EMPIRICAL RESEARCH QUALITATIVE

Recovering from physical trauma in late life, a struggle to recapture autonomy: A grounded theory study

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Abstract

Aim: The study aimed to explore the experiences of care and recovery among older patients treated for physical trauma.

Design: A qualitative study with a constructivist grounded theory design.

Methods: Fifteen in-depth interviews with older adults recovering from physical trauma were conducted and analysed between 2019 and 2023, in accordance with grounded theory methodology.

Results: The findings show that for older patients who suffered physical trauma, the core category was the strive to recapture autonomy. This was achieved by means of Adaptation, Reflection and Interactions, which constitute the three main categories. Recovery involves facing and navigating various new life challenges, such as increased dependency on others, managing difficult symptoms and adapting in various ways to everyday life. The recovery process was influenced by fear, hope and the attitude towards new challenges.

Conclusion: Older adults being cared for after a traumatic event have a difficult path to recovery ahead of them. Dealing with increased unwanted dependency on others was a main concern for the participants. Undertreated symptoms can lead to undesired isolation, delayed recovery and further increase unwanted dependency. On the other hand, hope, which was defined as having a positive approach to life and longing for the future, was a strong accelerating factor in the recovery process.

Impact: As a result of this study, we have established that older patients experience the initial period after trauma as difficult and that support in the initial phase can be helpful when returning home. As healthcare services are under increasing pressure because of an ageing population, this study contributes by addressing an understudied population and clarifying their concerns.

Reporting Method: Reporting adheres to the COREQ (COnsolidated criteria for REporting Qualitative research) Checklist.

Patient or Public Contribution: No patient or public involvement.
INTRODUCTION

Within the next 20 years, the global proportion of individuals over the age of 60 will be larger than for those under 5. This shift in age structure can already be seen in all highly industrialized economies and most developing countries (World Health Organization, 2021). Countries face significant challenges in terms of healthcare resources to meet the increasing need for quality care for an ageing population (Abrams et al., 2020). Consequently, nurses will have to handle this challenge as well as the increasing number of nurses leaving the profession (World Health Organization, 2020). Failure to provide nursing care has been found to be associated with nurses’ increased workload (Ball et al., 2018) and leads to adverse events, such as falls, infections, medication errors and pressure ulcers, to which frail older people are very vulnerable (Kalisch et al., 2014). These facts, together with the knowledge that older trauma patients are undertreated and experience a longer time to intervention and examination as well as being less likely to be treated in trauma-specific specialist care by a senior doctor than their younger counterparts (The Trauma Audit & Research Network, 2017), make the situation even more challenging for nurses within the trauma context. Although the number of older patients suffering from trauma is increasing, little is known about how these patients experience care and recover from their injuries. This study focuses on exploring older patients’ journey through the recovery process with the aim of identifying their main concerns in order to better meet their needs in the future, despite limited healthcare resources.

BACKGROUND

Typically, a person’s functional capacity diminishes with increasing age, which gives rise to symptoms of physical deterioration such as muscle weakness, vision and hearing impairment, impaired balance and walking ability as well as malnutrition, all of which can increase the risk of various health problems (World Health Organization, 2022). People of all ages may suffer unexpected accidents and traumas. However, older trauma patients often have comorbidities and face an increased mortality risk compared to their younger counterparts (Mulvey et al., 2020). In frail older adults, there is an increased risk of low-energy trauma and a significant risk of complications (Pecheva et al., 2020). It has also been shown that 1 year after a physical trauma, the perceived level of frailty did not return to baseline for most participants and that age, injury severity and preinjury physical frailty are independently associated with overall 1-year mortality (Maxwell et al., 2016).

Trauma is defined as an injury or injuries that can be life-threatening or life changing (Thompson et al., 2021). Trauma in older adults is often caused by ground-level falls. According to the American National Trauma Data Bank, the most common reason for trauma in all age groups is falls (44%), of which 55% occur in patients over 65 years (American College of Surgeons, 2016). In Sweden, the financial cost of all fall-related injuries is substantial, more than $16 billion/£13 billion in 2020. The most frequent injuries caused by trauma in older adults in Sweden concern the hips and femur followed by the head, abdomen, lower back and spine as well as the pelvis (The National Board of Social Affairs and Health, 2020).

