Exploration of older people’s perceptions of behavioural factors associated with falls

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Abstract

Background: falls rates in older people continue to rise despite concerted efforts to manage falls risks. As more effective strategies to reduce falls in older people may arise from better understanding their perspectives on falls risk, this study aimed to explore perceptions and behavioural decisions that may affect risk of falling among older people living in regional Australia.

Method: this qualitative research, informed by hermeneutics, explored older people’s perspectives on decisions they made that could affect their falls risk. The study involved 26 participants (21 females) aged 65–84 years, residing in regional Australia. In total, 13 participated in semi-structured focus groups and 13 in semi-structured, in-depth interviews.

Results: six key themes illuminated the challenges older people faced in relation to falls risk. These were: the role that independence played in decision making regarding risk; the influence of previous falls experience; older people’s level of understanding of risks; ability and willingness to engage with support; the need or desire to cover up a fall history; and the influence of finances in managing risk. Older people’s accounts demonstrated they experienced competing influences that impacted upon decisions they made with respect to falls risks. Most significantly, the complex interplay of these influences drove the decisions older people made, sometimes placing them at greater risk of falling.

Conclusion: consideration of the multifaceted issues older people face when managing falls risk, and the influence these factors have on their behaviours, is vital to successfully reducing rates of fall related injuries in this population.

Keywords: behavioural risk factors, older people, independence, falls risk

Introduction

Fall-related injuries in older people constitute a significant public health issue, with falling representing the leading cause of unintentional injury in this population [1]. Several studies of older people’s perceptions of risk have shown they do not always appreciate their actual risk of fall related injury [2–6]. Being aware of known falls risk factors but believing these factors do not apply to them is likely to result in an underestimation of risk, making it difficult to engage this population group in falls prevention strategies to further reduce their personal risk. In sharp contrast, older people who overestimate their level of falls risk are likely to impose restrictions on physical activity levels, potentially increasing their risk of falling in the future [7].

Why older people misjudge their falls risk is a mystery; little is known about the factors that contribute to older people’s decisions that affect their falls risks, other than a general belief of some that they are not at risk [8]. Therefore, it is difficult to speculate why older people overestimate or underestimate their levels of falls risk or continue to knowingly undertake tasks that pose a risk. Understanding older people’s perceptions of falls risk and influences on behaviour should provide valuable insight to inform the way we approach falls prevention for this population. The aim of this study was to explore older people’s experiences of falls and their perceptions of factors associated with falls risks and factors that inform their decisions on whether to undertake activities that pose a risk.
Methods design and setting

This qualitative study employed a hermeneutic approach to explore experiences of older people who had fallen. Hermeneutics, found within the interpretive paradigm, requires researchers to construct understandings by establishing the context and meaning behind what people do [9, 10]. The hermeneutic process requires researchers to identify their pre-understanding of the phenomena being explored (in this case falls risk), to illuminate meaning arising from participant transcripts in relation to the research questions. Congruent with hermeneutics, this article has used rich deep description with direct excerpts from the participants’ transcripts in relation to the research questions. This approach was critical in both the identification and the demonstration of themes arising from the research. As well, a reflexive journal [15] was used to document changes in group and interview questions were, ‘Describe your fall experience’ and ‘Describe any factors that you believe increase your potential to fall’. An additional theme was included in the interviews to further explore the personal impact of a significant injury as a result of fall ‘Describe how your fall related injury has impacted you’. All sessions were facilitated by the lead researcher (K.R.), approximately 60 min in duration and held in a private meeting room, centrally located within the town in which the participants resided. A reflexive journal was maintained before and after each session. Data were audio recorded and transcribed verbatim, with pseudonyms employed to protect participant privacy and anonymity.

Study sample

A purposive sampling method, consistent with the hermeneutic approach, was adopted in order to achieve the aims of the study [9]. The study recruited older people, 65 years and older, who had experienced a fall in the previous 12 months. To provide opportunity to explore risk factors and personal impact associated with serious injuries resulting from falls, participants who indicated, upon screening, they required medical treatment as a direct result of a fall related injury were invited to undertake a semi-structured in-depth interview and participants who sustained only minor injury or no injury as a result of their fall were invited to participate in a focus group.

