## Clinician's Commentary on Arnold et al.<sup>1</sup>

Adults over age 65 are the fastest-growing segment of the Canadian population. In this age group, the magnitude and scope of the morbidity and mortality sequelae of a fall are sobering, clearly highlighting the pivotal public-health importance of the problem of falls in older adults, which can initiate a progressive decline in function, loss of independence, and a decrease in quality of life.

Older adults experience not only physical trauma but also psychological consequences related to falls.<sup>2</sup> The psychological issues associated with falling, or with the prospect of falling, can be as disabling as the fall itself, if not more so.<sup>3,4</sup> These psychological consequences can be conceptualized across the dimensions of fear, self-efficacy, activity avoidance, and loss of confidence.<sup>2</sup>

Dealing with the psychological consequences of falls is crucial, as the prevalence of fear of falling ranges from 12% to 65% among older adults who have not fallen and from 29% to 92% among those who have.<sup>2,5</sup> Fear of falling may reflect an individual's realistic appraisal of reduced functional abilities that place him or her at an increased fall risk, as demonstrated by the moderate to strong associations that have been found between the Activities-specific Balance Confidence (ABC) Scale and measures of balance, gait, self-reported physical function, and activity restriction.<sup>6</sup> On the other hand, a fear of falling may also reflect a negative affective state that limits the performance of activities that the person is functionally capable of performing.<sup>5</sup> Unfortunately, a fear of falling can initiate a debilitating spiral of restricted activities, loss of functional ability, loss of confidence, physical frailty, and loss of independence.<sup>7</sup>

The recent updated fall-prevention guidelines from the American Geriatrics Society include, for the first time, the specific recommendation to assess an individual's perceived functional ability and fear related to falling.<sup>8</sup> While the revised guidelines now recognize the importance of these two factors, the information from fall-prevention studies is less instructive on how best to directly address fear of falling and low self-efficacy.<sup>7,9</sup> The important contribution of the study by Arnold and colleagues<sup>1</sup> is the use of a direct treatment approach to improve falls self-efficacy using an educational intervention in conjunction with exercises to reduce fall risk.

Key challenges in fall prevention include successfully identifying people at risk, understanding the interaction of risk factors, and targeting meaningful treatment to improve or maintain functional autonomy and quality of life. The goal of rehabilitation is for our clients to develop the function and skills that allow post-training performance in real-world situations; rehabilitation therefore includes addressing physical and affective dimensions of ability, to enhance carry-over and function after training. There is a distinction to be made between fear of falling and *falls efficacy*, defined as the perceived ability to confidently undertake activities of daily living without falling.5 Fear of falling and fall-related self-efficacy are not the same construct, though an improvement in self-efficacy can mediate a reduction in fear of falling, leading to a reversal of the downward spiral in function. The three goals of the education session in the study by Arnold and colleagues<sup>1</sup> explicitly address the importance of transferring skills to real-life situations and empowering the participants to apply their new knowledge to preventing falls.

A recent systematic review of interventions to address fear of falling recommended more research and highlighted the need to identify clinically relevant sub-groups who may benefit most from certain interventions or the need for adapted interventions.<sup>7</sup> Arnold and colleagues<sup>1</sup> describe an exploratory sub-group analysis based on self-efficacy levels and therefore offers a unique contribution to the literature in this area. The authors rightly state that their results should be interpreted with caution, as exploratory sub-group analysis is optimal for generating hypotheses for future studies rather than for direct application to current clinical practice.

Ultimately, a reduction in a fear of falling improves the psychological well-being of older adults, which may lead to increased social engagement and allow them to maintain or resume physical activity, leading to greater independence and overall quality of life. It will be exciting if these findings can provide the basis for future research that is powered to evaluate groups stratified by self-efficacy, can address the issues of ceiling effects of the ABC Scale for scores over 80,<sup>6</sup> and is generalizable to community-dwelling older adults.

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