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QUALITATIVE META SYNTHESIS

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Inpatients' experiences of falls: A qualitative meta-synthesis

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Abstract

Objectives: Identify and synthesize published qualitative research reporting inpatient experiences of a fall to determine novel insights and understandings of this longstanding complex problem.

Research Design: Qualitative meta-synthesis.

Methods: Online databases were searched to systematically identify published research reporting inpatient experiences of a fall. The included studies were inductively analysed and interpreted then reported as a meta-synthesis.

Data Sources: Databases Ovid MEDLINE, Embase, Ovid Emcare, CINAHL Complete, Scopus and ProQuest Dissertations and Theses Global were searched on 3rd August, 2023.

Results: From 10 included publications, four new themes of inpatients' experiences of a fall were constructed. Themes one, two and three related to antecedents of patient falls, and theme four related to consequences. Theme one, 'My foot didn't come with me: Physiological and anatomical changes', encompassed patients' experiences of medical conditions, medication, and anatomical changes. These aspects contributed to alterations in balance and strength, and misconceptions of capability in activities of daily (inpatient) living. Theme two, 'I was in a hurry: Help-seeking', encompassed patients' experiences striving for independence while balancing power and control, minimizing their own needs over care of others', and unavailability of support. Theme three, 'I couldn't find the call light: Environment and equipment', encompassed patients' experiences of not being able to reach or use equipment, and environment changes. Theme four, 'It was my fault too: Blame and confidence', encompassed patients' expressions of blame after their fall, blame directed at both themselves and/or others, and impacts on confidence and fear in mobilizing.

Conclusions: Inpatient falls are embedded in a complexity of individual, relational, and environmental factors, yet there are potential ways forward both informed and led by the patient's voice. Strength-based approaches to address the tenuous balance between independence and support may be one opportunity to explore as a next step in complementing the existing multifaceted interventions.

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Impact:

- Inpatient falls are a complex and costly health safety and quality problem.
- Despite global initiatives in the prevention of inpatient falls, they remain intractable.
- This meta-synthesis provides an in-depth exploration of extant qualitative data on patients' experiences of falls in hospitals.
- Four themes were constructed expressing the inpatients' experiences: physiological and anatomical changes, help-seeking, environment and equipment, and blame and confidence.
- Novel considerations for future investigation are offered, drawing from selfdetermination theory and positive psychological interventions.

Implications for Patient Care: This meta-synthesis elicits new considerations for future interventions based on people's experiences of their fall in hospital, offering healthcare professionals novel directions in fall prevention.

Reporting Method: The review was reported according to the *Enhancing transparency in reporting the synthesis of qualitative research statement* (ENTREQ; Tong et al., 2012). **Patient or Public Contribution:** No Patient or Public Contribution. **Registration:** PROSPERO CRD42023445279.

KEYWORDS

experiences, falls, hospital, inpatients, perceptions, qualitative meta-synthesis

1 | INTRODUCTION

Inpatient falls are a longstanding, complex, costly, health-care safety and quality problem. In the US alone, up to a million people each year are estimated to experience a fall in hospital, with a third resulting in injury and a third being preventable (Agency for Healthcare Research and Quality: Patient Safety Network, 2019). Consequences of inpatient falls are costly from a psychological, emotional, physical, social and/or financial perspective, impacting a broad range of people, such as individuals who fall, significant others, carers, healthcare teams, and organizations. For individuals, alongside the potential physical injury and associated morbidity or mortality, broader impacts include fear and hesitancy in mobilizing (Dabkowski et al., 2022).

Two recent reviews, an integrative review (Dolan et al., 2022) and a scoping review (Dabkowski et al., 2022), highlight inpatient falls as a significant, yet unresolved problem. Key risk factors for people in hospitals range from the impact of surgical and diagnoses on mobility, delirium, medications, environmental hazards, unfamiliarity with environments, and inadequate communication (World Health Organization, 2021). There are numerous reasons for inpatient falls, including patients' inadequate estimation of self-perceived risk (Dabkowski et al., 2022; Dolan et al., 2022); maintaining independence; and feeling vulnerable (Dolan et al., 2022). Interventions and recommendations to alter perceptions involve educational and motivational interventions (Dolan et al., 2022) and partnering with patients to determine fall management and care (Dabkowski et al., 2022).

Much prior research has focused on determining risk (Heng et al., 2020; LeLaurin & Shorr, 2019; Strini et al., 2021), with global imperatives in both prevention and management (Montero-Odasso et al., 2022), vet fall interventions and preventative strategies have not yet offered a gold-standard solution (Morris et al., 2022; Ren & Peng, 2019) and inpatient falls persist. Patient falls education interventions and delirium prevention interventions are two such strategies explored in recent systematic reviews. For education interventions, these ranged from in-person patient education regarding risk and mitigation, to information brochures; quality from an educational design perspective was low to moderate (Heng et al., 2020). For delirium prevention interventions, these involved multi-components such as orientation, mobility, sleep, and pain management. While there was a 43% reduction in the risk of falls compared to the control, confidence intervals were wide and there was considerable variation among study populations and intervention components (He et al., 2022). Variation in the implementation of both multifactorial falls risk assessments and interventions, to address individual falls risk factors, pose a significant problem in the complex healthcare context (Alvarado et al., 2023).

In a preliminary search of the literature, we identified several existing reviews related to falls focusing primarily on quantitative studies of inpatient falls in the areas of risk assessment, (Dabkowski et al., 2022; Dolan et al., 2022), risk reduction interventions (He et al., 2022; Heng et al., 2020; Wallis et al., 2022; World Health Organization, 2021), or implementation (Alvarado et al., 2023). Reviews that included studies exploring qualitative patient experiences of their fall, such as Dabkowski et al.'s (2022) scoping review and Dolan et al.'s (2022) integrative review, provided a broader mapping of key concepts and themes focused particularly on falls risk. As such, neither the scoping review nor integrative review required participants to have experienced an inpatient fall and there is limited reporting of inpatient's experiences and perceptions of their fall. Despite these existing reviews, preliminary searches did not identify any reviews reporting an indepth analysis of extant qualitative studies of patient experiences of their fall while in hospital. In contrast to previous reviews, the current review of patients' experiences of their inpatient fall provides an in-depth exploration of qualitative data, analysing data across studies, and extending previous work through interpreting and constructing new themes.

The qualitative metasynthesis approach appreciates the depth of human experience, drawing together findings of qualitative research to develop new knowledge that a single qualitative study may not (Tong et al., 2012). Appreciating, and synthesizing, the experiences and perceptions of people who have fallen during their inpatient hospital stay affords the opportunity to take a new look at this longstanding quality and safety problem. Generalisability in this approach is strengthened through a systematic and well documented approach to synthesizing qualitative findings (Finfgeld-Connett, 2010). The interpretive lens to the synthesis provides a richness to the review (Malterud, 2019; Noblit & Hare, 1988). With these strengths brings the potential for wisdom based on multiple ways of understanding across "time, context and positionality" (Thorne, 2022, p. 17). This current review addresses an opportunity in the extant literature by leveraging these strengths of qualitative research and the qualitative metasynthesis approach to offer a way forward in falls prevention.