Due to the establishment of trauma centres offering specialized, team-based care and monitoring of patients, the mortality rates of trauma victims of all ages are decreasing (Candefjord et al., 2022). However, evidence indicates that older patients receive insufficient care after physical trauma (Alshibani et al., 2021; Hoyle et al., 2020; Weber et al., 2022). Older trauma patients are under-triaged in emergency departments, possibly due to delirium related to the acute situation or cognitive impairment that complicates assessment. Clinical assessment scales, including specific trauma care scales and current trauma triaging systems, are considered inappropriate for the physiology and pathology of older patients (Eichinger et al., 2021; Hoyle et al., 2020; The Trauma Audit & Research Network, 2017). Additionally, older patients are often treated with medication that can mask signs of illness that further complicate the assessment (Woitok et al., 2021). In addition to being under-triaged, studies also show that older patients are undertreated, for example, receiving fewer analgesics than younger patients and a longer time to treatment (Ko et al., 2016; Quattromani et al., 2015). Previously conducted studies suggest that older patients encounter certain disadvantages within modern healthcare systems. Furthermore, the potential risks associated with interventions in older patients have been observed to play a crucial role in determining treatment decisions made by physicians. For instance, one study suggests that older age, severe TBI and lower performance status before injury are associated with significantly worse functional outcome and survival in older patients with TBI. In addition, the authors conclude that there were no statistical differences between those who had undergone surgery and those who did not receive such treatment (Aziz et al., 2022). There is also strong evidence that pre-hospital frailty in patients over the age of 65 years measured by the Clinical Frailty Scale (CFS) in the acute care setting can predict all adverse health outcomes such as mortality, readmission and functional decline (Falk Erhag et al., 2023).

The individual consequences of trauma are significant in terms of reduced quality of life, both in the short and the long term (Wad et al., 2018). Recovery after trauma is often difficult and outcomes show that 1 year after a trauma, 62% still experienced physical limitations in daily life, 37% needed assistance in activities of daily living (ADL) and 20% screened positive for post-traumatic
stress disorder (PTSD) (Haider et al., 2020). In a study by Tillou et al. (2014) investigating the effect of a geriatric consultant (GC) in a level 1 trauma centre, patients receiving a structured and multidisciplinary comprehensive geriatric assessment (CGA) had significantly better functional recovery 1 year after the traumatic event compared to a control group. The authors concluded that older adults need more healthcare resources than younger, as their functional capacity is usually impaired and often requires a longer recovery period. Furthermore, a CGA in trauma patients in the acute setting was considered beneficial and led to improved functional capacity, a stronger perception of recovery and higher levels of ADL compared to controls. Nevertheless, there are considerable gaps in the knowledge of older adults/patients’ experiences of care and recovery after physical trauma, making evidence-based care challenging.

3 | THE STUDY

3.1 | Aims

The study aimed to explore the experiences of care and recovery among older patients treated for physical trauma.

Two central research questions were explored:

1. What are older trauma patients’ main concerns during the recovery process?
2. How do they deal with these concerns?

4 | METHODS

4.1 | Design

This qualitative descriptive study was conducted according to a constructivist grounded theory design (CGT) as outlined by Charmaz (2014). CGT was considered appropriate when investigating this unexplored topic and attempting to develop a theoretical understanding of older trauma patients’ experience of the recovery process. Furthermore, CGT is suitable for studying social settings in everyday life, thus allowing us to identify patients’ responses in their efforts to cope with life changes in old age.

4.2 | Participants

Table 1 presents the demographic characteristics of the sample. A purposive sampling technique was used to recruit patients who could provide an individual in-depth and meaningful narrative about the investigated phenomenon. Potential participants (> 65 years old, undergoing treatment after a physical trauma, able to speak and understand Swedish, with no cognitive impairment and not receiving palliative care) were identified at a trauma unit in a university hospital in Sweden. Verbal and written information about the study was provided and informed consent obtained from all participants.

4.3 | Data collection

Data collection was conducted between May 2019 and March 2023. Since frailty and age were important risk factors for being severely affected by Covid-19, the recruitment of participants was postponed from spring 2020 until March 2022. All participants had been discharged from hospital at the time of their interview and the mean time between discharge and the interview was 6.0 weeks (IQR 1). The participants were asked to choose the location for their interview. Of all the participants, six preferred to be interviewed at the hospital and the rest in their homes.

An interview guide containing open questions was developed before the start of data collection and continuously revised, as additional categories emerged in the concurrent analysis when the interviews yielded relevant new data. All interviews were recorded and transcribed verbatim immediately after each interview. The open-ended questions guided the conversation, but participants were encouraged to talk freely about their experience of the trauma, time in hospital, the recovery process, their main concerns and how they dealt with them. The interviewer posed follow-up questions such as ‘Could you tell me more?’, ‘How do you mean?’ and ‘How did you deal with that?’ to gain a deeper understanding and more valuable content than that provided by the questions in the interview guide alone. Field notes were made by the interviewer during all interviews and consisted of memos describing aspects of the participants’ narratives that were not captured in the recorded interview such as emotions, body language and the interviewer’s reflections.