Participants were recruited through distribution of information sheets to a wide range of organisations, groups, clubs and health professionals within the geographic area, in order to ensure recruitment of participants with a range of falls experiences and perspectives on falls risk. In total, 26 eligible people contacted the researcher and were provided with an information sheet about the study before they consented to participate in the study. Written informed consent was obtained from each participant and no participants dropped out during data collection. Results of the purposive sampling and recruitment process are shown in Table 1.

Data collection

Semi-structured focus groups (Table 2) and semi-structured in-depth interviews, informed by hermeneutics, were used to gather data for this study. Both the focus groups and interview sessions were guided by open-ended questions to encourage conversation [9, 12]. Examples of the focus

<table>
<thead>
<tr>
<th>Semi-structured in-depth interviews</th>
<th>Semi-structured focus groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Age (years)</td>
</tr>
<tr>
<td>Female: ( n = 11 )</td>
<td>65–69; ( n = 1 )</td>
</tr>
<tr>
<td>Male: ( n = 2 )</td>
<td>75–79; ( n = 6 )</td>
</tr>
<tr>
<td>Lived alone: ( n = 6 )</td>
<td>80–84; ( n = 2 )</td>
</tr>
</tbody>
</table>

Data analysis

Data analysis was informed by Gadamer’s approach to hermeneutics and comprised a four stage process [13].

- **Stage 1**: Examination of the text as a whole to elicit the fundamental meaning.
- **Stage 2**: Examination of the individual parts to expose understanding of subject matter.
- **Stage 3**: Examination of each of the individual parts in light of the whole text with a purpose of expanding the understanding of the whole text.
- **Stage 4**: Identification of representative passages that provide a shared understanding between the researcher and the participants.

In order to identify the data saturation point, data analysis, commencing in parallel with data collection, involved coding of identified categories and relationships between categories [14]. Iterative development of understanding of the data was assisted by the use of memos that recorded reflections, ideas and thoughts. These memos helped to identify commonalities and differences that in turn led to identification of theoretical relationships. Throughout this process consideration of the true patterns in the data helped uncover new concepts or ideas that warranted further investigation or data collection. This was achieved through critical appraisal of the theoretical relationships and identified patterns linked to direct participant excerpts undertaken by the other two researchers (J.C. and R.P.). The process continued until key themes had emerged and data saturation had been achieved, such that no new categories within the data were being revealed.

Ensuring trustworthiness of this research involved a range of strategies. Decision making related to data collection and analysis was recorded and used to enhance understanding. This also retained focus on the meaning arising from participants’ transcripts in relation to the research questions. Congruent with hermeneutics, this article has used rich deep description with direct excerpts from the participants’ data in the presentation of results. This approach was critical in both the identification and the demonstration of themes arising from the research. As well, a reflexive journal [15] was used to document changes in
understanding arising from analysis and immersion in the data.

Results

The thematic analysis revealed a complex interplay between six themes that impacted upon participants’ behaviour towards risk. Of importance is that the theme independence strongly influenced all other themes being central to participant decision making related to falls risk. Figure 1 depicts each of the themes and the complex balancing act in which older people engage when managing their risk of falling.

At one end of the fall risk spectrum a person will instigate strategies to actively be safe and at the other end of the spectrum, a person will undertake activities that knowingly or unknowingly put them at risk of falling. Each of the themes is portrayed on a sliding scale, which illustrates mobility between ends of the spectrum. These themes are weighted according to the degree of influence they have on everyday decisions older people make. For example, a person may have the financial means to pay for added support to keep them safe, thus the influences of finance theme would move towards the actively being safe end of the spectrum. However, if that same person failed to recognise that they were at risk of falling because their previous fall experience had resulted in little or no consequence (physical or psychological), they were more likely to continue to undertake a task that put them at risk because experiencing a fall was a greater influence on their behavioural decisions than financial considerations.

The following sections detail the six themes that were identified and in each case a relevant example, derived from the participants’ transcripts, is provided to demonstrate the interpretation of the data.

