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Perspectives on Fall Prevention Among Older Patients and Healthcare Providers in UAE Hospitals: A Qualitative Study

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Purpose: Falls remain a major patient safety concern among hospitalized older adults, particularly as previously independent individuals become acutely vulnerable during admission. Although falls prevention strategies are widely used, their implementation is often insufficiently patient-centered and may not reflect the cultural, linguistic, and organizational realities of healthcare settings in the United Arab Emirates (UAE). This study explored fall risk and prevention from the perspectives of hospitalized older adults, frontline healthcare professionals, and nurse managers in the UAE.

Patients and Methods: A qualitative descriptive study was conducted across two acute care hospitals in the UAE. Using purposive sampling, data were collected in two phases: semi-structured interviews with hospitalized older adults aged ≥65 years (n=8); focus group discussions with nurses and allied health professionals (n=12); and nurse managers (n=15). Data was analyzed thematically, and triangulation was used to identify converging patterns across stakeholder groups.

Results: Four themes were identified: (1) autonomy versus safety, (2) gaps in patient education and engagement, (3) system and environmental barriers, and (4) opportunities for innovation and patient-centered solutions. Patients often prioritized independence despite clinical vulnerability, while staff highlighted limitations in education, delayed responses to call bells, environmental hazards, and the reduced sensitivity of current risk assessment processes to dynamic clinical change. Participants across groups emphasized the need for culturally responsive education, clearer communication, and more integrated system-level approaches.

Conclusions and Future Directions: Fall risk in hospitalized older adults is shaped by the interaction of patient behavior, communication practices, environmental conditions, and organizational responsiveness. This study contributes context-specific evidence from the UAE, showing that falls prevention should move beyond standardized risk scoring toward patient-centered, culturally responsive, and system-integrated strategies. Future research should examine whether addressing these barriers improves measurable outcomes such as fall rates, reassessment compliance, and response times.

Keywords: older patients, patient safety, qualitative research, inpatient falls, accidents, incidents, near misses

Introduction

Falls represent a significant patient safety concern globally and are widely recognized as a major clinical and public health concern.[1–6] They are amongst the most frequently reported adverse events in healthcare settings, contributing significantly to morbidity, mortality, and increased healthcare utilization.[1,7,8] Falls account for a substantial proportion of inpatient safety incidents, with a considerable percentage leading to injury, prolonged hospitalization, and increased healthcare costs.[3,5–7,9,10]

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In the United Arab Emirates (UAE) and other Gulf Cooperation Council (GCC) countries, falls remain a significant concern, particularly among older adults.[11–15] The UAE reported a higher incidence of falls among patients aged 60 years and older.[3,5,6,12] Although national efforts and institutional initiatives have contributed to reduction in overall fall rates in recent years, hospitalized patients, especially older adults, continue to be at risk of fall-related injuries.[11,12]

Beyond physical harm, falls cause considerable psychological consequences. Post-fall syndrome, characterized by fear of falling, can lead to reduced mobility, increased dependency, and decreased quality of life.[1,2,16–18] These outcomes highlight the need for holistic fall prevention approaches that address not only physical risk factors but also psychosocial aspects.[19–24]

Existing literature has predominantly focused on fall prevention interventions, risk assessment tools, and clinical outcomes. While these studies have advanced understanding of modifiable risk factors, they often adopt a provider-centric perspective.[5,25] This may insufficiently account for contextual and human factors influencing fall occurrence. Increasingly, evidence suggests that falls result from a complex interplay of patient, environmental, and healthcare system factors.[5,26,27]

Despite this growing body of research, important gaps remain. In particular, there is limited exploration of the lived experiences and perspectives of key stakeholders, including patients, allied health professionals, and nurse leaders, especially within the UAE and wider GCC context.[5,28] Furthermore, the extent of shared understanding of fall risk between patients and healthcare providers remains unclear.[21,29–32] This lack of insight may undermine the effectiveness of current fall prevention strategies, which increasingly require interprofessional collaboration and patient engagement.[33] Moreover, much of the available evidence is derived from Western healthcare settings, limiting its applicability to the UAE/GCC context, where cultural norms, communication practices, and interprofessional dynamics may differ.[34,35] In the UAE context, where healthcare delivery involves highly diverse, multilingual teams, achieving a shared understanding of fall risk between patients and healthcare providers may be particularly challenging. Cultural norms related to autonomy, family involvement, and trust in healthcare professionals may further shape how patients engage with fall prevention strategies.