4.4 | Data analysis

As recommended by Hallberg (2010), a comprehensive literature search was conducted prior to the start of the study to investigate whether there were any similar studies published; however, no such studies were found. Data were analysed according to the CGT by Charmaz (2014). First, data were read in full, followed by line-by-line coding. In this process, words and phrases that were related to the research question and described the participants’ main concerns as well as how they dealt with them were highlighted and coded. The first two interviews were independently analysed by two of the authors HJ and ME, who then discussed the highlighted meaning units and codes. After the initial coding was completed by the first author (HJ), all the line-by-line and focused coding was reviewed and discussed with the last author (ME), and the categories and sub-categories was derived. Throughout the analysis, constant comparison was used, initially code with code, code with categories, categories with categories as well as with the tentative theory. After
12 interviews, no new data emerged that yielded further insight into the conceptual categories and tentative theory. However, in order not to terminate data collection prematurely, three additional interviews were conducted. Then the material was discussed with a third author (AF) and at this time point our categories and tentative core category were abstracted further with inspiration from the categories developed by Rosengren et al. (2021). Thereafter, we considered that theoretical saturation had been reached as described by Bryant and Charmaz (2007). To ensure that the theoretical sensitivity was well grounded in data, the refined, more abstract core category was compared to all codes and categories. In addition, two validation interviews were carried out by the first author to assess the theoretical saturation. During these interviews, the theoretical model was presented to the participants to test whether their experiences were consistent with the constructed theory. Both participants approved of the model found it well-defined and agreed that the main categories and subcategories were in line with their own experience, including the fact that their main concern was to regain autonomy after trauma. Finally, the overall results were discussed with all authors. Throughout data collection and analysis, the researcher created memos, including thoughts or interpretation, impressions gained from the participant’s story or a reflection on potential similarities between stories. These memos were continuously used during all phases of the analysis, including conceptualizing the theory.

### 4.5 Ethical considerations

The study was approved by the Gothenburg Regional Ethical Review Board (No. 766-18). Participation was voluntary and required written and oral consent. The researcher who collected the data (HJ) was a nurse working at the unit from which the participants were recruited. To ensure that no relationship of dependency existed and thereby reduce data bias, patients who had been cared for by the first author were not approached for participation. All participants had access to a health social worker in case they needed support after the interview, a precautionary measure as we did not know what emotions the discussion might cause.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age</th>
<th>Type of trauma</th>
<th>Social life</th>
<th>Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>89</td>
<td>Fall from stairs</td>
<td>Living alone, home care after trauma</td>
<td>Rib fractures with flail chest, fracture of the neck, head injury</td>
</tr>
<tr>
<td>Male</td>
<td>74</td>
<td>Ground level fall</td>
<td>Living with wife and older child, no home care</td>
<td>Subarachnoid haemorrhage, laceration in the back of the head</td>
</tr>
<tr>
<td>Female</td>
<td>71</td>
<td>Ground level fall</td>
<td>Living alone, home care before and after trauma</td>
<td>Fracture of the neck, concussion, fracture of the hand</td>
</tr>
<tr>
<td>Female</td>
<td>78</td>
<td>Ground level fall</td>
<td>Living alone, with family close by, no home care</td>
<td>Multiple rib fractures, pelvic fracture, haemothorax, vertebral compression fracture</td>
</tr>
<tr>
<td>Male</td>
<td>68</td>
<td>Ground level fall</td>
<td>Living alone in apartment, no home care</td>
<td>Pneumothorax, multiple rib fractures with flail chest</td>
</tr>
<tr>
<td>Female</td>
<td>76</td>
<td>Motor vehicle accident</td>
<td>Living alone in apartment, home care and home health care after trauma</td>
<td>Sternal fracture, bilateral multiple rib fractures, pneumothorax, complex ankle fracture</td>
</tr>
<tr>
<td>Female</td>
<td>77</td>
<td>Ground level fall</td>
<td>Living with husband in apartment, home care after trauma</td>
<td>Haemothorax, multiple rib fractures</td>
</tr>
<tr>
<td>Male</td>
<td>65</td>
<td>Bicycle accident</td>
<td>Living alone, no home care</td>
<td>Multiple rib fractures with flail chest, pleural fluid</td>
</tr>
<tr>
<td>Female</td>
<td>90</td>
<td>Ground level fall</td>
<td>Living alone with home care after trauma</td>
<td>Traumatic lacerations in the back of the head</td>
</tr>
<tr>
<td>Male</td>
<td>73</td>
<td>Fall in staircase</td>
<td>Living with wife, no homecare</td>
<td>Rib fractures, maxillary fracture, multiple face wounds</td>
</tr>
<tr>
<td>Female</td>
<td>75</td>
<td>Fall in staircase</td>
<td>Living alone, no home care</td>
<td>Rib fractures, lumbar haemorrhage, subdural haemorrhage</td>
</tr>
<tr>
<td>Female</td>
<td>75</td>
<td>Fall in staircase</td>
<td>Living with husband, no homecare</td>
<td>Bilateral flail chest, subarachnoid haemorrhage, fractures to the thoracic spine, fracture of the clavicle, fracture of the hand, open wounds</td>
</tr>
<tr>
<td>Male</td>
<td>65</td>
<td>Bicycle accident</td>
<td>Living with wife, no homecare</td>
<td>Flail chest, haemo-pneumothorax, injury to the spleen grade 3</td>
</tr>
<tr>
<td>Female</td>
<td>76</td>
<td>Fall in staircase</td>
<td>Living with husband, homecare after trauma</td>
<td>Multiple rib fractures, pneumothorax, subdural haemorrhage</td>
</tr>
<tr>
<td>Female</td>
<td>75</td>
<td>Ground level fall</td>
<td>Living with husband, homecare after trauma</td>
<td>Fracture of ramus superior and inferior</td>
</tr>
</tbody>
</table>
4.6 | Rigour