Theme 1: Independence

The desire to be independent had a profound influence on participants because it was defined by their beliefs and their personal circumstances. It was the value participants placed on independence in their current situation that influenced their decisions regarding activities they would undertake. Although independence played an important role on its own, it was the interrelationship between independence and the other themes that more powerfully influenced decisions of older people related to falls safety. This complex interrelationship is highlighted in Audrey’s excerpt below:

I have a lovely little ladder which I’ve used for many years and it’s a sturdy, strong ladder to get to the top of the cupboards. I have just noticed now since we’ve both turned 80 it’s a bit difficult to get up the ladder, and we feel we shouldn’t do it, because it is dangerous. I haven’t stopped using it though. I used it last night. But I know I should stop. I haven’t got anybody to do anything for me, we have to be independent. (Audrey—FG with injury)

Audrey’s excerpt typifies the balancing act that the participants experienced in making decisions regarding whether to undertake what to them are everyday activities. As can be seen from the excerpt, the decision to use the ladder was multifaceted. Audrey recognised that, at the age of 80, her diminished physical capabilities probably increased her level of risk. However, she continued to undertake the task in the belief that the ladder was sturdy and strong; this seemed to reduce the perceived risk for her. Key to her decision was that there was no-one to help her and so she felt she had to do the task in order to retain independence. Also important to her decision was that previously she had undertaken this particular task without a fall. That is, successfully using the ladder in the past affirmed her decision to continue with this activity, even though she perceived a risk existed. Interestingly, Audrey previously experienced a fall tripping up a step, but this fall experience had not led to her considering that she might be at risk of falling when climbing the ladder. Essentially, she seemed not to link falling up a step to her ability to safely climb the ladder.

In some situations, an inability to access or unwillingness to ask for support may be why people take such risks. Audrey saw there was no one to do things for her. That is, her isolation required her to be independent and this led to her decision to complete the task herself. She openly admits that using a ladder was a risk, but having to be independent overshadowed any reluctance she may have had for taking the risk.

Theme 2: Experiencing a fall

Participants’ fall experiences underpinned their understanding of the risks, and their motivation to maintain independence or actively seek support. It appeared that the outcomes associated with their previous fall was strongly linked to motivation to change behaviour. Participants who escaped injury often failed to recognise the potential risks and continued to undertake activities that could increase their risk of falling. However, participants who had sustained a serious physical injury as a result of a fall or sustained psychological impact were more likely to actively change behaviour in an attempt to reduce their risk of falling again.

For some participants falling was really not significant for them; it was just regarded as something that occurred, which they had to get used to. This opinion can be seen in April’s excerpt below.
I’m good at falling. I’ve practised a lot. Most of them are just little falls; you know you pick yourself up. I’m lucky I have never broken anything. But I’ve been falling over consistently, you know I just fall. I fell off a tram in Melbourne once. A man picked me up. I’ve never broken anything. (April-FG with injury)

April had experienced multiple falls with little consequence. When participants had suffered little or no injury it led them to believe that falling was not a major concern and thus required little consideration. April’s response suggests that breaking a bone may be a measure of whether a fall was severe or not, and whether associated activities or tasks needed to be avoided. That is, participants with this type of experience seemed to have little appreciation of the risks associated with specific activities and were unlikely to adjust behaviour to prevent future falls.

Some participants overestimated risks, resulting in them limiting activities for fear of falling again. The participants with this perception had often suffered a significant injury, such as a fracture. They had become much more conscious of the risks associated with further falls, with their confidence considerably undermined. Because of their fear, these participants often adopted extreme measures to reduce their risk of future falls. The combination of fear with self-imposed restrictions greatly impacted on these participants’ quality of life. This can be seen in the excerpt from Andrew below.

We had no trouble, I’d get out and cut the lawn, I could walk around. I’d had no trouble whatsoever. But since I had this fall, I can’t do nothing. I mean I feel guilty that I can’t even get down the street. I never go, I can’t get out anywhere. I never go anywhere. I don’t do anything. I’m just frightened that I’m going to fall, keep falling all the time, I’m just too petrified. Too scared to do anything or advance myself to do anything because I’m scared I’m going to fall. (Andrew-Interview)

Andrew had fallen in his kitchen and sustained head and spinal injuries which resulted in him being hospitalised for over a month. As can be seen by this excerpt, there were a number of issues that Andrew discussed as a result of this fall. He talked about a sense of guilt associated with not being able to undertake the tasks he would normally perform, such as mowing the lawn or going down the street. This guilt added to the fear of falling that he identified as the reason he does not attempt to do these tasks. Andrew’s excerpt demonstrates that fear can influence a person’s perception of risk to the point that they overestimate their level of risk and restrict all activities.

