

Clinician's Commentary on Arnold and Gyurcsik¹

Falls are a major health concern for older adults, occurring in approximately one-third of people aged 65 and over each year² and often triggering a downward spiral in health that is associated with the highest injury costs in Canada.³ Arnold and Gyurcsik¹ have adapted the recently updated American Geriatric Society / British Geriatric Society (AGS/BGS) guidelines on fall prevention⁴ to account for the specific fall-risk factors associated with osteoarthritis (OA). In addition to the risk factors probed in the AGS/BGS guidelines, Arnold and Gyurcsik propose including range of motion, pain, falls efficacy, social support, and efficacy to overcome perceived barriers in the detailed assessment of individuals with OA who are identified as having a high risk of falling. While a systematic review of the literature would strengthen the findings further, applying general guidelines to a specific population is a useful exercise, and this project may serve as a model for adapting fall-prevention guidelines to other conditions. Future evaluation of the algorithm will also contribute to its utility in clinical practice.

The need to adapt fall-prevention guidelines for people with specific conditions such as OA reflects the larger issue of an increasingly complex ageing population in which multiple chronic conditions often coexist. Data from Canada are lacking, but it has been reported that 65% of Medicare beneficiaries in the United States have two or more chronic diseases.⁵ While geriatric syndromes such as falls have not traditionally been considered to come within the spectrum of chronic disease, co-occurrence of these conditions is common, and the prevalence of falling is elevated among people with chronic disease.⁶ Several chronic conditions (including arthritis) are independently related to falls, and fall risk increases with the number of risk factors.² Like chronic disease management, fall prevention requires sustained effort (e.g., through monitoring of medication use and regular exercise that challenges balance) to achieve optimal results.

We need to better understand multiple morbidity patterns associated with falls. One of the few studies to date identified five distinct biologically plausible clusters of comorbidity among individuals hospitalized for fall-related injury in Australia⁷ (the analysis did not include arthritis). Such distinctions between at-risk populations have implications for the implementation of fall-prevention interventions. At present, care is delivered and research is conducted primarily in a single-disease model; as a result, many practice guidelines do not consider interactions across multiple morbidities and therefore may not provide sufficient information regarding appropriateness, risks, and benefits for complex patients.⁸ There is a clear need for more research that considers the total biological burden of disease in an individual, to inform health service delivery and to optimize quality of care.

While creating these modified fall-prevention guidelines for people with OA is a critical first step, continued work is needed to ensure that the guidelines are truly implemented in clinical practice. Guidelines alone are not sufficient; for example, a 2006 study in British Columbia determined that that <5% of older adults presenting to the emergency department (ED) with a fall received care consistent with the 2001 AGS/BGS guidelines.⁹ Indeed, an important barrier to the implementation of

Arnold and Gyurcsik's modified fall-prevention guidelines¹ will simply be getting the appropriate people with OA to the physiotherapist or community exercise provider for treatment. This is no small feat: another study, conducted in Ontario in 2009, determined that 62% of older adults presenting to the ED with a fall had no documented referral, and only 1.2% of those who did receive one were referred to physiotherapy.¹⁰ But referral is also not enough; multi-factorial fall-prevention interventions that directly manage risk factors for falling are more effective than those that refer for service.¹¹

Adapted guidelines for clinical conditions such as OA are important tools for physiotherapists providing community fall-prevention interventions, and such guidelines will be optimized through continued work to include fall prevention in integrated care with a complex ageing population. Along with dissemination through publication in *Physiotherapy Canada*, use of active, integrated knowledge-translation strategies will increase the likelihood of maximal uptake in clinical practice. This will be key for the next generation of fall-prevention efforts, moving toward real application of knowledge into action.

*Kathryn M. Sibley, PhD
Post-doctoral Fellow
Toronto Rehabilitation Institute
Toronto, ON M5G 2A2
sibley.kathryn@torontorehab.on.ca*

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