To ensure rigour, the Consolidated criteria for reporting qualitative research COREQ (CONsolidated criteria for REporting Qualitative research) Checklist was used (Tong et al., 2007), see Appendix S1. Credibility was ensured by robust data collection, constant comparison between data and categories as well as the inclusion of several quotations from the participants. As the phenomenon has previously been only sparsely researched, we are convinced that the present study possesses originality. By conducting two validation interviews, we intended to at least partly fulfil the resonance criterion. Finally, we believe that the results are valuable as the findings can be used by nurses in their daily work to strengthen the autonomy of older trauma patients prior to discharge. The study can also be considered a platform for future research aimed at deepening the evidence pertaining to this group of patients.

5 | FINDINGS

In total, 15 participants agreed to participate, of whom two also took part in a validation interview. Their mean length of hospital stay was 11 days (IQR 21), and all identified themselves as ethnic Scandinavian. All participants except one, who had to be transferred to short-term care, were able to return to their home directly after discharge from hospital. Their mean age was 76 years (IQR 4.5), and in addition to the trauma, all suffered from multiple chronic illnesses and seven needed assistance post-discharge from the home health services. The average duration of the interviews was 47.3 min (range 25–72 min).

The core category when recovering from physical trauma in later life was the attempt to recapture autonomy, which was generated based on three main categories: Adaptation, Reflection and Interactions. Each of these categories contains essential strategies for mastering the early recovery process after physical trauma. Furthermore, recovery involved acceptance of the need to manage new challenges in life, such as increased dependency on others, dealing with troublesome symptoms and adjusting in many ways to everyday life. In the early recovery process, participants struggled with the deterioration of their memory due to the trauma and potent medications. They explained that what seemed important was getting up, being mobilized early and receiving sufficient analgesics to prevent pain.

Fear, poorly treated symptoms and negativity hindered the recovery process. In contrast to this, hope provided a sense of optimism towards the future, which made the experience of recovery more manageable. It was repeatedly described how a positive mindset was of great importance and without it, recovery was perceived to be prolonged. Participants believed that the deliberate choice to adopt a positive mindset regarding their recovery helped them in the recovery process, mainly by creating hope for the future. An overview of the results is presented in Figure 1 and Table 2.

5.1 | Adaptation

The participants struggled with multiple symptoms such as pain, fatigue, dizziness and side effects of medications both when hospitalized and at home, all of which were time and energy-consuming, delaying their recovery. They had to make certain adaptations to cope with everyday life after discharge. For example, at the time of data collection almost all participants were still on daily painkillers. Simultaneously, pain forced them to adjust and limit their physical activities, which delayed their recovery. When hospitalized, participants reported experiencing a great deal of pain and restrictions on how much weight could be placed on fractures. Some participants had to wear a neck collar that limited their mobility, affecting their perception of how quickly they would recover. Some also experienced a lack of opportunities for getting up and exercising. Several reported that their balance was affected and adapted by reducing their activity level, which negatively affected their emotional state and made them feel as if their life was on hold.

Because this...well, this happened to me, so I've been in hospital for over seven weeks including the rehabilitation ward, so this is quite hard for me, as I am used
TABLE 2 Summary of the core category, main category and sub-categories that describe participants’ strategies to deal with their main concerns during the care and recovery process.

<table>
<thead>
<tr>
<th>Core category</th>
<th>Recovering from physical trauma in late life: a struggle to recapture autonomy</th>
<th>Interaction—Meaning interaction with family and other social contexts as well as accepting an increased need for support from others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main categories</td>
<td>Adaptation—Meaning adjustments in daily life and training</td>
<td>Reflection—Involves dealing with the past, the present, and the future, including existential questions and existing identity</td>
</tr>
<tr>
<td>Sub-categories</td>
<td>Performing rehabilitation and exercising</td>
<td>Focusing on the future</td>
</tr>
<tr>
<td></td>
<td>Managing symptoms</td>
<td>Worrying what could have happened</td>
</tr>
<tr>
<td></td>
<td>Using assistive devices</td>
<td>Accepting that recovery takes time</td>
</tr>
<tr>
<td></td>
<td>Adapting behaviours</td>
<td>Redefining oneself</td>
</tr>
<tr>
<td></td>
<td>Performing strategies to overcome barriers in daily life</td>
<td>Having a positive approach</td>
</tr>
<tr>
<td></td>
<td>Cancelling plans and activities</td>
<td>Reflecting over life-changing decisions</td>
</tr>
<tr>
<td></td>
<td>Handling fear</td>
<td></td>
</tr>
</tbody>
</table>

...to being outside and then all this pain and all this... so it's an incredible change... restrictions! It's obvious one's mood can be upside down.

