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Research

A qualitative study of older adult trauma survivors' experiences in acute care and early recovery

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Abstract

Background: Older adults (aged ≥ 65 yr) account for a substantial proportion of hospital admissions for severe injury, yet little is known about their care experiences and views regarding outcomes. We sought to characterize the acute care and early recovery experiences of older adults who had been discharged after traumatic injury, with a long-term goal to inform the selection of patient-centred process and outcome measures in geriatric trauma.

Methods: From June 2018 to September 2019, we conducted telephone interviews with adults aged 65 years or older who had been discharged after traumatic injury within 6 months from Sunnybrook or London Health Sciences Centres in Ontario, Canada. Using interpretive description and thematic analysis, we drew on social science theories of illness and aging for data interpretation. We analyzed data to the point of theoretical saturation.

Results: We interviewed 25 trauma survivors aged 65–88 years. Most were injured in a fall. Four themes characterized participants' experiences, as follows: "I don't feel like a senior" (i.e., participants disliked being viewed as a senior or as needing senior-specific care); "don't bother telling him anything" (i.e., participants perceived ageist assumptions and treatment in acute care processes); getting back to normal (i.e., participants emphasized their active lifestyles and functional recovery as goals of care); "I have lost control of my life" (i.e., substantial social and personal losses linked to participants' experiences and adaptations to aging generally).

Interpretation: Findings suggest that older adults experience social and personal loss after injury, and underscore how implicit age bias may influence care experiences and outcomes. This can inform improvements in injury care and guide providers in the selection of patient-centred outcome measures.

Over the last decade, the incidence of physical injury among older adults (aged ≥ 65 yr) has increased substantially.[1–3] Otherwise known as geriatric trauma, this unintentional serious injury is most often caused by a fall (either from height or at the same level), or motor vehicle collisions (as drivers, passengers, pedestrians or cyclists).[4,5] The increase in injuries among older adults is attributable to more than just demographic changes, as older adults are living and working longer, and are leading very active lifestyles.[6–8] The development of organized trauma systems, including trauma centres, has improved injury care such that most seriously injured adults will survive their injuries.[9] However, many survivors will live with diminished health status, including chronic pain, emotional and psychological distress, and cognitive and physical impairments.[10–13] Injured older adults will experience these even more profoundly than other populations, given their existing comorbidities and limited physiologic reserve. Among older adults, short-term mortality and morbidity rates after severe injury are significantly higher than among younger people, even after adjusting for injury severity.[14–16]

Since trauma systems and care were originally developed for a younger population of injured adults, targeted strategies have aimed to address the acute care needs of older patients.[17–23] However, little is known about how these patients experience such care and about the variability and complexity of their long-term outcomes. Considering prevailing cultural attitudes toward older people and advanced age, the post-injury experiences of older adults may be quite disparate from those of younger patients.[24–26] Presently, we do not know what older adults consider to be high-quality trauma care or what they consider to be the most valued outcomes. This makes it challenging to evaluate and improve

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trauma care for injured older adults. In this study, we sought to characterize the acute care and early recovery experiences of older adult trauma survivors, with a long-term goal to inform the selection of patient-centred process and outcome measures in geriatric trauma.

Methods

Study design

We used interpretive description methodology.[27] This qualitative approach prioritizes clinically relevant research questions that derive pragmatic insights to improve patient care and experiences. Drawing from the interpretivist paradigm, we focused on the meanings associated with participants' lived experience of trauma care and short-term injury recovery.[28] Qualitative research has been strongly endorsed for understanding patient-centred outcomes and care experiences.[29] This study is reported using the Consolidated Criteria for Reporting Qualitative Studies (COREQ) checklist.[30]

Setting

We conducted the study from June 2018 to September 2019 in 2 level 1 trauma centres, Sunnybrook and London Health Sciences Centres, in Ontario, Canada. In Ontario, an organized trauma care system is in place such that severely injured people are treated in designated trauma centres. Organized trauma systems are associated with a reduced risk of injury-related death.[31,32] With respect to hospital care for older adults in Ontario, the Senior Friendly Care framework provides guiding principles to optimize outcomes across the following 5 domains: organizational support, processes of care, emotional and behavioural environment, ethics in clinical care and research, and physical environment.[33] In alignment with the Senior Friendly Care framework, injured adults aged 70 years or older in our centres receive an automatic referral for geriatric consultation, whereby a geriatrician performs a comprehensive assessment and plans for management and follow-up.

