

A qualitative study of older adults: The difficulties and needs of returning home after hip fractures

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ABSTRACT

Background: Falls and consequent fractures are an increasing problem among older adults, with low rates of return to previous functional condition and a substantial risk of subsequent falls. This scenario points to the need for an improved response to this population's needs.

Objective: To define the difficulties and needs felt by older adults with hip fractures when returning home.

Methods: This was a descriptive and exploratory qualitative study. Semi-structured interviews were conducted with hip fracture patients who had been submitted to surgery and who were treated at a hospital in the central region of Portugal. Bardin's content analysis was used to analyze the data. Content analysis was carried out with the support of MAXQDA® Analytic pro 2022 software.

Results: The analysis of the results of the 15 interviews yielded three categories related to the difficulties perceived by hip fracture patients on returning home: functional limitations; pain; and emotional management. Regarding the needs felt, the following categories emerged: resources/help with activities of daily living; capacity-building for the return home; and information.

Conclusions: The needs and difficulties of older adults with hip fractures on returning home are multiple and variable. Knowledge of these aspects can significantly enhance the standardized actions of nurses in this area of intervention, contributing to the improvement of continuity of care and ensuring a safe transition.

1. Introduction

Fractures resulting from falls can trigger a downward spiral in the health condition of older adults, causing greater dependence and disability and possibly leading to long-term complications (Cunha et al., 2021). Vulnerability is increased due to muscle and bone mass loss (Frontera, 2018), physical fragility associated with decreased strength, slowing of movement, and decreased physical activity (Correia, 2017). This consequently increases the risk of falls and subsequent fractures (Silva et al., 2023).

The non-recovery of functional capacity to pre-fracture levels is a concern, since the changes associated with gait and the risk and fear of falling alter the ability for self-care, decrease the quality of life of older adults (Baixinho et al., 2020; Guirant et al., 2018), and increase the risk of complications and readmission (Gilboa et al., 2019).

Hip fracture is the most prevalent type of fragility fracture,

responsible for a significant reduction in function and mobility of older adults and frail persons (Hertz and Santy-Tomlinson, 2018). It also results in difficulties in returning to the same pre-fracture functional and social condition (Contro et al., 2019; Rocha et al., 2024).

Upon returning home, these patients often present a functional decline and an increased risk of falls, associated with self-and other-imposed mobility restrictions and loss of walking ability (Hertz and Santy-Tomlinson, 2018; Contro et al., 2019). This, as a whole, represents serious problems, with a big impact on patients and their families, requiring the intervention of family caregivers so that patients can deal with their impaired ability to perform activities of daily living (ADLs) (Oliveira et al., 2023).

Considering that the recovery of functionality and mobility to restore independence in ADLs in patients after hip fracture is a key point (Lee and Lee, 2022), the development of an adjusted intervention promoting safety and recovery of a pre-fracture functional level is emphasized

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(Rocha et al., 2024). Several authors underline the importance of transitional care in the rehabilitation process and readaptation of older adults during the discharge process (Figueiredo, 2018; Hakkarainen et al., 2016), ensuring continuity of care (WHO, 2018).

Regarding continuity of care, WHO (2018) emphasizes the establishment of relationships of trust, which positively affect empowerment, capacity-building, and treatment adherence, as well as adequate coordination of care, based on a proactive approach with the involvement of professionals and care providers focused on the real needs of people, ensuring that they receive integrated care. Rocha et al., 2024 suggest that the continuity of care provided after hospital discharge, based on a structured and multidimensional intervention, can increase functional independence and the ability to perform ADLs, as well as reduce the risk of new falls and consequent new fractures.

Since 2003, the General Directorate of Health (DGS) in Portugal has emphasized the need for an adequate evaluation of people affected by this condition, considering their functional capacity and previous level of independence, to help determine their recovery potential, optimizing their functional results. In addition, there is a need for a sociological family and community resource assessment, ideally prepared by an interdisciplinary team, as well as counseling on the necessary technical aids, preparation for hospital discharge, and reintegration into the community, which are key aspects of this process (DGS, 2003).