For example, if participants ignored bodily signals and overexerted themselves by doing too much housework or taking long walks, it came with consequences such as increased pain or fatigue, resulting in the need to rest and stay inside even if they had other plans. It also meant that they had to take more painkillers, which further affected their well-being, resulting in a negative spiral. Wanting a faster recovery while at the same time needing to rest was a tricky balancing act.

The participants reported that a fear of falling was constantly present and worried about whether the consequences of a new fall would affect them even more than the previous one. They became even more cautious thereby limiting their lives and imposing behavioural change, such as not going out and cancelling social activities, resulting in isolation and depression.

In general, the participants were satisfied with the care they received at the hospital but reported deficiencies in the ongoing rehabilitation. Participants who were frail before the trauma seemed to be particularly vulnerable when not receiving appropriate follow-up or rehabilitation tools from the hospital. These participants lacked the resources to promote recovery by adapting to changes such as increasing their training, including managing rehabilitation on their own at home. Participants who sought help from physiotherapists, physicians and massage therapists after discharge reported experiencing this as helpful for rehabilitation and adopting a more active and health-promoting lifestyle. Other factors that enhanced the recovery process were good physical and social functioning before the trauma and a conscious positive mindset. Participants with these characteristics seemed to adapt to their new situation more quickly and simultaneously experienced a faster return to their old way of life, that is, recapturing autonomy.

It actually feels overwhelming. But I’m not the kind of person who lies down and cries or sits and cries. It doesn’t help me, but then I think like this, so what is... Of course, if you want to cry, you should do it, but it’s no use sitting around feeling sorry for yourself or... I am not that sort of person, it doesn’t help me. Absolutely, it’s better to get things done, do the work, to be honest.

Adjustments were described both as negative and positive. Some adjustments led to an increased sense of recaptured autonomy, even if this meant being unable to do things the same way as before the trauma. For example, when going outdoors, participants reported taking a taxi instead of the bus, walking only when they were familiar with the route, avoiding stairs and trying to anticipate obstacles such as always looking for unevenness in the ground and being aware of their surroundings. Although many participants reported wishing for less dependency on assistive devices, they still used walking aids, such as walkers, canes or walking sticks, to navigate both indoor and outdoor environments. Some participants used a wheelchair outdoors and accepted it as a help and comfort. They devised strategies and adapted their behaviour to different circumstances. For example, they reported always being careful and vigilant in potentially harmful situations, such as being outside alone, which could result in a fall if they were not careful.

I think very consciously where I sit in the tram for example, is there a good hand rail to hold on to? and so on... and, well, what is my strategy for getting off this bus? for example and why is that guy standing in my way? hoping that he moves when I nudge him a bit... I’m dealing with this... but I am not dealing with it on an existential level or having any kind of crisis over it but it is more these practical things...
By adopting a more careful lifestyle after a traumatic event, the participants felt less spontaneous and free, which reminded them that life had changed. This constant adaptation in the recovery process was perceived as a mixed blessing. On the one hand, planning, having strategies and finding new ways allowed them to go outdoors, which enhanced their recovery. However, on the other hand, participants reported feeling frustrated and disappointed about feeling more restricted and less accessible than in the past.

5.2 | Reflection

In the recovery process, participants reported dealing with their new situation by reflecting and elaborating on possible forms of lifestyle. Reflecting on their life before the trauma, dealing with their fears, thinking about what has changed and accepting their new way of life were important aspects of psychological recovery. One strategy for dealing with their concerns after trauma and progressing in the recovery process was to ponder, worry about and reflect on existential matters/issues. Often, the participants felt grateful that they survived the trauma and had managed to cope relatively well under the circumstances, which increased their feelings of autonomy. Simultaneously, they reflected on how bad it could have been and whether it would happen again. This made them aware that life was fragile, and they accepted that there was no room for carelessness in later life due to increasing frailty. The participants realized that they were not immortal.

No... But I’m probably lucky to be sitting here, I sometimes think, well, actually I am.

And it has affected me, like that you’re... you’re not immortal. Because I’ve been healthy all my life until now and I’ve never had any accidents. I haven’t. And so, you think that’s how it’s going to be for the rest of your life. But then you see how quickly things can change. A moment’s work, and it’s completely...

