneumonia, [...], along with reductions in exacerbations and hospital admissions. (P6)

Prevent immobility in bed. Prevent skin complications. Maintain skin integrity. Promote blood circulation. Prevent circulatory stasis. Prevent thromboembolism. (P8)

Participants associated health promotion strategies with greater health literacy among older adults and their caregivers; improved self-management of the disease and its complications; and greater knowledge of adaptive techniques for self-care and safety measures. The following statements illustrate the benefits they attributed to the rehabilitation nursing strategies implemented in caring for older adults with frailty.

[...] increase health literacy among older adults and their caregivers [...]. (P1)

Knowledge development—through teaching, education, and health literacy—to foster autonomy. Improved self-management of the disease and its complications, greater knowledge of adaptive techniques for self-care, and reduced caregiver burden. (P2)

Participants identified well-being and self-care as perceived benefits of rehabilitation nursing interventions for older adults with frailty. They associated these benefits with improvements in self-care performance, functional capacity, balance, muscle strength, flexibility, gait, and exercise tolerance, as illustrated by the following statement.

The benefits center primarily on improved functional capacity and self-care [...]. Improved functional capacity and self-care—rehabilitation interventions targeting motor, cardiorespiratory, neurologic, cognitive, nutritional, and social functions; improvements in self-care performance, functional independence, and mobility; and improvements in static and dynamic balance, muscle strength, and flexibility. (P2)

Participants also viewed fewer hospital visits, shorter hospital stays, and fewer readmissions as benefits of rehabilitation strategies for older adults with frailty. The following statements illustrate these perceived benefits.

[...] fewer hospital visits [...]. (P3)

[...] fewer days in the hospital and/or fewer readmissions. (P5)

Content analysis of the narratives provided insight into the meaning's participants attributed to rehabilitation care for older adults with frailty. Specialist nurses described this care as person-centered and supportive of well-being and self-care, while also acknowledging the challenges and vulnerabilities involved. Intervention plans emphasized motor, activities-of-daily-living, respiratory, swallowing, and toileting training. When designing these plans, professionals identified the following central priorities: physical, cognitive, and social stimulation; patient education and skills training to support the rehabilitation process; health education; patient mobilization; and enhancement of adaptive capacity.

Discussion

Physical, cognitive, and social stimulation was considered a key component of rehabilitation nursing care for older adults with frailty. Individualized strategies implemented in the home setting can enhance motivation and support changes in unhealthy behaviors, thereby helping mitigate the adverse effects of aging.²⁰ These findings are consistent with evidence that home visiting programs may foster greater social participation, a stronger sense of usefulness, and improvements in health, well-being, autonomy, and independence in activities of daily living among older adults.²⁰

Patient empowerment was another key rehabilitation strategy highlighted by participants. It involves helping older adults recognize their ability to make decisions and supporting them in making decisions about self-care.²⁰ Involving older adults in their care and in setting gradual, achievable goals is essential to adopting self-care behaviors and improving quality of life.²⁰

Older adults should be encouraged to engage in physical exercise²¹ to help prevent functional decline and falls. Health education programs that address the needs of older adults at risk of falling are particularly important given the association between fear of falling and frailty.²² Among community-dwelling older adults, fear of

falling is associated with a greater risk of frailty, as concerns about falling and the resulting restrictions in activities of daily living may contribute to functional decline, reduced muscle strength, impaired balance and mobility, and other adverse health outcomes.²²

Patient mobilization was also identified as an important strategy. Preventing functional decline and improving mobility are central goals of rehabilitation nursing interventions for older adults with frailty.²³ Exercise programs should ensure that exercise is safe, performed correctly, and tailored to older adults' needs, resources, and preferences.^{9,21} Older adults should therefore be encouraged to participate in these programs and engage in regular physical activity. Programs may be delivered in community-based group settings or at home, and digital health technologies may also be incorporated. These approaches are expected to support sustained, optimal outcomes in preventing functional decline.²¹

Implementing rehabilitation nursing strategies involves fostering adaptive capacity in older adults and their families. This requires rehabilitation nurses to negotiate care with older adults and their families to facilitate their participation.

Among the physical exercise programs discussed, rehabilitation nurses most often highlighted motor training as a professional intervention strategy. For older adults with frailty, motor training programs are key to preventing complications, improving mobility, and promoting functional independence and quality of life.^{10-13,23} Motor training programs should be planned, structured, and tailored to older adults' needs and responses to support their rehabilitation. Planning should account for their musculoskeletal limitations, functional capacity, exercise tolerance, and preferences.²³

Physical exercise programs should address frequency, intensity, time or duration, type, volume, and progression.²⁴ Frequency refers to how often the program is performed each day and/or week. Intensity should be determined from both the older adult's subjective perception of exertion and objective parameters, such as heart rate, to ensure safe motor training. Time is the duration of each session, whereas type describes the form of training performed. Volume refers to the total amount of exercise performed, including walking or running speed and the total number of repetitions in strength training, whereas progression describes how the prescribed training volume is gradually achieved.²⁴

Participants in this study²⁴ did not report exercise intensity. They reported frequency but not session duration. Balance and muscle-strengthening exercises were the most frequently described types of exercise. Regarding volume, one participant reported 3 sets of 10 repetitions. The limited descriptions of the motor training programs suggest that the programs may not be systematically structured and that their implementation may involve challenges.