Therefore, this study aims to address these gaps by exploring the lived experiences and perspectives of older patients (aged ≥65 years), allied health professionals, and nurse managers regarding fall risk and prevention in UAE hospital settings. Using a phased qualitative design involving focus groups and individual interviews, this study seeks to generate in-depth insights into the systemic, interpersonal, and contextual factors influencing fall prevention. The findings are expected to inform the development of culturally responsive, patient-centered, and system-integrated fall prevention strategies tailored to the UAE healthcare context.

Materials and Methods

Study Design and Philosophical Positioning

This study employed a descriptive, exploratory, qualitative design to investigate the experiences, perspectives, and perceived needs of older patients, healthcare professionals (HPs), and healthcare leaders regarding fall risk and prevention among older adults (aged ≥65 years) in UAE hospital settings. The study recognized that multiple realities exist, shaped by patients and HPs, and sought to capture their individual interpretations and lived experiences within a naturalistic clinical context.

Setting and Participants

The study was conducted across two major hospitals in the UAE (which exist within a larger private health system) to ensure diverse representation across urban and semi-urban clinical environments. At the time of the study, fall rates in these hospitals ranged from 0.44 to 0.97 per 1000 patient days between 2020 and 2023, compared with a benchmark of 0.35 per 1000 patient days. A purposive sampling strategy was used to recruit participants with direct experience and knowledge of fall prevention practices. This approach was selected to ensure inclusion of diverse stakeholder perspectives across clinical, patient, and leadership levels.

Three participant groups were included:

- **Phase 1A**: Nurses and AHPs who are regularly involved in direct patient care for older adults at risk of falls. Those involved in policy development related to fall prevention were excluded.
- **Phase 1B**: Hospitalized patients aged ≥65 years or their relatives, with recent inpatient experience of fall and assessed fall risk. Individuals with psychiatric diagnoses were excluded. Relatives were interviewed with the patient's consent when the patient was unable to communicate effectively.
- **Phase 2**: Nurse managers and healthcare leaders with direct responsibilities for fall prevention strategy and policy.

The inclusion of multiple stakeholder groups enabled triangulation of perspectives and a comprehensive understanding of fall prevention practices.

Recruitment

Participants were recruited through site principal investigators (PIs) using purposive sampling.

Phase 1A: Nurses and AHPs were invited via departmental communication and provided with study information prior to participation.
Phase 1B: Eligible patients or relatives were identified through hospital records and approached in person or by phone.
Phase 2: Managers and leaders were directly invited based on their roles in fall prevention oversight.

Written informed consent was obtained from all participants. No personal identifiers were collected, and all data were anonymized. Participants consented to audio recording and use of anonymized quotations for publication.

Data Collection

Data was collected over two phases from January 2024 to July 2025.

- **Phase 1A** included pre-validated semi-structured FGD (2 groups, n=12) with nurses and AHPs, preceded by a questionnaire on clinical background. Interviews were conducted until data saturation was reached to ensure sufficient depth and diversity of information captured.
- **Phase 1B** involved individual face-to-face semi-structured interviews with patients or their relatives (n=8), exploring personal experiences with fall prevention practices during hospitalization.
- **Phase 2** comprised a semi-structured focus group (n= 15) with nurse managers and leaders to explore strategic perspectives and review emergent themes from Phase 1.

Interview guides were developed based on existing literature and study objectives and were used consistently across sites. Interviews were conducted in English or Arabic (for patient interviews), with Arabic data translated into English prior to analysis. All interviews were audio-recorded, transcribed verbatim, and cross-checked for accuracy.

Data saturation was determined iteratively during data collection and analysis. Saturation was considered achieved when no new themes or insights emerged from successive interviews and when sufficient depth and variation in stakeholder perspectives had been captured across all participant groups. Ongoing preliminary analysis supported this determination, ensuring that data collection continued until informational redundancy was reached.