**Theme 3: Understanding of the risks**

Understanding the risks associated with falling was an important element in reducing risk of further falls as it influenced a person’s decision making towards undertaking tasks that might pose a risk. Some participants were aware that certain activities they undertook could pose a risk, while others had no awareness that an activity could cause a fall. This helps to explain why participants’ responses to risk were so varied, which adds to the complexity of designing effective falls prevention strategies.

Essentially, participants’ interpretations of which activities were safe played a role in their decisions to undertake those activities or tasks, as seen from Georgina’s excerpt below.

If you’re inside the house and you’ve got a stepladder that’s safe, you can put away the blankets, the winter stuff. I often use a stepladder inside to reach up to certain things. (Georgina-FG)

Georgina differentiates between inside and outside when using a ladder. She seemed to believe that because it was inside her house and she used a stepladder, it was a safe activity. Her belief may have formed from undertaking this task many times before without incident. The effect of age
on her ability to continue to successfully achieve this task without incident does not seem to occur to Georgina. Some activities may be considered safer by older people because of the environment in which they are undertaken.

Theme 4: Interacting with support

Ability and willingness to access support also influenced participants’ decisions to undertake high-risk activities. There were a number of reasons why participants found it challenging to interact with support. They described personal challenges centred on not wanting to accept support or burden people as well as barriers arising from not knowing where to access the support they needed.

Participants’ unwillingness to engage family members meant that they were more likely to undertake activities that may put them at risk of a fall. The participants’ reasoning for not asking for help was generally focused on a perception that younger family members were busy with their own lives and asking to assist would create an extra burden on them. This is seen in Gayle’s excerpt below.

I don’t want to because they’re good to me and because they’re so nice to me. There’s no way I’m going to be a burden to them. I manage to do most everything myself. But I don’t make a point of asking them to do much because they’ve got their own lives and I’d rather them come to sit and have a talk.

(Gayle-Interview)

Gayle appreciates that her family members are busy and she does not want to create extra stress or burden on them. She indicates that she is reluctant to ask for help as these requests could impact on their current relationship, meaning less time to sit and chat with her. It is the social interaction with her family that she values most and it is important to her that this is not jeopardised. Understanding the complexity associated with family relationships and falls, and the balance older people have to maintain between family doing things for them versus social interaction is important. This is central to why some participants, such as Gayle, continued to undertake activities that potentially put them at risk.

Theme 5: Covering up

Participants acknowledged that they did not always disclose their falls history or the challenges they faced on a day-to-day basis to health professionals or family members. There were two main drivers for this behaviour. First, their desire to maintain their current level of independence. Second, they did not want to worry their families. Of importance, covering up falls extended to interactions with health professionals.

Participants believed that admitting they had fallen, especially when they had not hurt themselves, would cause families to think they were not coping. One way of deflecting this concern was to hide or not disclose the true extent of the issues that the participant was dealing with, as explained by Gabrielle below.

I lose my balance a lot and I struggle getting up and down my stairs, we’ve got stairs everywhere. They [children] would worry terribly if I told them everything so I don’t, I don’t really want to put that burden on her then, and the other’s working hard because they’re paying off their little farm, he’s working hard.

(Gabrielle-Interview)

Gabrielle felt that if her family understood the full extent of the difficulties she was having it would increase their concern for her. She did not want to impact on their already busy lives. In Gabrielle’s mind she was doing the right thing by the family by not disclosing her limitations and potentially creating angst or causing them more work. This behaviour could put her at further risk for falls as she tries to undertake tasks that place her at risk of falling.

Theme 6: The influence of finances

Finances and their impact on participant behaviour related to falls was an important theme to emerge from the data. There was a real financial impact associated with falls prevention strategies, which the participants discussed. Participants who did not have the means to pay for support were often left to continue to undertake or cover up tasks that might put them at risk.

Discussion of financial constraints centred on specific modifications or regular support or maintenance. Some participants described less obvious ongoing costs. For instance, increasing general living costs, such as electricity, had an influence on the participants’ capacity to avoid a fall. Some participants actively engaged in strategies to keep themselves safe, but this had to be weighed up against the costs associated with these strategies. This is demonstrated in Alana’s excerpt below.