Participants and recruitment

Adults aged 65 years or older who were discharged from the trauma service at the study sites within the previous 6 months were eligible for study inclusion. Through purposive sampling and a maximum variation sampling approach, study coordinators used patient lists and chart records to identify eligible participants; they approached individuals either on the ward before discharge or in the follow-up clinic.[34] Coordinators made follow-up telephone calls to obtain patient consent to the study and to schedule interviews. We aimed to recruit a varied sample according to sex, age and injury mechanism. The study was described to participants as exploring the impact of injury on seniors aged 65 years or older. We excluded individuals who were unable to communicate in English and who had either cognitive impairment that precluded informed consent or hearing loss that precluded a lengthy telephone conversation. We excluded individuals living in organized care facilities. Study coordinators assessed eligibility.

Data collection

Two investigators (L.G.C., a female anthropologist with expertise in qualitative health research, and B.H., a female trauma surgeon and intensivist with expertise in older adult trauma care and experience in qualitative research) developed an interview guide, informed by the literature. They approached data with continuous reflection on their respective positions as a social scientist and clinician scientist with interests in critical analysis and improvement of older adult trauma care. One investigator (L.G.C.), who was not known to participants, conducted semi-structured telephone interviews. After 2 pilot interviews with participants and minor modifications to the guide, interviews were completed from June 2018 to September 2019; they were audio-recorded and transcribed by a professional transcriber. We used open-ended questions to elicit participants' experiences of injury, hospital admission and post-discharge care. We used probes to explore the specific care processes and outcomes that participants valued and participants' perspectives on senior-friendly care (Appendix 1, available at www.cmajopen.ca/content/11/2/E323/suppl/DC1).

Study coordinators extracted participants' age, sex, injury mechanism, number of comorbidities, hospital interventions, injury severity score, length of stay and discharge disposition from electronic charts. The injury severity score is the most widely used scoring system for injury. An injury severity score greater than 9 is commonly considered moderate injury, while a score greater than 15 is considered severe injury.[35] Injury severity score is calculated at level 1 trauma centres by certified trauma registrars. In this study, we collected injury severity score to describe the study population, rather than to interpret study results. No quality checks on data extraction were conducted.

Data analysis

Two investigators (L.G.C. and B.H.) analyzed data iteratively and inductively following the principles of thematic analysis as described by Ryan and Bernard,[36] and Pope and colleagues.[37] The main steps involved reading and coding transcripts on an ongoing basis within and across interviews. Data were inductively sorted and coded. Analysts then grouped codes into categories through frequent discussion. We selected participant quotes as representative of major themes. Once major themes were identified, we introduced anthropological and sociological theories of illness and aging to interpret the study findings and broaden our understanding of participants' experiences.[38–40] We collected and analyzed data to the point of theoretical saturation.[41] We used NVivo version 11 for data management.

Ethics approval

Approval was obtained from Sunnybrook (no. 2187) and London Health Sciences Centres' (Western University no. 111119) Research Ethics Boards.

Results

We interviewed 25 trauma survivors aged 65–88 years. Most participants were aged either 65–74 years (n = 12) or 75–84 years (n = 11). Thirteen were male, and 14 were injured

in a fall (Table 1). All participants were living independently at home before injury and 9 were working for income when injured. Two held volunteer roles. Injury severity scores ranged from 2 to 34, with a mean of 15.6. Participants were between 2- and 6-months post-discharge. Interviews lasted on average 36 minutes.