Ethical Considerations and Sampling

Purposive sampling was used across all phases. Recruitment was led by site PIs to minimize bias and ensure adherence to ethical standards. Participation was voluntary, with assurance that refusal would not affect clinical care, and written informed consent was obtained from all participants across the various phases. Ethical approvals were obtained from the

Institutional Review Board (IRB) of the participating hospitals and the participating University (MBRU IRB-2023-337), and from the Dubai Scientific Research and Ethics Committee (DSREC), DSREC-07/2024_32.

Data Analysis

Transcripts were analyzed thematically following the framework proposed by Braun and Clarke[36] and NVivo software was used to support data organization and analysis. The analysis followed six key steps: (1) familiarization with the data through repeated reading of transcripts; (2) generation of initial codes across the dataset; (3) identification of patterns and development of preliminary themes; (4) review and refinement of themes in relation to the coded data and full dataset; (5) definition and naming of themes; and (6) development of a coherent narrative linking themes to the study objectives.

An inductive coding process was independently conducted by two researchers, followed by collaborative theme development. Discrepancies were discussed and resolved through consensus to enhance analytical rigor.

Reflexivity was maintained throughout the study, recognizing that the research team's clinical and academic backgrounds in nursing and patient safety may have influenced data collection and interpretation. Researchers engaged in ongoing reflection to acknowledge and minimize potential biases and held regular team discussions to ensure interpretations remained grounded in participants' perspectives.

Trustworthiness was established using several strategies. Credibility was enhanced through triangulation of multiple stakeholder groups, including patients, healthcare professionals, and leaders, allowing comparison of diverse perspectives. Dependability was supported by the use of standardized interview guides and maintaining an audit trail of methodological decisions and data analysis processes. Confirmability was ensured by grounding findings in verbatim data and involving multiple researchers in coding and theme development, with consensus reached through discussion. Transferability was facilitated by providing detailed descriptions of the study context, participants, and healthcare setting.

Results

Thematic analysis of data from focus groups with nurses and allied health professionals (Phase 1A, n = 12), patient interviews (Phase 1B, n = 8), and focus groups with nurse managers (Phase 2, n = 15) identified four major themes: (1) Autonomy versus Safety, (2) Gaps in Patient Education and Engagement, (3) System and Environmental Barriers, and (4) Opportunities for Innovation and Patient-Centered Solutions.

Theme 1: Autonomy Versus Safety

Patient non-compliance emerged as a key contributor to fall risk, particularly in relation to toileting and ambulation. Many patients preferred to mobilize independently, often declining assistance due to a desire to maintain autonomy, concerns about privacy, and reluctance to inconvenience nursing staff. Several patients described a strong preference for self-reliance, even in the hospital setting:

> I walk alone at home. I don't want assistance to go to the toilet. (Patient 3)

> I don't like bothering nurses. If I feel okay, I'll go on my own. (Patient 5)

This reluctance to request assistance was also linked to feelings of embarrassment and discomfort:

> I don't like asking for help unless I really need to. I feel embarrassed. (Patient 4)

> I am not used to using a bell. At home, I walk on my own… I didn't want to disturb the nurses. (Patient 5)

Despite this perceived independence, patients frequently described situations where unassisted mobilization resulted in adverse symptoms such as dizziness:

> Sometimes they say 'wait', but I feel fine, and I go. Then I feel dizzy. (Patient 2)

> I had surgery, but I didn't want to call. I walked and felt dizzy. (Patient 8)

Healthcare professionals consistently reported challenges in reinforcing fall prevention protocols among patients who resisted assistance, particularly when patients perceived themselves as independent despite clinical risk factors.

> Even though you explain everything to them… they will just do their own thing. (Nurse, Medical Ward)

> They tell you, 'I don't need help, I can walk at home,' but they are post-op and on pain meds. (Nurse, Medical Ward)

Cultural factors further influenced patient behavior, particularly among older Emirati patients, where privacy and gender considerations affected willingness to accept assistance:

> Especially our local patients, they value privacy… they'll insist on going alone. (Nurse Manager)

> Some patients won't accept help from male staff even if it's critical to their safety. (Assistant Director of Nursing)

Together, these findings highlight a persistent tension between patient autonomy and safety, shaped by individual beliefs, cultural expectations, and clinical realities (see Appendix 1, Box 1).