In this context, WHO (2018) asserts that continuity and coordination of care are essential, and health services should be aimed at responding to people's needs. To this end, it is necessary to be aware of those needs. However, the literature review did not identify any studies in Portugal on the needs of informal carers. The international literature on the subject continues to recommend more research in this area in order to achieve person- and family-centered care that allows for the continuity of rehabilitation programmes and the prevention of complications on returning home.

The present study aimed to define the difficulties and needs felt by older adults with hip fractures when returning home.

2. Materials and methods

This was a descriptive and exploratory qualitative study that included patients with hip fractures treated at a hospital in the central region of Portugal. A descriptive approach of a qualitative nature derives from everyday and factual language that facilitates the understanding of a phenomenon, and is especially suitable for research in healthcare environments because it provides factual answers to questions with rich descriptive content from the perspective of the subjects (Colorafi and Evans, 2016). The value of qualitative research for the investigation of phenomena inserted in certain contexts is widely recognized, with special attention to the role of language and meaning, highlighting the reflective, relational, and interactive nature of research and investigation (Denzin and Lincoln, 2018; Presado et al., 2021). The need to understand the needs and difficulties of carers in depth led to this being a qualitative study.

The participants were selected for convenience on the basis of the following inclusion criteria: being over 65 years old, of both sexes, having suffered a hip fracture, having undergone surgical treatment, being able to answer interview questions, having been discharged to the community, and agreeing to participate in the study. Patients with hip fractures undergoing conservative treatment were excluded, as well as those who were unable to answer interview questions or were discharged to nursing homes. Fifteen participants were interviewed.

Semi-structured interviews were carried out. The script was drawn upon the basis of a literature review and consultation with experts in the field. The first part gathered data on the sociodemographic characteristics of the participants and the second part was related to the characteristics of the difficulties and needs felt by older adults with a hip fracture on returning home. Questions were included such as: After your hospital stay, how did it feel to return home? What strategies have you

used to solve or overcome difficulties? In your opinion, how should the family be prepared for this new situation?

Data were collected between June 2023 and February 2024 by the first author of the study. The interviews were conducted in an outpatient clinic at the time of the first post-discharge consultation. They were audio recorded, and the average interview time was 30 min.

Content analysis, according to Bardin (2020), was carried out to process the data. This process includes a thematic-categorical content analysis in three phases: pre-analysis to comprehend the content, exploring the material during which the content was organized, initial ideas systematized and codified, and inference and interpretation of results, and was supported by MAXQDA Analytic Pro® 2022 software.

After the interviews were carried out, they were fully transcribed. Floating readings were performed, progressing to more precise readings of the narratives, dividing them into context units and the dividing those into registration units. Based on the latter, categories were created by semantic approximation; last, the data was differentiated into sub-categories. To ensure rigor and credibility of this research, the researchers met regularly to discuss categories and reach a consensus on codification.

To structure this article, we followed the guidelines proposed by the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007).

Regarding ethical considerations, authorization was requested from the Board of Directors of the health institution of the Central Region of Portugal and from the Ethics Committee of the same institution, and approval and authorization from both were obtained. The participants signed an informed consent form and were told that they could withdraw from participation at any time.

Voluntary and informed participation of the participants was always ensured during the study. To maintain anonymity, the interviews with were identified with "E " followed by a number (E1, E2, E3, ...). The anonymized findings were stored on a password-protected computer.

3. Results

Of the 15 participants, most were female (93.3%), were married (66.7%), and had an average age of 77.1 years. The hospital length of stay was averaged 17.4 days. In 46.7% of the cases, it was the first fracture, and in 53.3%, a subsequent fracture.

When the characteristics of the difficulties experienced by the older adult with hip fracture upon returning home were analyzed, three categories and their respective subcategories emerged, which are shown in Chart 1.

Regarding how the participants identified their difficulties, the following categories emerged: "functional limitations," "pain," and "emotional management."