One thing that I think we do, it’s a safety measure in several aspects which we’re starting to have to think about is leaving a lot of lights on, a lot of lights around the house when you’re in the house, but the way electricity is going this is going to have to be something that we look at, because the bill goes up every quarter and certainly the income doesn’t. (Alana-FG with injury)

In this excerpt the cost of electricity was impacting on Alana’s decision making and thus her safety. As general cost of living pressures impacted upon participants’ abilities to budget, the costs associated with reducing falls risk also had to compete with other expenses. Participants seemingly had to make financially driven decisions that were not always in their best interests. Alana’s excerpt above demonstrates the complexity of preventing falls and the impact of seemingly unconnected factors.

Discussion

This research provides an understanding of the experiences and perceptions of older people concerning falling, falls
risks and the behavioural decisions they make on a daily basis. Most significantly, the study revealed that managing individual risk was multifaceted and older people were facing with competing influences that impacted their everyday decisions and behaviour. The reality was that managing falls risk was a daily balancing act for participants, where they struggled with both internal and external influences that would either move them towards the actively being safe end of the spectrum or the risking a fall end of the spectrum. Recognising the complex interplay between the themes identified in this research, in particular the theme of retaining independence, and the ways in which this drove decisions older people make is key to understanding falls and acting to prevent falls occurring in this population.

Retaining independence was found to be central to the decisions older people make regarding activities or tasks that may pose a falls risk. Participants in this research strongly linked independence with their sense of purpose and with their ability to control their lives. That is, independence overshadowed consideration of risks associated with an activity. This finding is supported in the research literature by other qualitative studies [6, 16, 17]. However, this research provides new understanding of the ways in which retaining independence and autonomy impacted upon the willingness of older people to knowingly undertake high-risk activities.

Although independence underpinned participants’ decisions, this research also found that it was the interplay between independence and the participants’ understanding of risks that seemed to have the greatest influence on whether the participant knowingly or unknowingly undertook activities that could pose a risk. For example, participants who did not believe they were at risk of falling continued to undertake high-risk activities, such as getting up ladders to clean the gutters, even though they had an appreciation that this was a task older people probably should not be doing. This research highlights the importance of an older person’s perception of their own level of risk and the ways this may lead to risk taking behaviour within their everyday lives.

Strengths and limitations

The research presented here is the first known in depth exploration of the behavioural risk factors associated with falling from the perspective of the older person. The research was undertaken in one geographic region of Australia, with a small sample of older people. Further research in other geographic locations and contexts is needed to assess the transferability of the findings, based on the described research approach and interpretations [9].

Conclusion

The complex interplay between retaining independence and autonomy and other factors in determining whether older people undertook activities that either posed a falls risk or reduced their falls risk was a central finding of this research. This finding was highlighted through exploration of the six themes described in this article that drove participants’ decisions regarding whether they would knowingly or unknowingly undertake risky activities.

The use of a qualitative research approach has enabled a deeper understanding of the experiences and perceptions older people have of falling. This new knowledge provides insight into why older people may continue to undertake activities that pose a risk for falling. To enhance falls prevention models, consideration of the complex behavioural risk factors identified in this research needs to occur alongside authentic engagement with older people to identify solutions that will work within their unique contexts.

Key points

- Understanding the perceptions of older people regarding risk factors for falls is important to inform prevention strategies.
- Behavioural decisions of older people can influence fall related risks.
- Behavioural decisions are influenced by a complex interplay between a desire for independence and other key considerations.
- Falls prevention strategies should consider the behavioural risk factors associated with falling.

Author’s contributions and consent

All authors conceived and designed the study. All authors contributed to the design, the first author collected the data and led data interpretation and all authors drafted the article. All authors approved the current article version of the article for publication.

Duplicate publishing

This study has not been published elsewhere.

Ethics approval and consent to participate

Ethics approval for this research project was granted through the Charles Sturt University Human Research Ethical Committee, protocol number HREC 2011/082. All participants gave written, informed consent to participate prior to data collection and participants were informed before the data collection phase and at the start of each interview or focus group session that their participation was voluntary and they were free to withdraw at any time without prejudice. All participants’ names have been replaced with pseudonyms to protect confidentiality.
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Conflict of interest

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References


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