2 | THE REVIEW

2.1 | Objectives

The objectives of this review are to identify, explore and synthesize existing qualitative evidence in the literature of patients' experiences and perceptions of their fall in the hospital setting.

TABLE	1	Search structure	and	incl	usion/	exc	lusion	criteria.
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The review question is "What are patients' experiences and perceptions of their fall in the hospital setting?"

2.2 | Methods

2.2.1 | Design

The review methods were informed by the methodological approach for systematic reviews (Aromataris & Munn, 2017) and qualitative meta-ethnography (Malterud, 2019; Noblit & Hare, 1988). Reviewers adopted Noblit and Hare's (1988) 7-step approach from search through to expression of the synthesis findings. The review was reported according to the *Enhancing transparency in reporting the synthesis of qualitative research statement* (ENTREQ; Tong et al., 2012). The protocol was prospectively registered with PROSPERO CRD42023445279.

2.2.2 | Search methods

Search strategies were developed by a medical librarian (MN-B) in consultation with the review team (RJ, KC). To identify relevant studies, a systematic search was conducted across six databases on the 3rd of August, 2023: Ovid MEDLINE (R) All, Embase (Ovid), Ovid Emcare, CINAHL Complete (Ebsco), Scopus (Elsevier) and ProQuest Dissertations and Theses Global. The latter was searched for relevant theses as part of a targeted grey literature search.

2.2.3 | Search terms

The PICo [Patient/population, Interest, Context] question was formulated as: Population = adult inpatients, Interest = inpatients' experience of falls, Context = hospital setting (see Table 1). A combination of subject headings and relevant keywords were adopted for each concept and an initial search was created in Medline before translation to other databases. Medline and Embase strategies were peer-reviewed by a second librarian (PT) using the Peer Review of Electronic Search Strategies (PRESS) checklist (McGowan

	Patient/population	Interest	Context
Broad terms	Adult inpatients	Inpatients' experience of falls	Hospital setting
Inclusion criteria	Adult (≥18 years of age) inpatients in a hospital setting	Inpatients' experiences or perceptions of a fall they experienced during their hospitalization	Any inpatient hospital setting globally
Other inclusion criteria	Types of publication: published peer-reviewed jou searchable online databases Types of study design: qualitative design where p or focus-group, for example phenomenology, qu Timeframe: no limiters Language: only studies reported and published in	urnal articles and masterate or doctoral theses av rimary qualitative data was collected by methods ualitative descriptive or exploratory, grounded the n the English language	ailable in such as interview eory

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et al., 2016). To help identify relevant qualitative studies, the inbuilt McMaster Qualitative (maximizes sensitivity) filter was used to limit the search in all databases on the Ovid platform as well as CINAHL Complete (Ebsco). A qualitative search string was used to limit the Scopus search. The final search strategies for each bibliographic database and details regarding the qualitative filter/search string are available in Supplementary File 1.

2.2.4 Inclusion and exclusion criteria

Inclusion criteria comprised published peer-reviewed journal articles and theses available in searchable online databases of qualitative design reporting adult inpatients' experiences or perceptions of a fall they experienced during their hospitalization in any hospital setting globally (see Table 1). No time limits were applied to the search. Studies needed to be reported and published in the English language.

2.2.5 Screening

Search results were exported to EndNote 20 (Clarivate Analytics, PA, USA) for organization and then imported into Covidence (Veritas Health Innovation, Melbourne, Australia) where results were deduplicated before the screening. Titles and abstracts were screened against inclusion criteria by two independent reviewers (RJ & ES or KC or NR or SB or KG). Full-text papers of potentially relevant records were retrieved and assessed against the inclusion criteria by the two independent reviewers. Any disagreements that arose between the reviewers at each stage of the review were resolved through discussion. Citation searching was performed on included studies and reviews, and one doctoral dissertation was identified.

2.2.6 Quality appraisal

Two reviewers (RJ & ES or KC or NR or SB or KG) independently appraised (step 2) included reports of studies using the Joanna Briggs Institute (JBI) qualitative appraisal tool, developed by JBI to establish quality and congruency of findings in included studies (JBI; Aromataris & Munn, 2017). Appraisal questions explored a range of reporting aspects such as congruency between stated philosophical perspective and research methodology, cultural and theoretical location of researchers, and adequacy of representation of participants and their voices. This appraisal is tabulated and reported narratively. The appraisal was used to develop and report an understanding of the quality of the included studies, as opposed to excluding low-quality studies from the review. As such, all studies progressed to the meta-synthesis irrespective of study quality.

2.2.7 | Data abstraction

Studies were read in full-text by reviewers (RJ & ES or KC or NR or SB or KG) (step 3), then authors' themes, categories, patterns and metaphors were first extracted in Covidence (Veritas Health Innovation, Melbourne, Australia) (RJ & ES or KC or NR or SB or KG). Authors' themes, categories, patterns and metaphors were then exported to Microsoft Excel[™] where reviewers (RJ, NB, & KC) explored data across the studies and synthesized this narratively.

2.2.8 Synthesis

Participant quotes of their experiences were extracted in Covidence, then exported and analysed by reviewers (RJ, NB) in Microsoft™ Word and Excel to determine relationships across all studies (step 4), drawing from the inductive and interpretive approach of Noblit and Hare (1988) and Malterud (2019). To systematically examine and organize the data, translate studies (step 5), and synthesize translations (step 6), inpatients' experiences and perceptions of their fall were analysed independently by the two reviewers. New themes and subthemes were constructed and, to express the synthesis (step 7), findings of steps 1-6 were elaborated on in this new translation and explored in relation to the wider research. Data from all nine studies progressed to meta-synthesis. Data from Turner's (2012) doctoral thesis, rather than the subsequent 2019 journal article publication of the study, were included in the analysis, as data expressing inpatient experiences of their fall was duplicated in the journal article. The study of Chung (2009) was selected as the index study due to strengths in reporting (reflected in quality appraisal) and the range and depth of participant quotes. All extracted quotes were independently reviewed by two reviewers, both with training and experience in qualitative research and analysis (RJ, NB). All final themes and subthemes were determined through discussion and consensus.

2.2.9 **Ethical considerations**

Ethical approvals were not required for this gualitative metasynthesis.

RESULTS 3

Of the 5542 studies identified through the searches, 32 progressed to the full-text eligibility screening, and 10 publications (Aihara et al., 2021; Carroll et al., 2010; Chung, 2009; Dabkowski et al., 2023; Gettens et al., 2018; Heng et al., 2021; Lim et al., 2018; Rogers, 2013; Turner, 2012; Turner et al., 2019) reporting nine separate studies were included. One study was reported in both a doctoral dissertation (Turner, 2012) and a journal article (Turner et al., 2019). The search and screening process is illustrated via a flowchart (Figure 1).