Relative to the category "functional limitations," the participants spontaneously mentioned some aspects when they narrated their perceptions of their difficulties, so the following subcategories were differentiated in the data corpus: "uncertainty about the recovery of autonomy"; "concern with architectural barriers"; "fear of falling"; and "inability to perform ADLs."

Regarding "uncertainty about the recovery of autonomy," the participants said the following: "I hope I don't fall again..."; "... I'm no longer a girl of forty!" (E6); "I started thinking: now I'm going to be here alone, what will my life be like? If I still can't even move or anything ..." (E7).

Considering "concern with architectural barriers," the participants' discourse expressed their difficulties in conducting ADLs: "The hardest part was going up the stairs ..." (E1); "I didn't go up the stairs because it's too risky ..." (E5) and the need to make changes to the interior of the house to improve mobility between doors: "My children adapted everything to one floor, on the ground floor...they have done work in the bathroom ..." (E3).

The subcategory "fear of falling" gathered the largest number of responses, as can be seen in the narratives: "I was afraid... I was afraid of

falling... Fall, be afraid to fall! I think the worst part was being scared ...” (E1); “... I am afraid of sometimes losing my balance. He (husband) also tells me: be careful... look... It was traumatic for the both of us. I’m afraid I’ll fall again ...” (E6); “I was very afraid, and my husband even worse! Very afraid, very afraid, very afraid!” (E9); “We are afraid... Our problem is the fear of standing up...of falling.” (E13).

The inability to perform ADLs was also reported by a large part of the participants: “I felt a big difference. After the surgery I couldn’t do everyday things; I needed help with everything!” (E1); “It was not easy to return home... I was just in a wheelchair...”; “I couldn’t be alone anymore ...” (E3); “I noticed a big difference in my ability to do day-to-day things ...” (E4).

Analyzing the participants’ discourse revealed that one of the main difficulties felt by older adults with hip fractures when returning home was functional limitations and lack of mobility. The interviews pointed to the experience of facing difficulties associated with the inability to perform ADLs, the presence of architectural barriers at home, and the fear of falling, expressing uncertainty about the recovery of autonomy.

“Pain” emerged as a category, associated with loss of functionality and gait difficulty. It is clear that pain management is a difficulty: “The pain was too much, too... it was hard for me to sit for a long time, not even with pillows or anything, I couldn’t... I was in a lot of pain!” (E7). The experience of facing difficulties associated with pain management was unequivocally reported as an aspect that affects quality of life, prevents mobilization and walking, and worries older adults and their families.

“Emotional control” was a challenge reported by some participants: “I would get nervous afterwards... wanting to do the task and not being able to! And I cried! I cried so, so, so, so much!” (E7). The changes secondary to the fracture, hospitalization, and loss of functional capacity, especially changes in gait and fear of falling again, generate a spiral of emotions that are difficult to manage.

The participants were also asked about the needs felt after their hip fracture on returning home, which resulted in the categories and subcategories identified in [Chart 2](#).

The category “resources/help with ADLs” included the resources used by the older adults to respond to the needs felt and verbalized, divided into four subcategories: “technical aids”; “readaptation strategies”; “formal support”; and “informal support.”

The use of technical aids was considered a facilitating resource for mobility and self-care: “I walked with the walker ...” (E1); “He had already provided a walker and crutches...commode chair ...” (E5); “Little by little, I went up and down the stairs, with crutches ...” (E8); “Getting into bed was a little difficult. It was a little high, and so I needed the walker” (E1).

Participants referred to the use of readaptation strategies, describing their application: “My husband improvised a trapeze to help me get into bed, to get up and lie down... It was very helpful.” (E1); “There was a bench by the bed to climb up ...; there was a mat in the shower to prevent slipping ...” (E4); “I took all the rugs away...They did some work on the house, took out the bathtub and put in a shower ...” (E6); “My son got a wooden ramp so I could support my feet when I was sitting...And I always sat in taller wooden chairs.” E8.