Multicomponent physical exercise programs combining endurance, strength, balance, and flexibility training have been examined in several studies involving older adults with physical frailty.¹¹⁻¹⁴ These programs are often delivered at home as part of routine health care for community-dwelling older adults with frailty.²⁴ Evidence indicates that a single type of exercise should not be used in isolation to improve physical performance in older adults.¹⁰ Physical exercise programs should combine aerobic activity with endurance and balance training, muscle-strengthening exercises, and postural control exercises, with each component individualized and tailored to older adults with frailty.

The multicomponent program evaluated by Casas-Herrero *et al.*¹¹ combined resistance, balance, and flexibility exercises with gait training over 3 months and resulted in significant improvements in functional capacity, cognitive function, muscle function, and mental health. Similarly, Faria *et al.*¹² found that a 12-week home-based rehabilitation nursing program improved frailty status, functional capacity, balance, and perceived exertion among older adults with frailty. Specialist nurses in rehabilitation nursing also provide breathing retraining for symptom control and patient and caregiver education and skills training,²⁵ as well as activities-of-daily-living training to promote autonomy and safety and facilitate adaptations to the home environment.²⁶

Participants' narratives also highlighted the prevention of complications as a goal of rehabilitation nursing care for older adults with frailty. In the study by Suikkanen *et al.*²⁷, a 12-month rehabilitation program involving individualized home-based exercises improved physical performance and reduced falls, although it did not reduce dependence in activities of daily living.

Participants perceived rehabilitation nursing strategies as supporting health promotion by improving health literacy, self-management of health conditions, and performance of activities of daily living among older adults. Individualized home exercise programs delivered by rehabilitation nurses in community settings are particularly important for older adults with frailty. These programs are consistent with international exercise recommendations for older adults and may support prevention at the primary, secondary, and tertiary levels.²³ Participation in structured physical exercise programs can benefit older adults with a wide range of age-related diseases and disabilities. These programs can be individualized and monitored, with their components adjusted as needed to achieve the intended outcomes.²³

Evidence²⁰ underscores the importance of nurse-led home visiting programs that provide education and skills

training to community-dwelling older adults with chronic multimorbidity. These programs support older adults in adopting health-promoting practices and engaging in self-care behaviors while promoting autonomy and functional independence.

Exercise and physical activity programs may improve self-care performance, reduce falls, and enhance muscle strength, balance, and gait, as well as cognitive function, mental health, and emotional well-being.^{11,12}

In summary, rehabilitation nurses' perceptions highlighted several key findings:

- The use of a range of rehabilitation nursing strategies considered essential to the care of older adults with frailty;
- The fragmented and unsystematic development of physical exercise programs;
- The importance of home visits and/or group activities in the rehabilitation of older adults;
- The perceived health benefits associated with these rehabilitation nursing strategies.

Conclusion

This study provided insight into specialist nurses' perceptions of rehabilitation programs for older adults with frailty. The rehabilitation nursing programs they described were multicomponent, tailored to individual needs, and included motor, respiratory, and activities-of-daily-living training. Participants associated the implementation of these programs with outcomes consistent with nursing care quality standards, including the prevention of complications, health promotion, patient education and skills development, well-being, self-care, and fewer hospital admissions.

Designing and implementing structured multicomponent programs tailored to older adults' preferences and expectations may support rehabilitation and active aging. Such programs may promote well-being and functional ability, help prevent complications, and ultimately improve quality of life.

These findings may inform health policy development in support of active and successful aging. Health policies should prioritize older adults' participation in community-based group exercise programs. They should also support a more active and effective role for rehabilitation nurses and other rehabilitation professionals in delivering home-based care to older adults with frailty.

The findings may also inform the design of undergraduate and graduate nursing curricula, as the study identified themes that could be incorporated into the education of future nurses and specialist nurses in rehabilitation nursing.

Study limitations

This study has limitations related to its methodological approach, purposeful sampling, and data collection method. Conducting a qualitative study in specific settings may limit the transferability of the findings. Although the narrative prompt guide allowed some flexibility and enhanced the richness and depth of the findings, it may also have shaped the range of responses. Completing the narratives without direct contact with a researcher may have increased the risk of subjective reporting. The involvement of an investigator experienced in qualitative content analysis of narratives and in conducting qualitative research may have helped mitigate this risk of bias. Future studies involving more participants and greater researcher engagement through semistructured interviews may help reduce subjectivity in participants' reports.

Future studies should also consider mixed-methods designs or controlled clinical trials to evaluate community-based rehabilitation nursing programs for older adults with frailty.

Authorship and Contributions

RF: Study design and planning; Data collection; Data analysis and interpretation; Drafting the manuscript; Critical review of the manuscript; Approval of the final version of the manuscript and responsibility for it.

CH: Study design and planning; Data collection; Critical review of the manuscript; Approval of the final version of the manuscript and responsibility for it.

JM: Study design and planning; Data collection; Critical review of the manuscript; Approval of the final version of the manuscript and responsibility for it.

OBL: Study design and planning; Data collection; Critical review of the manuscript; Approval of the final version of the manuscript and responsibility for it.

PP: Study design and planning; Data collection; Critical review of the manuscript; Approval of the final version of the manuscript and responsibility for it.

LS: Analysis and interpretation of data; Drafting of the manuscript; Critical review of the manuscript; Approval of the final version of the manuscript and responsibility for it.

CLB: Analysis and interpretation of data; Drafting of the manuscript; Critical review of the manuscript; Approval of the final version of the manuscript and responsibility for it.

CF: Design and planning of the study; Drafting of the manuscript; Critical review of the manuscript; Approval of the final version of the manuscript and responsibility for it.

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Data availability statement

Data relating to the study will be made available upon request.

Supplementary Material:

- [Reviewers' comments A](#)
- [Reviewers' comments B](#)
- [Reply Letter to Reviewers](#)

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