Some reflected that life would be great even if they never became their old self again due to a permanent loss of capacity, while others longed for a future in which everything would go back to being just like before.

Several participants realized that an essential part of recovery was accepting that it would take time and lead to unwanted changes in their lives. Before the trauma, most participants lived independent lives without help from others and could live as they pleased and do things such as household in their preferred way. After the trauma, many had to accept help they did not want and that others did not always do things the same way as they had. This was perceived as a personal failure and resulted in a balancing act between dependency and independency. Almost all participants reflected on how their current physical limitations acted as a barrier to achieving autonomy, which some accepted more easily than others. Perceived dependency also occupied many of their thoughts. Reflecting on and processing this issue was a concern, as it was an unwanted situation that they could not influence to the extent they wished. Whether the help was provided by community services or relatives, the participants reported that accepting this dependency was a challenge. Women seemed to find the situation particularly difficult, an example being letting their husbands take care of the home when they could no longer manage it themselves. It was challenging to relinquish responsibility, but it was something they had to accept because there was no alternative.

Yes, very, very difficult. Very difficult. I have understood that I need to hand over more and more responsibility to him [husband]. That I’ve had to ignore a lot of things that... Whether it was dirty here or there. I’ve had to rethink a lot and just do the basics ... My grandson came home, he said, ‘Oh my God Grandma, you were blown over [by the wind], while Grandpa grew in stature’.

Thinking about the future created hope and a desire to continue the recovery process. Participants longed to return to more normality, where they could enjoy life with their loved ones. Those with more severe illnesses reflected that their remaining time might be limited and involve a greater dependency on others.

5.3 | Interactions

Being in a social context and interacting with family and friends was an important part of the recovery process and regaining autonomy. Participants stated that social support from family members meant everything and that they would be unable to manage life without them. Therefore, they tried to live as normally as possible in terms of social interactions by devising strategies to avoid cancelling plans with family and friends. These strategies enabled them to interact, stay involved with friends and avoid becoming isolated.

So, life is very limited, I can’t see my friends like this. We are six ladies who have had a lot of fun together. Now we’ve had a little break, but I said they could come here, and then they said yes... So, they bring their own food, or buy something on the way so we can sit here and have coffee and talk.

Relatives, family and friends helped the participants in daily life by assisting with household chores, running errands and being a companion when going outside. Furthermore, family and friends also contributed to their social well-being by conversations, physical contact, caring for them and showing them necessary love and concern.

But I think I’ve had a lot of help from the kids. And then we have our sons-in-law, they’re very helpful, so...
Participants who had relatives nearby regularly interacted with them, while others who had relatives living further away reported receiving daily phone calls from family and friends, which made them feel safe. Some participants mainly turned to their immediate family and had no other social interaction because they found it difficult to talk about the accident or felt ashamed. Their bruises and scars reminded them of the accident and gave them a sense of weakness. They felt embarrassed by their looks, which made them reluctant to go out and visit friends and family or even go to the supermarket, leading to a sort of voluntary isolation. Another kind of isolation was caused by their inability to go out, whereby they missed interaction with others due to physical barriers created by the trauma, which led to loneliness and feeling unwell.

... It has been very lonely and very difficult because I'm so disabled, I guess you could say that when it comes to getting outside, I've heard that there are people who go shopping with the home care service, but if you want to go for a walk, for example, it costs you money.

Every social interaction served as a strong motivator for recovery and evoked an intense wish that things would soon return to normal or at least improve. Participants who were very restricted by their symptoms felt forced to stay indoors, making them long for the future when they could participate in social interactions again. They planned social events with friends as part of their recovery process.

Well, we were two lively pensioners, we went to shopping centres and town and had lunch in lovely places, and I can feel that something has been taken away from us... but I hope that it will come back, that normal life that we had before, that this is simply temporary.

Being unable to interact like they wished left them feeling dependent on others. Participants described having to sit and wait for family or friends to visit instead of going out alone. On the other hand, family and friends who helped them in situations they could no longer manage themselves resulted in positive interactions that might not have happened before the traumatic event.

For participants without close family or friends, time spent with community health and nursing services provided support and social interactions. These participants were mainly satisfied with the healthcare professionals and expressed gratitude for the help they received. One problem mentioned was the large number of staff involved and the participants worried about dealing with new personnel and engaging in new interactions in a vulnerable situation, such as when not knowing who was coming to their home. Another problem that affected their recovery process was that home healthcare personnel sometimes lacked professional knowledge about individual care needs.

One particular challenge concerning interaction was experienced by those who had previously been caregivers themselves. After the trauma, they described an inability to continue to be the primary caregiver for their spouse, meaning that, for example, a husband had to be transferred to an assisted living facility. Losing the interaction with a loved one and their identity as a caregiver was experienced as hurtful, something that affected them greatly and occupied them a great deal.