Theme 2: Gaps in Patient Education and Engagement

This theme reflects inconsistencies in the delivery, comprehension, and effectiveness of fall prevention education among patients and healthcare providers.

Patient education was frequently described as verbal, brief, and inconsistently delivered, often limited to general instructions without sufficient explanation or reinforcement. Many patients reported receiving minimal or unclear information regarding fall prevention strategies during hospitalization.

> No one gave me any leaflet or video… I just thought not falling was common sense. (Patient 1)

> They told me not to walk alone but didn't explain why or what to do instead. (Patient 1)

Several patients reported that education was either not provided or not retained, particularly during acute illness or postoperative recovery.

> No one showed me anything about falling. I was only told not to get up alone after surgery. (Patient 5)

> I was not given a paper or anything. Maybe they told me, but I don't remember. (Patient 4)

In some instances, patients engaged in formal processes, such as signing fall prevention documents, without fully understanding their purpose.

> I signed a paper but didn't understand what it was. (Patient 6)

Despite these gaps, patients and families expressed a strong appreciation for education and emphasized the importance of repetition, continuity, and clear communication.

> Communication must be continuous… every period they come to remind him. (Patient Relative)

Healthcare professionals described delivering education at admission and reinforcing it during care using tools such as leaflets and fall prevention contracts. However, they acknowledged that education was often delivered under time constraints and without a systematic assessment of patient understanding.

> We have a fall contract, but how many patients can actually read and understand it? (Allied Health Professional)

Variability in staff communication practices was also highlighted, with some participants noting differences in the clarity and consistency of education provided.

> Some nurses explain everything clearly, others are rushed. It depends on who's on duty. (Unit Manager)

Participants across stakeholder groups emphasized the need for more effective and inclusive education strategies, including repetition, multilingual resources, and patient-centered communication approaches.

They need reminders in their language, not just paperwork. (Physiotherapist)

Together, these findings indicate that current education practices are often insufficiently tailored, inconsistently delivered, and not always aligned with patients' needs or comprehension levels (see Appendix 1, Box 2).

Theme 3: Systems and Environmental Barriers

Environmental Factors

Environmental conditions were consistently identified as contributors to falls and near-miss events. Key risks included wet or slippery floors, poor lighting, lack of assistive fixtures, and limited space for safe mobility.

Patients described direct encounters with environmental hazards, particularly in bathrooms and during nighttime:

The floor was wet near the sink. I slipped but didn't fall. (Patient 5)

I fell at night. It was dark, and I couldn't find the bell. (Patient 1)

Toileting areas were frequently highlighted as high-risk due to inadequate support and environmental design:

The toilet is far, and there's nothing to hold on to. (Patient 7)

Healthcare professionals reinforced this pattern, identifying toileting, especially at night, as a common context for falls:

Most of the falls are related to toileting, especially at night. (Nurse, Medical Ward)

Patients often perceived the hospital as safer than home due to constant monitoring:

Hospitals are a million times better than home. At home, there is no one watching you. (Patient 7)

In contrast, staff noted that safety was influenced by both environmental conditions and adherence to safety measures, which were sometimes inconsistent due to patient behavior or system limitations. Issues such as overuse of visual alerts (eg, yellow wristbands), non-compliance with non-slip footwear, inconsistent environmental cues (eg, missing wet floor signage), and cluttered spaces were highlighted as barriers to effective risk mitigation.

Everyone wears a yellow band; it doesn't help us know who actually needs supervision. (Nurse)

We give them non-slip socks, but some of them take them off or wear their own slippers, which are not safe. (Nurse Assistant)

I've seen patients slip near the sink or bathroom. Sometimes there are no wet floor signs, or the cleaner has just mopped. (Duty Manager)

Rooms are small and often cluttered. If the patient uses a walker, there's no space to move safely. (Wound Care Nurse)

Overall, these findings indicate that environmental design, maintenance practices, and perceptions of safety collectively influence fall risk (see Appendix 1, Box 3a).

Delayed Response to Call Bells and Staffing Constraints

Delayed response to call bells emerged as a key factor influencing patient decisions to mobilize independently. While patients recognized the importance of using the call bell, delays often prompted risk-taking behavior.

