

URINARY INCONTINENCE AND FALLS: A DELPHI CONSENSUS

Hypothesis / aims of study

Urinary incontinence (UI) and falls are clinically connected conditions in older adults. Despite evidence of UI as an independent risk factor for falls (1), there is a lack of acknowledgement and application of this association in both continence promotion and falls prevention clinical practice guidelines and primary and community health care practices. Given the strong research evidence, the relationship between these two conditions needs to be routinely addressed and treated in older adults presenting with falls or UI. The aims of this study were to:

- 1) Mobilize the research **knowledge** that supports the connection between falls and UI **into action** to address a current care provision gap; and
- 2) Develop a **preliminary set of consensus-based practice principles** related to falls prevention and UI for relevant stakeholders in community-based primary health care.

Study design, materials and methods

This study was informed by the Knowledge to Action (K2A) framework for knowledge translation and followed Delphi consensus methodology (2). The Delphi process commenced with a comprehensive literature review. Next, an expert panel (n=12) was purposively assembled from the disciplines of rehabilitation, nursing, research, policy and patient safety. All panelists participated in the four phases of the consensus process.

In phase one, an online survey was distributed to participants in order to gather their perspectives on the topic of falls and UI. Questions were posed regarding effective treatments and the barriers and facilitators of managing both UI and falls in older adults. In phase two, an in-person meeting took place (May 11, 2016). At the meeting, presentations were delivered on falls, UI, and the relationship between UI and falls, each incorporating findings from the literature review and the phase one survey responses. After each presentation, participants discussed the evidence and determined potential practice indicators. A practice indicator was defined as an actionable item that a health care professional would enact, such as, include questions about UI in every falls assessment. In phase three, a follow-up online survey was sent to each panellist in which they were asked to rate the indicators on a 1-5 scale based on:

1. Potential for improvement in clinical practices;
2. Impact on patient outcomes; and
3. Feasibility of abstracting the data.

In phase four, a follow-up teleconference took place (July 6th, 2016). Final consensus of the items was determined at this concluding meeting.

Results

In phase two, 37 potential practice indicators were generated. By phase four, 16 of the 37 indicators achieved consensus as practice principles.

The following parameters were used to establish consensus:

- Indicators with a score greater than one standard deviation (SD) above the mean were kept;
- Indicators with a score greater than one SD below the mean were discarded; and
- Indicators that fell within one SD of the mean were discussed in phase four to determine if they should be included or removed.

The above process was iterative and further analysis included organization of the developed practice principles into three categories. Refer to Table 1.

Table 1. Final Consensus Practice Principles

Identification of Fall Risk
Assess for fear of falling.
Complete the TUG (Timed-up-and-go) test.
Screen for falls with all individuals with multiple chronic conditions.
Identification of UI
Include questions about UI in every falls assessment.
Ask client directly "Do you have any trouble getting to the bathroom dry?"
Make UI screening a part of every community care assessment by every discipline, including: nursing, physiotherapy, occupational therapy, speech language pathology, registered dietician, and social work.
Strategies to Enhance Service Provision for Falls Risk and UI
Common care plan developed and communicated to all care providers when a client is identified as having UI and at risk for falls.
Interdisciplinary team approach to falls prevention programs.
Interdisciplinary team approach to UI prevention.
Increased education to health care professionals on aging process and functional decline.
Education re: safe and optimal use of gait aids.
Education to patients/health consumers to reduce the amount of time spent in a seated position.

Patient/health consumer education to include bridges, lunges, repeated sit to stand and wall push-ups as standard health promotion exercises.
Treatment plan is implemented for clients at risk.
Inclusion of posture and diaphragmatic breathing exercises and education in treatment programs
Pelvic floor muscle retraining is implemented for clients with UI.

Interpretation of results

To our knowledge, this is the first study to transfer the knowledge of the connection between falls and UI into action through the development of consensus-based practice principles. Findings from the online survey in phase one corroborated with the scientific literature on the topic of falls and UI, pointing to a clear practice gap that requires bridging. The sixteen indicators, derived by consensus, represent an important first step towards more comprehensive and robust practice principles related to falls and UI. Given that feasibility was one of the parameters in which the panellists rated the developed practice indicators, the final list of preliminary practice principles are not only evidence-informed, but were also deemed to be feasible and usable. Generally, the practice principles were supported because they: improved education for health care professionals, patients and health care consumers; are likely to improve outcomes; or promoted an interdisciplinary approach to practice. These findings need to be disseminated, enacted and built upon.

Concluding messages

The knowledge related to the connection between falls and UI requires mobilization into action. We have established the first set of preliminary practice principles that could support improved care provision related to falls and UI in community and primary health care settings. It is essential that all relevant stakeholders, including health care professionals and the older adults they serve, understand the association between UI and falls and the connected actions that can be taken to health promote, prevent and manage these two conditions successfully.

References

1. Chiarelli P, Mackenzie L, Osmotherly P. (2008). Urinary incontinence is associated with an increase in falls: a systematic review. *Australian Journal of Physiotherapy*, 55, 89-95.
2. Tetroe J, Graham I, Scott V. (2011). What does it mean to transform knowledge into action in falls prevention research? Perspectives from the Canadian Institutes of Health Research. *Journal of Safety Research*, 42, 423-26.

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