... But I am struggling. My heart is broken by the fact that I was forced or had to leave the hubby [in a nursing home], I couldn't ... No, he couldn't stay at home because he needs so much care, so it was no longer possible.

6 | DISCUSSION

Recovering from physical trauma in late life was described as a strive to recapture autonomy. To our knowledge, this is the first study to explore the recovery process in older adults after a traumatic injury. Participants described a difficult time, both at the hospital and after returning home. The main burden was summarized as troublesome symptoms, resulting in increased dependency. To counter this and proceed in terms of recovery, different strategies were adopted during each phase. The recovery was influenced by emotions such as hope and fear as well as the participants’ mindset with regard to future challenges. They used adaptation, reflection and social interactions in everyday life as coping tools for recovery. Despite the fact that there is no previous theory exploring recovery after trauma for older patients, parallels can be drawn with Troutman’s middle-range nursing theory on successful ageing (Jordan, 2020). Three coping processes form the basis of this middle-range theory: (1) awareness and choice as an adaptive response to physiological and physical losses, (2) intrapsychic factors (the characteristics of an individual that can enhance or impair their ability to adapt to change and solve problems) and (3) spirituality. Several of these strategies are consistent with our findings, demonstrating that those who can adapt to new conditions and have a positive attitude seem to experience a faster recovery, something that is essential for successful ageing. According to the Theory of Successful ageing, by initiating a conversation and listening to the patient's life story, nurses can identify patients’ intrapsychic factors such as problem-solving skills that have previously been successful, which in turn can help patients handle new difficulties (Jordan, 2020), such as a deterioration in health after a physical trauma.

Recovery from physical trauma in later life involved a period of re-identification and acceptance of the need for greater dependency on others. Most of the participants considered themselves...
In addition to a PLA, a person’s ability to tolerate and cope with the patient (Wolf et al., 2017) activation for a PLA. This can be achieved through person-centric participants’ PLA is important for recovery after hospital discharge. Further, resilience can be described as the ability to cope with traumatic events and being able to maintain normal functioning (Ungar et al., 2013). The higher a person’s resilience, the greater their ability to cope with illness and vulnerability. In this context, older adults’ way of handling adversities by adopting a positive approach is a form of resilience or coping mechanism. Similar results have been reported in other studies concerning trauma victims. A recent study from the US showed that patients suffering from moderate to severe trauma with a low level of resilience had a more difficult recovery than those with a high level. The low resilience group had more difficulty performing ADLs independently, were less likely to return to work, more burdened by pain and PTSD and had lower quality of life at 6 months post-injury (Nehra et al., 2019). However, this needs to be further studied in order to draw conclusions about older adults.

The participants in our study had several symptoms that limited them in their daily life and prevented their transition to recovery. The fact that they needed to take painkillers on a daily basis but still felt limited may be a sign that they were undertreated. Undertreated pain can have devastating consequences, such as the risk of pneumonia, thrombosis, pressure ulcers, delayed rehabilitation, confusion, depression, risk of falling and the development of chronic pain (Baratta et al., 2014). According to Quattrromani et al. (2015), older patients injured by blunt trauma were significantly undertreated compared to a younger age group and less likely to receive analgesics. Of those who did receive analgesics, the time to treatment was significantly longer for the younger group. Similarly, Ko et al. (2016) found in their retrospective study that older trauma patients received insufficient analgesic administration compared to younger patients. Untreated pain can lead to consequences that interfere with patients’ daily lives and, in addition, to chronic conditions later in life.

Participants in the present study who experienced low symptom control described how this resulted in unwanted isolation and had a negative impact on recovery. Research shows that isolation can be associated with adverse physical and psychological effects. In a study by Newman-Norlund et al. (2022), researchers measured quality of life, activity and loneliness in persons aged 60–80 years, before and after isolation during the Covid-19 pandemic. The result showed that even during a limited period of isolation, quality of life was significantly lower than pre-isolation. Our study demonstrates the need to continue monitoring patients’ symptoms after discharge from the hospital, which could be achieved by a nurse-led trauma outpatient clinic. Consequently, structured follow-up care might identify gaps in the treatment and provide interventions which can reduce the risk of becoming isolated. In a systematic review, researchers found six types of interventions that can be helpful for preventing loneliness in older adults. These interventions included social facilitation, psychological therapies, health and social care provision, animal therapy, befriending and leisure/skill development (Courtin & Knapp, 2017). Studies on these interventions provided individualized strategies for independent individuals and did not wish to be a burden. Similar results have been presented in a study on stroke survivors who returned home after early discharge and experienced that their relatives helped them with everyday tasks. Having relatives and friends nearby for help and support gave them a great sense of security. However, this also led to a feeling of interference in their personal autonomy when relatives tried to influence them (Nordin et al., 2015). Other research addressing this concern, that is, seeking help in later life, includes the study by Canvin et al. (2018), who also found that older adults were often reluctant to seek help even if they needed it. In contrast, they were more likely to purchase help in the form of home deliveries, cleaning help and everyday aids instead of asking relatives, as they did not want to be regarded as a burden. Sometimes, they also avoided offered help because of the perceived impact on their independence.