Sometimes I press the call bell, but no one comes, so I try to go alone. (Patient 2)

I tried to call for help, but no one came for 10 minutes. (Patient 6)

Healthcare professionals and leaders similarly identified delayed response times as a critical contributor to inpatient falls, particularly during peak workload or night shifts.

Call bell delays were a major factor in our past falls. (Nurse Manager)

Participants attributed these delays to staffing constraints, competing clinical priorities, and high-acuity demands.

> At night, there are fewer staff… that's when most of the falls happen. (Staff Nurse)

Although strategies such as increased monitoring, use of informal communication tools, and support from ancillary staff were described, these were inconsistent and often insufficient to mitigate risk.

> We try to monitor all high-risk patients, but… it's not always possible. (Fall Champion Nurse)

> We use WhatsApp to alert each other if someone is high risk, but unless it's documented in the handover or whiteboard, it may be missed. (Head Nurse)

These findings highlight how system-level constraints directly influence patient safety behaviors and fall risk (see Appendix 1, Box 3b).

Limitations in Risk Assessment

Participants identified significant limitations in current fall risk assessment and communication processes. Standardized tools, such as the Morse Fall Scale, were perceived as insufficient in capturing dynamic and condition-specific risks, particularly in postoperative and cognitively impaired patients:

> We use the Morse Scale, but… it doesn't capture the real risk. (Clinical Educator)

> It doesn't factor in post-op confusion or medication side effects. (Senior Unit Manager)

Healthcare professionals emphasized that high-risk patients, particularly those with delirium, sedation effects, or neurological conditions, were often under-recognized:

> Confused patients often score borderline, but we know they're high risk. (Senior Nurse)

Patients also described physiological and environmental factors, such as fatigue, poor sleep, and inadequate nutrition, that contributed to fall risk but were not routinely assessed:

> I couldn't sleep… I was tired and got dizzy. (Patient 8)

> After surgery, I didn't eat… I felt weak getting up. (Patient 2)

> Nutrition and hydration should be part of fall risk, but they aren't in our current assessment tools. (Dietician)

Gaps in reassessment processes, particularly during patient transfers, were also highlighted as a critical vulnerability:

> Reassessment doesn't always happen after ICU transfer. (Nurse Manager)

Overall, participants indicated that current risk assessment approaches are often static, with limited integration of clinical changes, communication systems, and patient-specific factors, increasing the likelihood of unrecognized risk (see Appendix 1, Box 3c).

Theme 4: Opportunities for Innovation and Patient Centered Solutions

Participants identified the need for more patient-centered, proactive, and system-integrated approaches to fall prevention. Patients emphasized simple, intuitive solutions to support safe behavior, including clearer communication, environmental modifications, and timely assistance.

> If the bell alerted someone faster, I wouldn't need to try on my own. (Patient 4)

> More rails, more light… maybe a sensor? (Patient 8)

Patients also highlighted the importance of accessible and culturally appropriate education:

> Even a small video in Arabic would help… I don't understand the English papers. (Patient 5)

Healthcare professionals and leaders emphasized the potential role of technology to enhance early detection and communication, including real-time monitoring systems and digital alerts:

> Technology can help: sensor mats, voice alerts, live dashboards. (Allied Health)

> A smarter system that updates fall risk in real time would be ideal. (Quality Nurse)

There was also strong support for dedicated roles to coordinate fall prevention efforts and reinforce patient education:

> We need someone dedicated… to track and educate. (Nurse Manager)

However, participants noted that staffing constraints and workflow pressures may limit implementation, highlighting the need for solutions that integrate effectively into existing systems.

Overall, these findings suggest that combining patient-centered design, targeted education, and supportive technologies may strengthen fall prevention strategies (see Appendix 1, Box 4).

Discussion

This study provides an in-depth, multi-stakeholder exploration of fall risk and prevention in hospitalized older adults within the UAE healthcare context. The findings highlight that fall prevention is not solely a clinical or procedural issue but a complex interaction between patient behaviors, communication practices, environmental conditions, and systemic constraints.

A key contribution of this study is the identification of fall risk as a dynamic, socio-technical phenomenon, shaped by the interaction between patient autonomy, system responsiveness, and contextual factors. While previous studies have largely focused on modifiable risk factors and prevention strategies, our findings demonstrate that falls persist despite such interventions due to misalignment between patient beliefs, staff practices, and system capacity.