FIGURE 1 Flowchart illustrating search and screening process.

Records were largely excluded in the title and abstract, then fulltext screening, stages due to the fall occurring in the wrong setting, such as a person's home, or no qualitative data about the person's experience of their fall being collected, such as only perceptions of risk. The duplicate screening percentage agreement was 95%.

3.1 | Characteristics of included publications

The nine studies were reported in journal articles (n=7) and/or doctoral theses (n=3) and were conducted in Australia (n=3), USA (n=3), UK (n=1 - one study reported in two publications), Singapore

(n=1) and Japan (n=1). Characteristics of included publications are summarized in Table 2.

Phenomenology was the most commonly reported methodology, inpatient samples ranged from 5 to 100 participants, and interviews with thematic analysis were used in most studies.

3.2 | Quality appraisal

Strengths across studies included having appropriate ethical approvals or review by an Institutional Review Board and reporting conclusions that flowed clearly from the analysis or interpretation of the data. The most frequent limitation was lacking description of the positioning of researcher culturally or theoretically. Quality appraisal findings are presented in Table 3.

3.3 | Data abstraction

Themes, categories, patterns, and metaphors for inpatients' experiences of falls were synthesized for all 10 publications (of the 9 studies). Four main foci were expressed by primary study authors, (1) patient perceptions of causation, (2) education, (3) individual preferences, and (4) awareness, attitudes and perceptions towards falls, risk and prevention. Patients' perceptions of causation (1) extended across several studies and were linked to both environmental and individual factors. Aihara et al. (2021) described the theme of "Direct causes of the fall". This theme included a range of environmental and individual factors which were also highlighted in Carroll et al.'s (2010) categories of "the need to toilet coupled with loss of balance and unexpected weakness" (p. 239). Environmental factors were identified by Rogers (2013) in 'Universal Theme Two' which extended this description to include the influence of technological factors and education. Patient education (2) was a theme across several studies (Dabkowski et al., 2023; Heng et al., 2021; Lim et al., 2018); reflected in Dabkowski et al.'s broad pattern of "Outcomes," and one of the six major themes from interviews by Lim et al. (2018) which included poor retention of information. Three of Heng et al.'s (2021) themes were focussed on education: 'Inconsistency in patient education experiences whilst in hospital', 'Value in educating and empowering patients to prevent their own falls whilst in hospital', and 'Individual preferences for education delivery'. Individual preferences (3) were also reflected in the themes of a patient's desire to maintain independence (Chung, 2009; Gettens et al., 2018; Rogers, 2013), including in the decision-making process and preserving dignity (Chung, 2009), being perceived as physically competent (Gettens et al., 2018), and being motivated by self-care (Rogers, 2013). Awareness, attitudes, and perceptions towards falls, risk and prevention (4) were evident in most studies (Aihara et al., 2021; Carroll et al., 2010; Chung, 2009; Dabkowski et al., 2023; Gettens et al., 2018; Heng et al., 2021; Lim et al., 2018; Turner, 2012; Turner et al., 2019) ranging from the theme of

'Realising the risk' (Gettens et al., 2018), 'Awareness of consequences' (Dabkowski et al., 2023), a mismatch between perceived and actual risk (Heng et al., 2021; Lim et al., 2018), and behaviour changes to prevent future falls (Aihara et al., 2021).

3.4 | Meta-synthesis of participant experiences of their inpatient fall

Across the studies, participant experiences were constructed as four themes through the process of translating studies into one another, then synthesizing these translations: (1) '*My foot didn't come with me'*, (2) '*I was in a hurry'*, (3) '*I couldn't find the call light'*, (4) '*It was my fault too*'. The first three themes were expressed as 'antecedents' to the inpatient's fall, and theme four as 'consequences' of their fall. The themes and associated subthemes are illustrated in Figure 2.

Each theme and subtheme, tabulated with supporting quotes across studies, is presented in Supplementary File 2.

3.4.1 | My foot didn't come with me: Physiological and anatomical changes

For theme one, 'My foot didn't come with me: Physiological and anatomical changes', patients reported multiple intrinsic experiences of alterations in physiology and anatomy, which impacted on balance and strength, and led to misconceptions of capability. Loss of balance and lacking strength was primarily during routine activities such as getting dressed or shifting from one space to another,

"I was standing up, getting dressed...I lost balance and fell between the two beds" (p. 128; Turner, 2012).

Usual physiological responses were not as expected. For one person this resulted in their foot not shifting position as usual,

"It has affected me, yes definitely my confidence to work by myself. I didn't expect my left foot not [to] work and when I took off I found my foot didn't come with me. So I just took a fall." (p. 748, Gettens et al., 2018),

For another person, there was an unexpected heaviness on one side of their body,

"I thought this half (the paralyzed side) would move a little more, I did not expect it to feel this heavy" (p. 6; Aihara et al., 2021).

Misconceptions of capability were reflected in statements of surprise, disbelief, self-blame, and fear,

"No – it just happened. No blackouts or dizziness. I just fell down." (p. 130; Turner, 2012).

"I did not imagine I would fall" (p. 7; Aihara et al., 2021).

For one patient, the misconception of capability was made by others,

"I'd asked for a commode and I basically was told to stop acting like a nine year old, type thing, and just use the toilet. Then when I did, I had the fall, so that kind of made me feel, I guess, not so much scared but just like that I was kind of worthless." (p. 748; Gettens et al., 2018).

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	Data collection year/ methods/type of analysis	2016-2017/Interview/ Thematic	Not reported/Interview/ Open coding, two-person consensus, debriefing	2007/Interview/Thematic	(Continues)
	Methodology/study design	Unclear/Qualitative	Not reported/Qualitative descriptive	Phenomenology Phenomenology	
	Sample size & characteristics	23 inpatients 14 male/9 female Mean age: 65.9 years (range: 44–90)	9 inpatients 2 men/7 women Mean age 61.2 years (range 24-78) Fall within 48 h Cognitively intact Reasons for hospitalization: pneumonia, amputation, lymphoma, and a variety of neurological disorders 6 participants had fallen in past	15 inpatients 7 male/8 female Ranged in age from 67 to 93 years 14 identified as white/1 African American 8 married, 5 widowed, 1 single, and 1 divorced Admitting medical diagnoses were diverse and included pulmonary disease, heart failure, gastrointestinal illness, and stroke Average length of stay 7-days Experienced fall during current hospitalization 12 used a walker, cane, or wheel chair to	assist with mobility 12 had previous fall prior to the current admission
	Study location & context	Japan Kaifukuki rehabilitation wards (KRWs) of a 160-bed convalescent rehabilitation hospital in Japan Sub-acute intensive rehabilitation covered by Japan's medical insurance system Patients with stroke are eligible for admission within 2 months of the onset of stroke symptoms and can stay up to 6 months after admission	United States ^a Acute care hospital	United States Large tertiary hospital with over 950 beds 10 medical-surgical units A typical participant's room has a hospital bed, a sleeper chair, a night- stand, a bedside table, an intravenous pole, and a bathroom The majority of the rooms were private	
	Study objectives	Elucidate the subjective perspectives towards falling among patients with stroke admitted to rehabilitation wards	Explore the patient's experience of a fall and to gather information on ways of preventing falls in acute care hospitals	Explore the lived experience of older adults who experienced a fall while hospitalized with an acute illness	
	First author (date)/ publication type	Aihara et al. (2021)/ Journal article	Carroll et al. (2010)/ Journal article	Chung (2009)/ Doctoral thesis	