Table 1: Participant characteristics

Characteristic	No. of participants* $n = 25$
Sex	
Male	13
Female	12
Age, yr	
65–74	12
75–84	11
≥ 85	2
Injury mechanism	
Fall	14
MVC	4
Pedestrian	2
Assault	2
Other	3
Comorbidities	
0	11
1	2
2	2
≥ 3	10
Hospital care	
Surgery	8
Intensive care	13
Ventilation	1
Hospital LOS, d	
≤ 3	7
4–10	8
11–19	7
≥ 20	3
Median LOS	8
Range LOS	1–25
Injury severity score	
≤ 8	3
9–15	10
16–24	9
≥ 25	3
Discharge disposition	
Home	16
Rehabilitation	6
Other hospital	3

Note: LOS = length of stay, MVC = motor vehicle collision.
*Unless indicated otherwise.

Theme 1: "I don't feel like a senior"

Participants disliked being viewed as senior or as needing senior-specific care. Many study participants pushed back on the idea they were viewed as senior in the context of their hospital care, associating senior care negatively with being old. Although we did not give any operational definition of senior-friendly care beyond its inclusion of patients who were aged 65 years or older, many participants did not see themselves as suitable for it and rejected any assumptions about what it implied. For example, one participant expressed offense to our study title (patient-centred outcomes in geriatric trauma) because, as they explained, "I don't act as though I'm old" (P13, 76 yr). Several participants responded similarly when told their care was delivered as part of a senior-friendly care strategy. Participants in the youngest cohort of the study (65–74 yr), drew comparisons between themselves and people in their 80s to further explain how they were "not old" and were not in need of senior-friendly care. They highlighted their relative youth, physical strength and high level of cognitive functioning (Box 1).

Theme 2: "Don't bother telling him anything"

Participants perceived ageist assumptions and treatment in acute care processes. Several participants described personally degrading experiences in the hospital that they attributed to ageist attitudes. Despite the implementation of the senior-friendly care strategy in these care settings, some felt ignored by hospital staff when needing assessment or asking questions

Box 1: Theme 1 — "I don't feel like a senior"

"I'm not going there; I'm not going to be old! I am age-wise but I'm not elderly in my mind. I have to admit, I am 73 years old, so I guess I do fit into that category. I just don't feel like it that's all, which is a good thing." (P3, 73 yr)

"Well, I don't feel like a senior. I feel, like, you know, I don't know — 50." (P10, 78 yr)

"I don't particularly need a senior friendly strategy." (P17, 86 yr)

"I shouldn't be considered a senior because it's not the way I see myself. But I doubt that's the way anybody sees themselves … because I didn't suffer a head injury and because I'm not senile and because of a bunch of other things, I was perfectly able to integrate whatever doctors were telling me into my world view, if you know what I mean. I'm probably atypical. I'm just as busy now doing what I'm doing as I was 30 years ago." (P24, 66 yr)

"I went to the Rolling Stones concert 2 weeks out. Mick Jagger is 78 years old. I still feel young myself. I don't have a problem with feeling a little older. I just don't see 71 as a senior. I don't particularly like it. I'd rather be going backward but that's the reality of it. I've always been reasonably healthy. So, I'm reasonably active and fortunate enough to live life in a reasonable, pretty good way." (P23, 71 yr)

"I don't feel like a senior. I understand that I'm 66. I'm glad that there's attention being placed to seniors because in the hospital I had 4 roommates and the last one I had was 89 years old. I don't consider myself in that group because my brain doesn't function that way. So, I don't act and feel like a senior." (P22, 66 yr)

about their care and perceived ignoring to be related to their age. Along with feeling unheard and unseen, a participant noted ageist assumptions in health record notes, accessible through the patient portal of the hospitals' electronic medical records (Box 2).

Theme 3: Getting back to normal

Participants emphasized their active lifestyles and functional recovery as goals of care. When describing their goals of care, getting back to normal was the prevailing expression. Many participants emphasized returning to their active independent lifestyles. All of those who were employed pre-injury valued returning to work as an important outcome, needing to generate income and maintain their livelihoods. That said, only a small minority of participants recalled being asked about goals of care or discussing their daily routines while in hospital. Most had not discussed with providers what "normal" meant to them in the context of their own lives. In several instances, participants stated that their trauma care providers were unaware of the level of activity that they had returned to post-injury, either because they had not been asked or had not been advised by providers to modify their activity (Box 3).