A central finding was the tension between autonomy and safety. Patients often valued independence, privacy, and dignity, particularly during toileting and ambulation, even when clinically vulnerable.[8,12,13,15,18,34,35,37,38] Although this aligns with previous research showing that older adults may underestimate their fall risk or resist assistance,[22,29,38] the present study extends this understanding by showing how these behaviors are shaped not only by personal preference but also by cultural expectations and prior habits of independence. In the UAE context, concerns related to privacy, gender concordance, and dignity appeared to further influence willingness to request or accept help. This is an important contribution because it suggests that falls prevention strategies may fail when they are designed primarily around institutional compliance rather than around how patients interpret autonomy, risk, and acceptable care. The findings, therefore,[22,37–40] support a shift from viewing "non-compliance" as a patient problem toward understanding it as a mismatch between clinical safety expectations and patient values.

A second important finding concerns gaps in patient education and engagement. Although staff reported routinely providing fall prevention education, patients and families often described this education as brief, inconsistent, or insufficiently explained. The issue, therefore, was not simply whether education was delivered, but whether it was understood, retained, and translated into safe behavior. This distinction is important. Much of the existing literature assumes that the provision of education is inherently beneficial;[3,22,23,25,33,41] however, the present findings suggest that education that is not tailored, reinforced, or checked for comprehension may have limited effect. In a multilingual and multicultural healthcare environment such as the UAE, this issue becomes even more significant. Our findings indicate that effective falls education must move beyond one-time verbal instruction or standardized paperwork and instead become continuous, culturally responsive, and patient-centered. This interpretation strengthens the study's practical relevance by reframing education as a relational and communicative process rather than a discrete task.

The study also highlights the importance of system and environmental barriers, particularly delayed call-bell response, staffing constraints, and limitations in current risk assessment processes. These findings are especially important because they demonstrate that patient behavior is often shaped by system conditions. Patients did not mobilize independently only because they preferred to; in many cases they did so because help was delayed, the environment was difficult to navigate, or risk was not adequately recognized. This suggests that some falls may be better understood as the downstream consequence of system

constraints rather than simply poor patient decision-making. In this regard, the study adds to the existing falls literature by showing how patient action and organizational capacity are closely intertwined.[40–45] Delayed response times, lack of reassessment during transfers, and the limited sensitivity of tools such as the Morse Fall Scale all illustrate how static or overloaded systems may fail to capture dynamic risk. The findings therefore support the need for fall prevention models that are more responsive to clinical change, especially after surgery, sedation, sleep disruption, nutritional decline, or ward transfer.

Relatedly, the findings raise important questions about how fall risk is assessed and communicated in practice. Staff across roles expressed concern that current tools may under-represent situational or evolving risks, particularly in patients with delirium, orthostatic symptoms, postoperative weakness, or cognitive fluctuation. This is a meaningful contribution because it identifies a gap between formal risk assessment and bedside clinical judgment. In practice, clinicians often recognize risk through observation and experience, yet institutional systems continue to rely heavily on standardized scores and generalized visual cues. This mismatch can dilute prioritization and contribute to missed opportunities for prevention. The study therefore supports the adoption of more dynamic and bundled approaches to falls risk assessment, integrating physiological, functional, and contextual indicators rather than relying on a single tool.

The fourth theme, opportunities for innovation and patient-centered solutions, provides practical direction for clinical improvement. Importantly, participants did not advocate technology as a stand-alone answer. Instead, they described technology as potentially valuable when embedded within clear workflows, staff training, and responsive care systems. This distinction is important because it avoids technological solutionism and instead places innovation within a broader patient safety framework. Participants highlighted the need for culturally appropriate multimedia education, improved call-bell responsiveness, more intuitive environmental design, real-time risk communication, and dedicated falls prevention roles. These suggestions indicate that the most promising interventions are likely to be those that combine human factors principles, patient engagement, and system redesign.[1,2,19–21,29] In the UAE, where healthcare systems are rapidly digitizing, this finding has particular relevance. The study suggests that digital innovation should be developed in a way that is linguistically accessible, culturally sensitive, and operationally realistic.