TABLE 2 Characteristics of included publications.

	thodology/study Data collection year/ ign methods/type of analysis	Jecth) Jecth Jecth Jecth Jecth	nomenology/ Not reported/Interview/ Phenomenological, Thematic	nomenology/ 2019-2020/Focus group/ nomenology Thematic
	M. Sample size & characteristics de	 18 inpatients 9 male/9 female 9 male/9 female 9 male/9 female 9 male/9 female 9 materage age 69.8 years (SD±12.7, range ex 10 At 10 84 years) 11 and P15) 12 participants had mild cognitive 12 participants had mild cognitive 13 participants for these falls 14 their current hospital 18 admission 2 participants reported a history of 18 multiple falls, which they attributed to 18 their chronic health conditions 2 All participants, except for one [P4], were classified as having a high falls risk 	12 inpatients Ph 7 female/5 male Ph Aged between 27 and 84 years	 11 inpatients 3 male/8 female 3 male/8 female 7-92) 7-92) 3 from acute medical ward formed focus group 1 3 from orthopaedic rehabilitation ward formed focus group 2 5 from 3 rehabilitation wards formed focus 3 6 reported at least one fall in past 12 months
	Study location & context	Australia 3 regional public hospitals in Victoria, Australia 289-bed hospital, 70-bed acute/ subacute hospital, 36 acute/subacute facility Acute medical, surgical, orthopaedic and rehabilitation wards	Australia 630-bed tertiary referral hospital in Queensland, Australia Falls rates in this hospital are well monitored and average 55 per month Usual care includes admission (then weekly) assessment using a falls assessment tool that includes a management plan If a patient sustains a fall, they are reassessed as part of a post-fall plan All nurses are required to attend annual falls prevention education	Australia Healthscope hospitals, Australia Five wards including acute medical, acute surgical, orthopaedic, and geriatric rehabilitation Nationwide policy for falls prevention: governance and systems, methods for capturing and auditing falls data, evidence-based clinician education, patient education, environmental adaptations, exercises and physical activities, diet, medication monitoring,
()	Study objectives	Explore the perceptions and experiences that influence a patient's understanding of their falls risk in Australian rural and regional public hospitals	Understand the patient's perspective of falling in hospital	Explore hospital patient experiences of falls prevention education; Investigate barriers and facilitators to their understanding of, and adherence to, hospital falls prevention education programs; Understand the preferences of patients for falls prevention education
TABLE 2 (Continued	First author (date)/ publication type	Dabkowski (2023)/ Journal article	Gettens et al. (2018)/ Journal article	Heng et al. (2021)/ Journal article

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Data collection year/ methods/type of analysis	2014-2015/Interview/ Content	Not reported/Interview (semi-structured) or Observation (only staff - general informants)/ Thematic		2008-2009/Focus group; Interview (patients only involved via interview)/ Phenomenological - Constant comparative analysis	
Methodology/study design	Naturalistic Inquiry/ Exploratory, qualitative descriptive	Ethnographic theoretical framework/ Ethno-nursing		Critical Realism/ Qualitative action research	
Sample size & characteristics	100 inpatients Mean age 65.2 (SD±12.1) years 64 male/36 female 58 patients' falls occurred in their room 94 patients had a fall when they were alone	8 inpatients Average age 57 years Mostly female (63%) Most fall events occurring in the early morning (50%) Participant diagnoses included cardiac, respiratory and gastrointestinal disorders with similar medication regimens		5 inpatients Average age 82years (range 77-88) 2 male/3 female.	
Study location & context	Singapore Acute care hospital	United States Academic medical center located in the mid-west of the United States 570 licensed bed facility that includes a level one trauma center, a burn center, as well as an aero-medical program for patient transport from a range of 150 miles The center is a recognized leader in providing specialty and primary care health services, including the American Nurses Credentialing Center's Magnet designation The organization has a long- established hospital wide inpatient falls committee In 2010, the committee implemented the Johns Hopkins Fall Risk Assessment Tool within the organization's electronic information system All key informants were measured at	low, medium, or high risk for fall risk via this tool	United Kingdom National Health Service staff that worked on the two elderly rehabilitation wards during the research period Both wards were similar in terms of patient demographics, numbers of	patients, falls rates, length of stay and staffing levels Average number of staff on duty Days: 12–14, Nights: 3–4
Study objectives	Explore the experiences of patients who had a fall and their perspectives towards fall prevention in the acute care setting	Discover, describe and systematically analyse culture care meanings, expressions, and patterns of adult inpatients that have fallen		Facilitate changes to falls prevention and in-patient rehabilitation services for older people	
First author (date)/ publication type	Lim et al. (2018)/ Journal article	Rogers (2013)/ Doctoral thesis		Turner (2012)/ Doctoral thesis ¹	

TABLE 2 (Continued)

TABLE 2 (Continued)

First author (date)/ publication type	Study objectives	Study location & context	Sample size & characteristics	Methodology/study design	Data collection year/ methods/type of analysis
Turner et al. (2 019)/ Journal article ^b	Explore the experiences of older patients who fell during their hospital stay	United Kingdom Two rehabilitation wards at a large general hospital in England (United Kingdom) Both wards were similar in terms of patient demographics, numbers of patients, fall rates, length of stay, staffing levels, interventions provided, and workforce planning	5 inpatients Average age 82 years (range 77–88) 2 male/3 female	Not reported/Qualitative exploratory	Not reported/Mixed methods (semi-structured interviews, incident reports, and medical records provided information about each fall)/Thematic, discourse, and descriptive analysis were used to analyse data
Abbreviations: SD, stand	ard deviation.				

Assumed from author details.

^bTwo publications, one thesis and one journal article reporting same study.

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3.4.2 | I was in a hurry: Help-seeking

For theme two, 'I was in a hurry: Help-seeking', patients expressed both intrinsic and extrinsic experiences as they sought to manage their desire for independence. This desire was influenced by their need to seek support whilst balancing power and control, alongside minimizing their own needs over the care of others. Independence was reflected in statements of challenging oneself and calculated risk-taking. For one patient this occurred when they walked without assistance.