“Formal support” was a subcategory that emerged from the participants’ narratives as a resource used to respond to needs: “At home, the physical therapist went, worked about 15 min. I wish they worked out longer and did more exercises ...” (E1); “The health center nurses came by the house 2–3 times a week, and their support was enough.” (E5); “The physical therapist came here twice a week...started doing the exercises and things started to improve a lot! (E13).

Informal support was also very evident in the narrative of the participants: “That situation where I would sit on the bed...and my daughter would pull me up...”; “To take a shower... I would wash from the front and my daughter would wash from the back ...” (E1); “We got a lady to do the chores I can’t do...plus the support of my husband ...” (E4); “I had support from my daughter. The daughter took leave for a month and it was essential” (E9).

The participants expressed the need to resort to technical aids for ADL training and developed readaptation strategies, which involved

some modifications and environmental adjustments at home. The need for and importance of formal and informal support were also mentioned, using the help of professionals to ensure conventional postoperative rehabilitation and exercise training and the help of caregivers/family members.

In “capacity-building for the return home,” the following subcategories emerged: “patient education and capacity-building”; “family education and capacity-building”; and “managing the risk of falls.”

“Patient education and capacity-building” were perceived as a need, as shown in the narratives of the participants: “The lessons were very, very important for home.” (E6); “The nurses taught me everything: how to get up, how to walk, how to move my leg ...; in the hospital...everything I learned there, I continued to do at home; the exercises, walking, because it is very useful after, at home.” (E8); “She said to do that exercise later, and I do it! Even today, first thing in the morning I do the exercises she told me to do... sit and stand, walk ...” (E13).

“Family education and capacity-building” were also mentioned: “The family must learn...to later help at home.” (E1); “The lessons that were given were very important for my husband to be able to help me at home.” (E4); “At the hospital, the lessons the rehabilitation nurse gave my daughter were essential...to help us at home.” (E5); “My husband helped me go to bed... because he went there to learn ...” (E13).

The older adults referred to the need for and importance of patient education and preparation, highlighting education for self-care, support and counseling for the family, and family education and preparation as absolutely structuring aspects in capacity-building for the return home.

The “information” category indicated that participants felt the need to obtain information about the care measures to be taken and fall prevention strategies to better adapt to their new condition, as indicated by the following statements: “... in the bathroom, she said: now you have to support yourself in the best way, you have to go down slowly ...” (E6); “I was doing the exercises they taught me in the hospital.” (E8); “They prepared me...they told me many times: you pay attention, do this as we do ...”; “I’ve recovered with these things they told me.” E6).

Those interviewed identified needs such as obtaining more information regarding the care to be taken when returning home and strategies for preventing falls.

[Fig. 1](#) presents the categories and subcategories that emerged from the content analysis of the interview corpus.

By analyzing the participants’ discourse and comparing it with the literature, we obtained an outline of the characteristics of the difficulties and needs faced by older adults with hip fractures. They reported the experience of facing difficulties associated with functional limitations, pain, and emotional control, expressing needs for resources/help in self-care, capacity-building for the return home, information, and training activities.

4. Discussion

This study analyzed patient perceptions of the difficulties and needs felt on returning home after hip fractures. Functional limitations, concern with architectural barriers, and fear of falling were some of the greatest challenges faced, thus requiring help (formal and informal) in adopting rehabilitation and care measures appropriate to this situation.

Functional limitations and uncertainty about recovering autonomy were aspects that generated great apprehension in patients with hip fractures upon returning home. The difficulties related to uncertainty about the recovery of autonomy are well highlighted in the participants’ discourses, namely with regard to functional disability in ADLs and confrontation and concern with architectural barriers and the fear of falling. This is corroborated by [Amarilla-Donoso et al. \(2020\)](#), who stated that these patients present considerable deterioration in quality of life, characterized by a significant decline in functional capacity for basic and instrumental activities of daily living, which translates into difficulties with self-care, daily activities, and mobility.