Taken together, the findings suggest that effective fall prevention in hospitalized older adults requires a move from protocol-driven prevention to patient-centered, system-integrated prevention. The study's novelty lies in showing how falls risk emerges at the intersection of four domains: patient autonomy, educational engagement, environmental and staffing conditions, and dynamic system performance. This contribution is especially relevant to the UAE and similar multicultural healthcare systems, where diversity in language, cultural expectations, and staffing models may intensify the gap between standardized prevention policies and actual patient behavior. Rather than treating these domains separately, healthcare systems should address them as interconnected elements of a broader safety ecology.

These findings have several implications for practice. First, falls prevention plans should incorporate patients' own beliefs, routines, and preferences, particularly regarding independence, privacy, and gender-sensitive care. Second, education should be repeated, multimodal, and delivered in the patient's preferred language, with explicit checks for understanding rather than simple documentation of completion. Third, health systems should consider monitoring call-bell response times, reassessment after transfer, and dynamic clinical risk factors as part of falls prevention governance. Finally, staff support structures, including designated falls champions, standardized handover prompts, and environment-focused redesign, may strengthen prevention efforts more effectively than isolated technological solutions.

This study also has implications for future research. Because the present design was qualitative and exploratory, it aimed to understand stakeholder experiences and system challenges rather than measure intervention effects. A valuable next step would be mixed-methods or implementation studies that link these qualitative findings to measurable outcomes, such as fall rates, call-bell response times, post-transfer reassessment rates, or patient understanding of fall prevention strategies. Such work would help determine whether addressing the relational and system-level issues identified here leads to measurable improvements in patient safety.

Strengths and Limitations

A key strength of this study is the triangulation of patients', frontline staff's, and leadership's perspectives, allowing a more comprehensive understanding of fall prevention than would be possible from a single stakeholder group. However, the study was limited to two hospitals within a single healthcare system, which may limit transferability. In

addition, patient interviews relied on retrospective accounts, which may have been influenced by recall or illness-related factors. Nonetheless, the consistency of themes across stakeholder groups strengthens the credibility of the findings.

Conclusion

This study shows that fall risk in hospitalized older adults is shaped by the interaction of four key factors: patient autonomy, gaps in education and engagement, environmental and staffing barriers, and limitations in current risk assessment processes. By incorporating the perspectives of patients, frontline staff, and nurse managers, the study highlights that fall prevention in UAE hospitals is not only a clinical issue, but also a communication, systems, and workflow challenge.

A key contribution of this study is the demonstration that standardized tools and routine precautions alone are insufficient when they are not aligned with patients' beliefs, cultural expectations, and changing clinical conditions. The findings suggest that effective fall prevention requires more than risk scoring and signage; it requires repeated and culturally responsive patient education, timely staff response to requests for assistance, dynamic reassessment of risk during clinical change and transfer, and environmental design that supports safe mobility.

For hospital practice, these findings support the adoption of patient-centered, system-integrated strategies such as multilingual education, structured reassessment after transfer, monitoring of call-bell response times, and greater use of coordinated communication across teams. For healthcare systems and policy, the findings point to the need for falls-prevention frameworks that integrate staffing, workflow, environmental safety, and digital support tools within clear governance structures.

As this was a qualitative study, the findings provide explanatory insight rather than outcome measurement. Future mixed-methods and implementation studies should examine whether interventions targeting these identified barriers improve measurable indicators such as fall rates, response times, reassessment compliance, and patient understanding of falls prevention.

Ethics Statement

This study was conducted in accordance with the Declaration of Helsinki and received ethical approval from the Institutional Review Board (IRB) of the participating hospitals and the participating University (MBRU IRB-2023-337), and from the Dubai Scientific Research and Ethics Committee (DSREC), DSREC-07/2024_32.

Informed Consent

All eligible participants were provided with clear information about the study purpose, process, potential risks, and benefits, and written informed consent was obtained prior to participation. Participation was voluntary, and participants could withdraw at any time without affecting their medical care or employment. Confidentiality was ensured through the use of coded identifiers, and all data was securely stored with access restricted to the research team.

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Disclosure

The authors report no conflicts of interest in this work.

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