"I have had one [fall]... I wasn't supposed to walk without help... my sons would tell you because I'm bloody-minded" (p. 4; Heng et al., 2021).

Risk-taking occurred in a range of ways, from a patient thinking they could make it,

"I'm very independent. I thought I could make it. I'm looking at that clock and I'm thinking to myself, that's over there and that's over there, I can make it" (p. 84; Rogers, 2013),

to another who wanted to test their capability.

"It was because I refused to listen to other people's advice. I wanted to take the risk to try (walking) by myself" (p. 49; Lim et al., 2018).

Minimizing individual needs and the significance of falls was expressed by some, and the complex interplay of factors related to seeking support were evident, particularly where there was an urgency, lack of immediate support, and consideration of the needs of others - both patients and nurses. Acting on urgency was expressed in a range of ways, for one person their past experience of waiting influenced the decision.

"I know everyone is busy and it is not just me here. I push the button and I have to wait 10-15 minutes and I have little control and I have to go." (p. 42-43; Chung, 2009).

for another patient, the experience of needing to wait for the nurse was untenable,

"I called the nurse. The nurse was a bit slow. It was urgent." (p. 50; Lim et al., 2018).

Not wanting to disturb the nurse was embroiled in feeling they had called too frequently,

"I feel like I called the nurse enough. You know I don't want to be a bother." (p. 240; Carroll et al., 2010),

and altruistic thoughts towards other patients,

"There are other patients who require more assistance than me, so usually I won't disturb the nurse." (p. 50; Lim et al., 2018).

The fear of not making it to the bathroom in time was the reality for one person,

"I think the fall was just a small issue. I supposed I was in hurry and I was afraid of dirtying my bed or the floor." (p. 49; Lim et al., 2018).

3.4.3 | I couldn't find the call light: Environment and equipment

For theme three, 'I couldn't find the call light: Environment and equipment', patients expressed extrinsic experiences of mobilizing within an environment and with equipment that contributed to their fall,

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TABLE 3 Quality appraisal of included publications.

Total 'yes' Publication 01 02 Q3 Q4 05 Q6 Q7 08 Q9 Q10 votes/10 Aihara et al. (2021) No Δ No No No No No Yes Yes Yes Yes Carroll et al. (2010) No No No No No No No Unclear Yes^e Yes 2 Chung (2009) Yes 10 Yes Yes Yes Yes Yes Yes Yes Yes Yes Dabkowski et al. (2023) Yes Yes Yes Yes Yes No Yes Yes Yes Yes 9 Gettens et al. (2018) 10 Yes Heng et al. (2021) Yes 9 Yes Yes No Yes Yes Yes Yes Yes Yes Lim et al. (2018) Yes Yes Yes Yes Yes No No No^d Yes^e Yes 7 Rogers (2013) Yes Yes Yes Yes Yes Yes Yes Yes Yes^e Yes 10 10 Turner (2012) Yes No^b No^b No^b No^b Turner et al. (2019)^f No^a No No Yes Yes Yes 3 Total 'Yes' votes/10 7 7 7 7 7 4 7 8 10 10

Abbreviations: Q, Question; Q1, Is there congruity between the stated philosophical perspective and the research methodology?; Q2, Is there congruity between the research methodology and the research question or objectives?; Q3, Is there congruity between the research methodology and the methods used to collect data?; Q4, Is there congruity between the research methodology and the representation and analysis of data?; Q5, Is there congruity between the research methodology and the interpretation of results?; Q6, Is there a statement locating the researcher culturally or theoretically?; Q7, Is the influence of the researcher on the research, and vice-versa, addressed?; Q8, Are participants, and their voices, adequately represented?; Q9, Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?; Q10, Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?

^aNo philosophical perspective/research methodology reported.

^bNo research methodology reported.

^cParticipants not independently identified in results and very few quotes reported.

^dVery few of 100 participants represented in the quotes.

^eInstitutional Review Board.

^fThesis (2012) & article (2019) reporting same study's findings.

FIGURE 2 Themes and subthemes of inpatient experiences of falls.



particularly due to unfamiliarity with both. Finding or accessing necessary items such as personal belongings, call-bells, and the bed were all problematic at times. Moving to get water, which was out of reach, was difficult for one patient,

"I wanted to go to the table over there to get my water. The nurses don' t leave everything where I can get to it, like my telephone which I like to have here in the bed by me. But they just move everything all around." (p. 43; Chung, 2009).

Locating the call bell was a barrier to accessing support. For one person, the call bell could not be found,

"the nurse told me to pull the string when I was ready to go back to bed but I could not find the string." (p. 43; Chung, 2009),

and for another patient, while they could find the call bell, it was out of reach,

"So anyway, I was by the bed and looking for the call button. I saw it on the floor so I reached down there to pick it up. When I started to pick it up, I slipped and came down" (p. 82; Rogers, 2013).

For some patients, using the inpatient equipment such as chairs, beds, and door handles when navigating the environment contributed to inpatient falls,

"I need to pay more attention. I thought I was all the way on the bed, sitting on the bed, but I was like half on the bed and half off. It wouldn't happen if I paid more attention and get help" (p. 80; Rogers, 2013),

"I moved to the edge of the chair and I leaned on the bed side table for support and it went over yonder." (p. 43; Chung, 2009).

Being unaccustomed to equipment, or experiencing deficiencies in the hospital environment, was also identified as a cause for some patients,

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"So when I fell, they had me in a wheelie and I had a spasm in my right arm and all on my face, and then they said, "I don't think a wheeliewalker is good for you... Yeah....I said...I'm not using one of them again...I didn't hurt myself. I didn't get a bloody nose or... I think I just got a little bump on the head. That was a bruise. But I didn't like that. Then I couldn't walk properly because this leg, the right leg drags because of this dystonia and I fall. If there's a little lump in the floor, I fall, I trip over it. So I'm not going to walk anymore. The doctor said, "No more walking for you" so they put me in a wheel-chair... I'm a disaster waiting to happen." (p. 748; Gettens et al., 2018).

A slippery bathroom floor was a concern for another person,

"I always felt that it is slippery here (the bathroom floor)" (p. 5; Aihara et al., 2021),

3.4.4 | It was my fault too: Blame and confidence

For theme four, 'It was my fault too: Blame and confidence', encompassed patients' intrinsic and extrinsic experiences as they expressed blame after their fall, directed at both themselves and/or others, and impacts on confidence and fear in mobilizing. Patients expressed a sense of needing to be more careful and feelings of stupidity,

"I did not use my head and I should have been more careful. It was my fault too." (p. 41; Chung, 2009).

"It was my stupidity that made me fall down" (p. 80; Rogers, 2013). Fault for the fall was attributed to either themselves or nurses,

"It's my fault. I didn't call the nurses." (p. 49; Lim et al., 2018).

"if the nurses were present I wouldn't have fallen" (p. 146; Turner et al., 2019).