Other studies have reported similar results, finding that, after

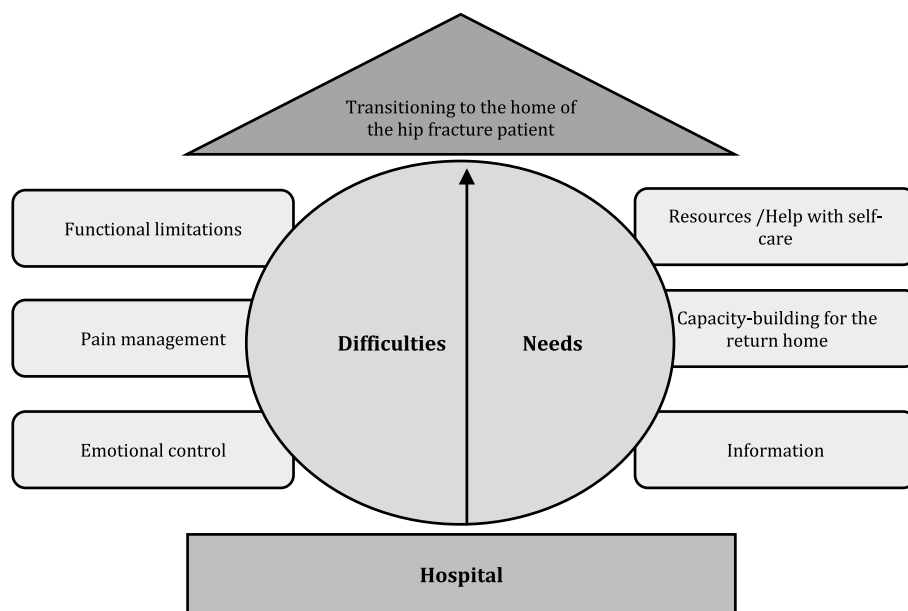


Fig. 1. Representation of the difficulties and needs felt by older adults with hip fractures when returning home.

Perceptions of older adults with hip fractures on returning home		
Dimension	Category	Subcategories
Difficulties	Functional limitations	- Uncertainty about the recovery of autonomy - Concern with architectural barriers - Fear of falling - Inability to perform ADLs
	Pain	- Pain management
	Emotional management	- Emotional control

Chart 1. Systematization of the categorical analysis referring to the “difficulties” dimension.

Perceptions of older adults with hip fractures on returning home		
Dimension	Category	Sub-categories
Needs	Resources/Help with ADLs	- Technical aids - Readaptation strategies - Formal support - Informal support
	Capacity-building for the return home	- Patient education and capacity-building - Family education and capacity building - Managing the risk of falls
	Information	- Care measures to be taken - Strategies for preventing falls

Chart 2. Systematization of the categorical analysis referring to the “needs” dimension.

fragility fractures, older adults are often dependent in terms of functional activities for up to three months post-surgery. This post-fracture dependence is the main cause for concern of patients when transitioning to home (Figueiredo, 2018) because it limits gait, reduces mobility, and interferes with the ability for self-care (Guirant et al., 2018).

Gait and, consequently, the use of technical aids were among the aspects about which the participants reported feeling the need for training. Considering the vulnerability of older adults, Baixinho et al. (2020) reiterate the importance of nurses directing their attention to gait, which is often associated with the risk of falls.

Dependence affects patients as well as families, increasing costs to society (Hertz and Santy-Tomlinson, 2018). Thus, it is important to mitigate such difficulties by increasing interventions that are centered

on physical exercise and ADL training, postoperative rehabilitation, education for fall prevention, environmental modifications/adjustments at home, support, and counseling (Rocha et al., 2024).

Given the increased risk of new falls and new fractures upon returning home (Hertz and Santy-Tomlinson, 2018), a fear that was well presented in the participants' discourse, it is necessary to introduce programs that include the assessment of the risk and fear of falling and the introduction of individualized psychoeducational interventions to control fear and risk factors of falling (Baixinho et al., 2020). This also requires environmental risk assessment; counseling about modifications; equipment and adaptation of spaces; counseling on the acquisition of support products; and cognitive-behavioral strategies that increase the safety of older adults when using the physical spaces in their homes

(Santos and Baixinho, 2020).