Box 2: Theme 2 — "Don't bother telling him anything"

"Older people don't get listened to." (P2, 76 yr)

"You get to be a certain age and you don't matter." (P7, 69 yr)

"I have gotten to think that that this is the way it was when I was a kid dealing with doctors and nurses. You know, 'I know he's getting better so don't bother telling him anything'." (P1, 76 yr)

"We get to be thinking that all old people are slightly demented. I even found it in my notes. No sign of dementia. Like, they were expecting it. And then another one, 'Doesn't appear to have false teeth,' or something like that. I was just laughing. It's ridiculous." (P25, 79 yr)

Box 3: Theme 3 — Getting back to normal

"All I think about is getting back in the bush. I've been cutting wood since 1974. Never had a problem. Six hours minimum a day. And then the days I'm not cutting my wood, I'm cutting my grass. I've got 8 acres of grass here. Yeah. That's my life." (P10, 78 yr)

"I was fully committed to coming back and stepping right back in, which I have already done. The doctors probably wouldn't be too happy with me … I really and truly don't know whether they realize what farmwomen do. I'm driving tractors, driving skid steers, working with cattle and this kind of thing. I don't think they really realize that's what you do on a daily basis." (P16, 75 yr)

"I couldn't tell you what the goals of care were because like I said, I'd see somebody if it was necessary, and all they did was just talk about was the current problem, you know? 'We're going to send you to x-ray' or 'we're going to do this', but no reason why." (P2, 76 yr)

"Well, except the word rehab means preparing you to go to live a normal life at home. That's rehab as far as I was concerned. But there wasn't any, 'Well, we're glad you're here. Now, we're going to, you know, prepare you for this or that'." (P15, 83 yr)

Theme 4: "I have lost control of my life"

Substantial social and personal losses were linked to participants' experiences and adaptations to aging generally. Although participants described a range of functional and cognitive limitations, there was also a predominant narrative of loss associated with their injuries. The experience of becoming completely or moderately homebound after discharge felt like loss of freedom. One participant compared it to living in a cage. Injury-imposed limitations on everyday activities, such as shopping and caring for grandchildren, led to frustration and a sense of defeat. Many participants described loss of independence, which manifested as total life disruption, and expressed unhappiness about new permanent living or working arrangements, such as work retirement, driving retirement or need for assisted living. Several participants expressed guilt for how their injuries had affected their caregivers' lives, particularly when they themselves held a caregiving role before injury (Box 4).

Interpretation

Our study findings have implications for improving the experience of acute injury care for older adults and, in particular, for identifying and combating ageism in this context. Although strategies such as geriatric consultations are in place to address the unique needs of this population, ageist stereotypes held by

Box 4: Theme 4 — "I have lost control of my life"

"My children are more worried about my staying alone. We are actively looking for a condo, which might solve some problems, but not all the problems. This is a house; I like to live in the house. I like gardening and that's why I stayed on even after my husband's death. But now I think it may be too much for me. I think they are looking for senior apartments." (P14, 76 yr)

"Well, I've been literally grounded. You lose control. And I have lost control of my life to the point that — I'm mobile because I have friends and I have a spouse — I can get around, but it's a different way and it's making me a beggar." (P1, 75 yr)

"I have 2 grandchildren, 20 months and 7 weeks old, and right now I still can't really hold the 7-week-old with great confidence. I can't go out to the park with my granddaughter, like I did, to you know, give her swing, so my big thing is my independence is by far the most — being able to drive instead of being chauffeured, not having to rely on my husband who's my 24/7 caregiver. Or my son who does all the paperwork. I want to be able to go grocery shopping again. So cook, clean, wash dishes. These are things I'm not doing right now." (P22, 66 yr)

"For older people, especially those that were, you know, pretty much totally independent, that's the worst thing is to lose that independence. Like, right now I have to depend on other people to do — well, certainly everything outside for me. And at this point in time, I'm even dependent on family to make sure I get my laundry done, to get my shopping done and any other kind of errand, which I'm hoping, I'm certainly hoping that I get that ability back." (P21, 72 yr)