For one patient there was a sense of feeling 'selfish' for calling staff for support,

"I don't expect them to drop everything for me. I just find I need help going to the toilet. I know they're busy. When you want to get back to bed, I buzz and then I say to myself, 'You're being selfish'" (p. 6; Dabkowski, 2023).

For another, there was the perception of staff becoming angry when they were not called,

"I mean they have gotten angry because I didn't call and tell them something you know and I don't blame them it's their job and they want to do a good job" (p. 81; Rogers, 2013).

Following the fall, many patients experienced feelings of fear and anxiety when considering mobilization. This had significant impacts on their confidence and perceived ability to walk independently,

"I feel more unnerved now, more anxious. I try to be more careful" (p. 145; Turner, 2012).

"After that (fall), even walking is tough. I'm scared when there are people and wheelchairs in my path" (p. 5; Aihara et al., 2021).

Strengthening focus and concentration was proposed as a consequence of their fall for one person,

"After having my falls, it makes you concentrate more. 'Cause it's scary being on the floor, flopping around like a dying fish. So that's what keeps you a lot more focused if you have had a fall" (p. 8; Dabkowski, 2023).

In summary, across the four themes, patients expressed both intrinsic and extrinsic factors related to their fall which occurred in the period leading to the fall itself, and subsequently experiencing loss of confidence and attributing blame both to themselves and others.

4 | DISCUSSION

In this review we sought to identify, explore, and synthesize existing qualitative evidence in the literature of patients' experiences and perceptions of their fall in the hospital setting. Four new themes were constructed through the analysis of the inpatient quotes in the primary studies, (1) 'My foot didn't come with me: Physiological and anatomical changes', (2) 'I was in a hurry: Help-seeking', (3) 'I couldn't find the call light: Environment and equipment', and (4) 'It was my fault too: Blame and confidence'. Each of these themes were reflected to a degree in the primary research study authors' themes. There is considerable depth and breadth in existing inpatient falls research, which is unsurprising given the complexity and lack of resolution to this longstanding and substantial problem. This review adds strength to the inpatient's voice, taking one step towards uplifting, hearing, and valuing this voice as a key part of the challenging move towards reducing the incidence of inpatient falls. Each of these themes highlight many of the unchangeable contributors to patient falls.

The perception of nurses being busy, patient's anticipating delayed assistance, and communication barriers such as decreased call bell use, as expressed in the current review, are not new research findings (e.g., see Dabkowski et al., 2022). Recommendations such as partnering with patients and their families, and communicating for safety, offer essential elements for effective patient-clinician communication, including how the elements can influence patient outcomes (Australian Commission on Safety and Quality in Health Care, 2024). Elements recommended by the Commission include fostering relationships, two-way exchange of information, conveying empathy, engaging patients in decision-making and care planning, and managing uncertainty and complexity. Individually tailored education is proposed as having a large positive effect on hospital falls, both rates and risk (Morris et al., 2022). This education is recommended for both patients and clinicians, combined with other interventions such as "...procedures around nurse handover, fast responses to call buttons, regular toileting, environmental modifications, assistive devices, exercise therapies, safe footwear, medication management, diet or management of cognitive impairment" (p. 9).

Similarly, patients' desire for autonomy and seeking independence, as expressed in the current review, also reflects past research (e.g., see Dabkowski et al., 2022) with considerable attention being directed towards clinical models, such as shared decision making (Montero-Odasso et al., 2022), to mitigate barriers and challenges.

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The individual, relational, and contextual factors evident in the patient experiences were found to be complex in the current review, and reinforced the need for person-centred and shared decisionmaking approaches to falls prevention. World Guidelines for Falls Prevention and Management for Older Adults recommend holistic multifactorial falls risk assessments to be completed, and for these assessments to be complemented with shared decisions to develop agreed goals and interventions (Montero-Odasso et al., 2022). To achieve these shared decisions, a key proposed component is the "consideration of the priorities, beliefs, resources of the older person and other relevant individuals..." (p. 19).

A future research opportunity is investigating the influence of patient and clinician motivation on inpatient falls. For example, it is possible the identified motivation of patients to pursue independence is embedded in self-determination theory - where autonomy, competence, and relatedness are proposed as crucial elements to motivation (Deci & Ryan, 2000). Bringing the lens of self-determination theory (e.g., see Pettersson et al., 2021) is one potential opportunity for future interventions. An alternative consideration is positive psychological interventions based on theoretical lenses such as Fredrickson's (2004) Broaden-and-Build theory, drawing from positive affect, as outlined by Pressman et al. (2019), or Attention Restoration theory (Kaplan, 1995) in designing inpatient spaces and interventions, to develop new inroads in the intractable inpatient fall rates.

People will continue to experience injury, illness, and disease, influencing their anatomy and physiology, and consequently their balance, strength, perceptions, and capability, which is exacerbated by the ageing and co-morbid population (Hartholt et al., 2019). Strategies for improvement highlight the key role of patients, carers, and families in both prevention and harm minimization. Providing both information and support is recommended in the hospital setting with multiple resources offered by both national quality and safety commissions (e.g., Australian Commission on Safety and Quality in Health Care) and internationally (Montero-Odasso et al., 2022). Resources include information such as videos, pamphlets, and risk self-checklists, alongside recommendations to ensure access to referral services (Australian Commission on Safety and Quality in Health Care, n.d.-b).

An important practice and research consideration is exploring the timeliness of knowledge translation to practice in the local context, developing an understanding of the local factors contributing to any delays, and co-designing organizational approaches to mitigate these delays. Despite evidence syntheses, world guidelines, and quality and safety recommendations, delays exist in the translation of knowledge to practice, for example in both the implementation and de-implementation of interventions, proposed as "leaks in the pipeline between discovery of knowledge and application to improve population health and patient care" (Chambers, 2023, p. xv). Local teams having agency and resources to identify and appraise relevant evidence, and then contextualize this to the clinical environment is a challenge and requires leadership and support. Commonly reported barriers to guideline implementation include misalignment with patient preferences, time constraints, guideline complexity, lack of awareness of guidelines and corresponding tools, lack of agreement among clinicians, and lack of resources to implement recommendations (Correa et al., 2020; Fahim et al., 2023). Perceived facilitators to guideline implementation include awareness of updated guidelines, clinician consensus, and ease of use (Correa et al., 2020), and promotion of adherence was through organizational culture, educational intervention, reminders, and patient education (Pereira et al., 2022). Exploring clinician motivation in relation to falls guideline implementation with a perspective of self-determination theory (Deci et al., 2017) is a further research opportunity to understand delays in uptake. Innovative use of artificial intelligence in healthcare (e.g., see Javaid et al., 2023) may also be considered in future research to support clinician awareness of new or updated guideline recommendations.