This study also addresses a concern regarding relatives’ role in caring for older patients. In Sweden, one in five people over the age of 18 provides care for a close relative, and extensive care can have major consequences for the caregivers’ health, employment and quality of life (National Board of Health and Welfare, 2014). Health care today is dependent on a patient’s relatives taking a great responsibility after discharge. While relatives wish to participate in planning the discharge, they are often poorly prepared for their loved ones’ homecoming (Bragstad et al., 2014).

In the present study, we found that the participants depended on others for managing their everyday life but the family members were not prepared for such responsibility. According to our data, social support and belonging seemed to be key factors for a safe return home. Therefore, we believe it is essential for nurses to involve relatives in planning the discharge and rehabilitation of their loved ones as they can make them aware of the importance of their role in the transition to recovery. Participants’ personal life approach (PLA), defined as how they perceive life and deal with difficulties, seemed important in the recovery process. Those with a positive mindset had an easier time overcoming barriers in this process than those with a more negative one, whose recovery was delayed by fear and a negative attitude. Similar findings have previously been reported by Pritchard et al. (2016), who interviewed older patients after acute hospitalization or rehabilitation. These authors found that a positive PLA was crucial and the main factor for participation in daily activities. Participants with a positive PLA used strategies to adapt to their new situation and make the best of it, thereby enabling them to participa in everyday activities. The study by Pritchard et al. (2016) as well as the present one, indicate that participants’ PLA is important for recovery after hospital discharge. When planning the discharge, it is necessary for nurses to identify the patients’ resources, thus enabling them to find their inner motivation for a PLA. This can be achieved through person-centred care during the hospital stay and by creating a partnership with the patient (Wolf et al., 2017).

A positive attitude also generated the power to act forcefully. In addition to a PLA, a person’s ability to tolerate and cope with changes also appeared to be essential in the recovery process. This is sometimes described as resilience, which refers to the ability to bounce back from adversity and adapt to the new normal state of life. Further, resilience can be described as the ability to cope with traumatic events and being able to maintain normal functioning (Ungar et al., 2013). The higher a person’s resilience, the greater their ability to cope with illness and vulnerability. In this context, older adults’ way of handling adversities by adopting a positive approach is a form of resilience or coping mechanism. Similar results have been reported in other studies concerning trauma victims. A recent study from the US showed that patients suffering from moderate to severe trauma with a low level of resilience had a more difficult recovery than those with a high level. The low resilience group had more difficulty performing ADLs independently, were less likely to return to work, more burdened by pain and PTSD and had lower quality of life at 6 months post-injury (Nehra et al., 2019). However, this needs to be further studied in order to draw conclusions about older adults.

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6.1 | Strengths and limitations of the study

In this study, we aimed to explore an under-represented patient group and provide a broader description of trauma patients' recovery process, including how they cope after experiencing a traumatic event. While writing present study, the COREQ Checklist was applied as a reporting standard to guarantee that the research is comprehensible for readers and can be replicated by other researchers. To further enhance credibility, we conducted two validation interviews with participants to determine whether they considered the findings to reflect their experiences. The participants included those who suffered various degrees of injury as well as different complications which influenced the duration of hospitalization. There was an even balance between women and men. This is a qualitative single-centre study, which may affect transferability to other contexts. In addition, a limitation is that patient recruitment may have been affected by the fact that patients cared for by the interviewing researcher were not asked to participate. A further possible limitation is that the sample is homogeneous, as all participants were Scandinavian.

The study aimed to explore participants' experiences of care and the recovery process after trauma. However, with the exception of participants reporting satisfaction with the care provided, the interviews yielded very little information about experiences of care at the trauma unit. This might be a consequence of deteriorated memory functions after trauma, which many of the participants reported during the interviews. Another possible explanation is limitations in the interview technique. A further possibility is that participants did not experience any major concerns during hospitalization, which may indicate that at the time of the interview, the participants had 'put the past behind them' and were mainly looking to the future and focusing on the recovery process.

6.2 | Recommendations for further research

The present study addresses an issue where previous research is limited. As the number of older patients is increasing, there will be an even greater need for evidence-based nursing care in the future. Thus, the theory presented here, that is, recovery after trauma in older patients in trauma care. Additionally, longitudinal quantitative studies on symptom burden should be performed.
A qualitative interview study with patients and professionals. BMJ Open, 7(7), e016491. https://doi.org/10.1136/bmjopen-2017-016491


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