"I'm 82. So, I just sit back at how much time I did enjoy that, and spend time with people … I taught a lot of different classes in the high school, which you do get paid a bit for, night classes and things like that. But that wasn't really the reason I did it. It was just that I enjoyed it and I enjoyed the people I worked with." (P8, 82 yr)

older adults themselves have implications for how they view themselves in relation to this care. For example, geriatric medicine, and the comprehensive geriatric assessment, has been previously critiqued for reinforcing cultural ideology that equates older age with disease, and for upholding a biomedicalization of aging that may alienate older adults who are well.[39,40] This critique resonated for trauma survivors in our study, who viewed senior-friendly care to be rather unnecessary. The finding that older adults hold negative views of aging is not new, but consideration of its implications for engaging in important age-related trauma care is important because they may not engage in such care if they do not see it as relevant to them. Although unintentional, providers' language use may act to constrain and limit some older adults' views of, and engagement in, important age-specific injury care. Opportunities exist to modify this in clinical practice; for example, by replacing terms perceived to be demeaning and value-laden, such as "geriatric," with value-neutral language that refers to injury care for people older than 65 years. In written clinical notes, bias can present in word choice and phrasing that stigmatizes or increases negative attitudes toward patients.[42] This bias can be mitigated by avoiding notes that stereotype or reinforce ageist assumptions; for example, "no sign of dementia," which reflects implicit and unknowing ageism. These subtle but meaningful changes may improve the treatment experience of older adults who have survived traumatic injury, who may then see themselves through a more value-neutral lens as being older with age-specific needs.[43]

There are also important implications of the finding that older adult trauma survivors experience considerable social and personal loss that has the potential to threaten how they view themselves and how they wish to be viewed by others (i.e., their sense of social personhood).[44] This experience is comparable to what has previously been described among the chronically ill as loss of self, which is an individual's experience of suffering, vis-à-vis loss of their self-image from a serious illness.[44] Changes in self-image owing to illness experience may lead to a diminished concept of self as everyday limitations associated with the illness undermine establishing a new, valued self-image. Although we found variation in participants' experiences of loss after injury, for some participants, loss of self appeared to be an entangled social process related, on the one hand, to the injury experience, and on the other hand, to the experience of aging. These experiences intersected for many participants in our study, whereby loss associated with injury also introduced a sense of loss that is typically, and stigmatically, associated with being old. As a result of these intersecting experiences, and in light of ageist attitudes held by some participants, we found that, although some older adults perceived little or no life disruption from their injury, injury had the potential to be a magnifying and totalizing experience of loss for others.

Study findings suggest that, in caring for older adults, health care providers must move beyond the medical, disease-oriented model of injury toward an integrated approach that accounts for the subjective and social experiences of both injury and aging.[45] This requires a heightened sensitivity to how injury in older adults threatens the cultural ideals of independence and control, and a meaningful social life, particularly in ways that can lead to social isolation and long-term mental health–related outcomes.[46–48] Assessment of older adults' self-image and perceived self-worth after injury and over time may be an important outcome measure to better understand and evaluate their survivorship experiences and concomitant adaptation to aging.

Limitations

The views described here reflect a selected sample of participants who were mostly aged 65–84 years and who appeared to be generally well. Participants were neither cognitively nor hearing impaired and were largely independent at baseline. We did not collect reasons for nonparticipation, race and ethnicity and socioeconomic status, potentially limiting the diversity of our sample. We did not return transcripts to participants and we did not seek participant feedback, potentially limiting analysis.[49,50]

Conclusion

Older adults who survived traumatic injury value care processes that reflect their independence and autonomy, and outcomes that uphold a sense of social and self-continuity, as well as control over daily life. Patient-centred approaches to trauma care for older adults must consider the variable activities that adults older than 65 years value and consider ways to mitigate social and personal loss. Awareness and replacement of value-laden terminology is a first step in modifying patient experience. To evaluate and improve trauma survivorship, future research should examine the sociocultural factors that influence survivors' experiences and outcomes over time.

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