With people continuing to experience injury, illness, and disease, so too will they need to access healthcare, which may bring them into contact with unfamiliar environments and equipment. Existing guidelines and standards increasingly provide explicit strategies for improvement of services to reduce risks associated with both the environment and equipment within the environment, such as chair and bed heights, lighting, maintenance of surfaces and reducing trip hazards (Australian Commission on Safety and Quality in Health Care, n.d.-a), and recommendations for adopting multifactorial falls risk assessments as opposed to falls risk assessment tool scoring, multidomain interventions, and tailored education on falls prevention (Montero-Odasso et al., 2022). Future investigations of both patient and clinician motivations in relation to falls prevention and the timely translation of knowledge to practice are opportunities to leverage further.

4.1 | Limitations

Drawing only from published studies may contribute to biased findings due to missing the potential insights from unpublished works. The inclusion of dissertations and theses may reduce this bias but also reduce the strength of the evidence due to the lack of formal journal peer review of these theses. The use of formal quality appraisal may reduce the likelihood of overlooking the poor methodological quality of studies. Including only studies reported in the English language, and the search terms only utilizing English language terms may contribute to further bias, limiting the likelihood of inclusion of studies being either conducted or reported in other languages. Extending search terms and reporting to include studies conducted and reported in other languages remains a future research opportunity.

5 | CONCLUSIONS

The experiences of people who fall during their hospital admission include persisting individual, relational, and environmental factors. The patient voice continues to provide valuable insights and inform -WILEY-JAN

potential ways forward. This review has highlighted the tenuous balance between independence and support; integrating elements such as autonomy, competence, and relatedness to the forefront in interventions affords a potential next step.

AUTHOR CONTRIBUTIONS

Rebecca J. Jarden: Conceptualisation, Formal analysis, Investigation, Writing – Original Draft, Writing – Review & Editing, Visualization, Supervision, Project administration. Katherine Cherry: Formal analysis, Investigation, Writing – Original Draft, Writing – Review & Editing. Emma Sparham: Formal analysis, Investigation, Writing – Review & Editing. Naomi Brockenshire: Formal analysis, Investigation, Writing – Review & Editing. Mina Nichols-Boyd: Conceptualisation, Methodology, Resources, Writing – Review & Editing, Writing – Original Draft (search strategy methods). Simone Burgess: Formal analysis, Investigation, Writing – Review & Editing. Kate Grieve: Formal analysis, Investigation, Writing – Review & Editing. Bernadette Twomey: Writing – Review & Editing. Jessica Walters: Writing – Review & Editing. Nonie Rickard: Formal analysis, Investigation, Writing – Review & Editing.

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The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Data available in article supplementary material.

ETHICS STATEMENT

No ethical approvals were required for this qualitative metasynthesis. All data in the submitted manuscript were lawfully acquired.

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REFERENCES

- Agency for Healthcare Research and Quality: Patient Safety Network. (2019). Falls. https://psnet.ahrq.gov/primer/falls
- Aihara, S., Kitamura, S., Dogan, M., Sakata, S., Kondo, K., & Otaka, Y. (2021). Patients' thoughts on their falls in a rehabilitation hospital:
 A qualitative study of patients with stroke. *BMC Geriatrics*, 21(1), 1–12. https://doi.org/10.1186/s12877-021-02649-1
- Alvarado, N., McVey, L., Wright, J., Healey, F., Dowding, D., Cheong, V., Gardner, P., Hardiker, N., Lynch, A., & Zaman, H. (2023). Exploring variation in implementation of multifactorial falls risk assessment and tailored interventions: A realist review. *BMC Geriatrics*, 23(1), 1–12. https://doi.org/10.1186/s12877-023-04045-3
- Aromataris, E., & Munn, Z. (2017). Joanna Briggs Institute Reviewer's Manual. The Joanna Briggs Institute.
- Australian Commission on Safety and Quality in Health Care. (2024). Communicating with patients and colleagues. Australian Commission on Safety and Quality in Health Care. https://c4sportal.safetyandq uality.gov.au/communicating-with-patients-and-colleagues
- Australian Commission on Safety and Quality in Health Care. (n.d.-a). The NSWHS Standards. Comprehensive Care Standard. Minimising harm. Action 5.25. Preventing falls and harm from falls. https://www.safet yandquality.gov.au/standards/nsqhs-standards/comprehensivecare-standard/minimising-patient-harm/action-525
- Australian Commission on Safety and Quality in Health Care. (n.d.-b). The NSWHS standards. Comprehensive Care Standard. Minimising Harm. Action 5.26. Preventing falls and harm from falls. https://www. safetyandquality.gov.au/standards/nsqhs-standards/comprehens ive-care-standard/minimising-patient-harm/action-526
- Carroll, D., Dykes, P., & Hurley, A. (2010). Patients' perspectives of falling while in an acute care hospital and suggestions for prevention. Applied Nursing Research, 23(4), 238–241. https://doi.org/10. 1016/j.apnr.2008.10.003
- Chambers, D. (2023). Dissemination and implementation research in health: Translating science to practice. Oxford University Press.
- Chung, H. (2009). The lived experience of older adults who fall during hospitalization (PhD, ISBN: 1109481632). Texas Woman's University.
- Correa, V., Lugo-Agudelo, L., Aguirre-Acevedo, D., Contreras, J., Borrero, A., Patiño-Lugo, D., & Valencia, D. (2020). Individual, health system, and contextual barriers and facilitators for the implementation of clinical practice guidelines: A systematic metareview. *Health Research Policy and Systems*, 18, 1–11.
- Dabkowski, E., Cooper, S., Duncan, J., & Missen, K. (2022). Adult inpatients' perceptions of their fall risk: A scoping review. *Health*, 10(6), 995. https://doi.org/10.3390/healthcare10060995
- Dabkowski, E., Cooper, S. J., Duncan, J. R., & Missen, K. (2023). Exploring hospital inpatients' awareness of their falls risk: A qualitative exploratory study. *International Journal of Environmental Research and Public Health*, 20(1), 454. https://doi.org/10.3390/ ijerph20010454
- Deci, E., Olafsen, A., & Ryan, R. (2017). Self-determination theory in work organizations: The state of a science. Annual Review of Organizational Psychology and Organizational Behavior, 4, 19-43. https://doi.org/10.1146/annurev-orgpsych-032516-113108
- Deci, E., & Ryan, R. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. https://doi.org/10.1207/s15327965pli1104_01
- Dolan, H., Slebodnik, M., & Taylor-Piliae, R. (2022). Older adults' perceptions of their fall risk in the hospital: An integrative review. *Journal* of *Clinical Nursing*, 31(17-18), 2418-2436.
- Fahim, C., Prashad, A., Silveira, K., Chandraraj, A., Thombs, B. D., Tonelli, M., Thériault, G., Grad, R., Riva, J., & Colquhoun, H. (2023). Open access dissemination and implementation of clinical practice guidelines: A longitudinal, mixed-methods evaluation of the Canadian task force on preventive health Care's knowledge translation efforts (Vol