The participants' narratives highlight the importance of formal support, which can ensure the maintenance of rehabilitation exercises after hospital discharge. These aspects are also underscored by Ortiz-Piña et al. (2019), who report that the presence of a rehabilitation program upon return home was essential to ensure the successful and effective recovery of older adults with hip fractures. In this process, patient involvement and participation may result in better outcomes (Asplin et al., 2017). Slade et al. (2016) report that the implementation of interventions that integrate exercises should include strategies for motivation and adherence to exercise, as well as components of the home program.

Another relevant finding was the difficulty of regulating emotions, which corroborates the results of a study by Figueiredo (2018) that also reports feelings of inability, insecurity, and loss of control over oneself, which are highly associated with dependence and the manifestation of negative emotions.

The participants in the study referred to the need for information to be conveyed and adjusted to their condition and the time of transition. They also recognized the value of the information given to them and of the family's involvement immediately after hospitalization. This corroborates a study by Oliveira et al. (2023) that suggests that nurses evaluate the needs felt by patients and their family caregivers, in the sense of adequately directing all the planning of nursing interventions, based on the gaps initially identified. Such gaps, if not verified, can contribute to unhealthy transitions.

It should be noted that this information is not always sufficient, which leads us to agree with the authors who warn that insufficient information provided by health professionals and ineffective discharge planning constitute problems commonly indicated by older adults with hip fractures (Ariza-Veja et al., 2019; Asif et al., 2020).

In a study examining the transitional care of older adults with hip fractures, Stolee et al. (2019) found that involvement of and choices by patients, the role of family caregivers, strong relationships, coordination of roles, documentation, and sharing of information were areas with the potential to support and improve transitional care. Oliveira et al. (2023) maintain that the participation of family members in decision-making about the rehabilitation process and discharge planning results in a safer transition from hospital to home.

4.1. - Implications for clinical practice and research

This study may enable decision-making to ensure safe transitions from hospitals to their homes for patients with hip fractures, discharge planning based on adequate assessment of patient/family needs, consequent comprehensive and systematized capacity-building, and continuity of the rehabilitation process, based on coordination with existing resources in the community (technical support, support in the provision of care/rehabilitation). Taken together, these aspects should motivate the implementation of appropriate policies to enable these interventions to be implemented more effectively.

Regarding the implications for research, other studies should be carried out that compare the perceptions of patients, nurses, and family caregivers of the needs and difficulties felt on returning home after hip fractures, to make the results more robust.

4.2. - Limitations of the study

The results showed that few studies in the scientific literature portray patient perceptions of the phenomenon under study.

The limitations of this study are related to the type and size of the sample, as the participants came from a single institution. Therefore, the data may have been influenced by the organization's context, and other participants could contribute with different data to understand the phenomenon.

5. Conclusion

The results of this study indicate that older adults with hip fractures on returning home face several difficulties: functional limitations, which include uncertainty about the recovery of autonomy, concern with architectural barriers, fear of falling, and inability to perform ADLs, in addition to pain management and emotional control.

The needs mentioned in the interviews include: resources/help with ADLs, which include technical aids, ADL training, readaptation strategies, and formal and informal support; capacity-building for the return home, namely patient education and capacity-building, family education and capacity-building, and managing the risk of falls; and information on care measures to be taken/strategies to adopt.

These findings justify the need for well-structured discharge planning, with standardized actions by nurses that prioritize individualized education of patients and family caregivers, helping to define roles and responsibilities and contributing to the improvement of continuity of care, in order to ensure a safe transition.

CRediT authorship contribution statement

Paula Rocha: Writing – review & editing, Writing – original draft, Visualization, Software, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Cristina Lavareda Baixinho:** Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Software, Resources, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Maria Adriana Henriques:** Writing – review & editing, Validation, Supervision, Resources, Project administration, Methodology, Investigation, Funding acquisition, Conceptualization.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:

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