11, pp. E684-E695). CMAJ Open. https://doi.org/10.9778/cmajo. 20220121

- Finfgeld-Connett, D. (2010). Generalizability and transferability of metasynthesis research findings. Journal of Advanced Nursing, 66(2), 246–254. https://doi.org/10.1111/j.1365-2648.2009.05250.x
- Fredrickson, B. (2004). The broaden-and-build theory of positive emotions (0962-8436). (Philosophical Transactions of the Royal Society of London). Series B: Biological Sciences, Issue.
- Gettens, S., Fulbrook, P., Jessup, M., & Low Choy, N. (2018). The patients' perspective of sustaining a fall in hospital: A qualitative study. *Journal of Clinical Nursing*, 27(3-4), 743-752. https://doi.org/10. 1111/jocn.14075
- Hartholt, K., Lee, R., Burns, E., & van Beeck, E. (2019). Mortality from falls among US adults aged 75 years or older, 2000–2016. JAMA, 321(21), 2131–2133. https://doi.org/10.1001/jama.2019.4185
- He, S., Rolls, K., Stott, K., Shekhar, R., Vueti, V., Flowers, K., Moseley, M., Shepherd, B., Mayahi-Neysi, M., & Chasle, B. (2022). Does delirium prevention reduce risk of in-patient falls among older adults? A systematic review and trial sequential meta-analysis. *Australasian Journal on Ageing*, 41(3), 396–406. https://doi.org/10.1111/ajag. 13051
- Heng, H., Jazayeri, D., Shaw, L., Kiegaldie, D., Hill, A., & Morris, M. (2020). Hospital falls prevention with patient education: A scoping review. BMC Geriatrics, 20, 1–12.
- Heng, H., Slade, S., Jazayeri, D., Jones, C., Hill, A., Kiegaldie, D., Shorr, R., & Morris, M. (2021). Patient perspectives on hospital falls prevention education. *Frontiers in Public Health*, *9*, 592440. https://doi.org/ 10.3389/fpubh.2021.592440
- Javaid, M., Haleem, A., & Singh, R. (2023). ChatGPT for healthcare services: An emerging stage for an innovative perspective. BenchCouncil Transactions on Benchmarks, Standards and Evaluations, 3(1), 100105. https://doi.org/10.1016/j.tbench.2023.100105
- Kaplan, S. (1995). The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology*, 15(3), 169– 182. https://doi.org/10.1016/0272-4944(95)90001-2
- LeLaurin, J. H., & Shorr, R. I. (2019). Preventing falls in hospitalized patients: State of the science. *Clinics in Geriatric Medicine*, *35*(2), 273–283.
- Lim, M., Ang, S., Teo, K., Wee, Y., Yee, S., Lim, S., & Ang, S. (2018). Patients' experience after a fall and their perceptions of fall prevention. *Journal of Nursing Care Quality*, 33(1), 46–52. https://doi. org/10.1097/NCQ.0000000000261
- Malterud, K. (2019). Qualitative metasynthesis: A research method for medicine and health sciences. Routledge.
- McGowan, J., Sampson, M., Salzwedel, D., Cogo, E., Foerster, V., & Lefebvre, C. (2016). PRESS peer review of electronic search strategies: 2015 guideline statement. *Journal of Clinical Epidemiology*, 75, 40–46. https://doi.org/10.1016/j.jclinepi.2016.01.021
- Montero-Odasso, M., van der Velde, N., Martin, F., Petrovic, M., Tan, M., Ryg, J., Aguilar-Navarro, S., Alexander, N., Becker, C., Blain, H., Bourke, R., Cameron, I., Camicioli, R., Clemson, L., Close, J., Delbaere, K., Duan, L., Duque, G., Dyer, S., ... Task Force on Global Guidelines for Falls in Older Adults. (2022). World guidelines for falls prevention and management for older adults: A global initiative. Age and Ageing, 51(9), 1–36. https://doi.org/10.1093/ageing/ afac205
- Morris, M. E., Webster, K., Jones, C., Hill, A.-M., Haines, T., McPhail, S., Kiegaldie, D., Slade, S., Jazayeri, D., & Heng, H. (2022). Interventions to reduce falls in hospitals: A systematic review and meta-analysis. *Age and Ageing*, *51*(5), afac077.

- Noblit, G., & Hare, R. (1988). Meta-ethnography: Synthesizing qualitative studies. Sage.
- Pereira, V. C., Silva, S. N., Carvalho, V. K. S., Zanghelini, F., & Barreto, J. O. M. (2022). Strategies for the implementation of clinical practice guidelines in public health: An overview of systematic reviews. *Health Research Policy and Systems*, 20(1), 13. https://doi.org/10. 1186/s12961-022-00815-4
- Pettersson, B., Janols, R., Wiklund, M., Lundin-Olsson, L., & Sandlund, M. (2021). Older adults' experiences of behavior change support in a digital fall prevention exercise program: Qualitative study framed by the self-determination theory. *Journal of Medical Internet Research*, 23(7), e26235. https://doi.org/10.2196/26235
- Pressman, S., Jenkins, B., & Moskowitz, J. (2019). Positive affect and health: What do we know and where next should we go? Annual Review of Psychology, 70(1), 627-650. https://doi.org/10.1146/ annurev-psych-010418-102955
- Ren, L., & Peng, Y. (2019). Research of fall detection and fall prevention technologies: A systematic review. *IEEE Access*, 7, 77702–77722.
- Rogers, L. (2013). Opening the black box: Understanding adult inpatient falls Loyola. Loyola University Chicago.
- Strini, V., Schiavolin, R., & Prendin, A. (2021). Fall risk assessment scales: A systematic literature review. Nursing Reports, 11(2), 430–443.
- Thorne, S. (2022). Qualitative Meta-Synthesis. Nurse Author & Editor, 32(1), 15–18. https://doi.org/10.1111/nae2.12036
- Tong, A., Flemming, K., McInnes, E., Oliver, S., & Craig, J. (2012). Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. BMC Medical Research Methodology, 12(1), 1–8. https://doi.org/10.1186/1471-2288-12-181
- Turner, N. (2012). Patients' and staff's views of falls occurring on rehabilitation wards: An action research study to explore the voices of experience. University of Northumbria.
- Turner, N., Jones, D., Dawson, P., & Tait, B. (2019). The perceptions and rehabilitation experience of older people after falling in the hospital. *Rehabilitation Nursing Journal*, 44(3), 141–150. https://doi.org/ 10.1097/rnj.00000000000107
- Wallis, A., Aggar, C., & Massey, D. (2022). Multifactorial falls interventions for people over 65 years in the acute hospital setting: An integrative review. *Collegian*, 29(1), 100–108. https://doi.org/10.1016/j. colegn.2021.05.003
- World Health Organization. (2021). Step safely: Strategies for preventing and managing falls across the life-course (9240021914). World Health Organization.

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