

**Paper** Moving forward in fall prevention: an intervention to improve balance among older adults in real-world settings

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Robitaille and colleagues used a quasi-experimental design to evaluate the effectiveness of a group-based exercise program to improve balance ability among 200 adults aged 60+ years. The intervention involved 12 weeks of bi-weekly structured group-based exercises sessions conducted by a trained professional staff in older-adult community centres, supplemented by home-based exercises. Ten community organizations that offered services to older adults in the Montreal area (Quebec, Canada) participated in the intervention group and seven similar organizations recruited participants for the control group (received no intervention).

PA intervention is a revised version of the Stand Up! fall prevention program designed specifically for older adults who have a history of falls or have concerns with their balance. The primary goals of the program are to improve balance, leg strength and ankle mobility. The program involved movements adapted from tai chi and leg-strengthening exercises with elastic bands. Participants are also given a poster about 12 exercises as an aid to support home exercise. The third component of the program involved 12 weekly 30-minute group discussions on home modifications and safe behaviours. Measurements: Participants were assessed at registration and at 3 months with a battery of physical performance tests: static balance (one-legged stance test with eye closed and open, and tandem stance test), stability limits (functional reach and lateral reach tests), mobility (tandem walk test), strength of lower extremity muscles, walking speed, and grip strength.

Findings: The program achieved a high retention rate with 89% of original participants attending the 3-month measurement session. Participants in the intervention group significantly improved their static balance and mobility, after adjusting for baseline demographic and health characteristics and balance levels. No significant difference in strength between groups, but the positive change among the intervention participants was in the hypothesized direction. Process evaluation conducted by the study indicated a relatively good attendance rate among the exercisers (78%), with 70% of those participants attending 16 out of 22 sessions. Doing exercise at home for at least once a week was also reported by 78% of the intervention participants.

While the development and evaluation of efficacious programs for PA promotion is a priority among researchers, the public health value of such programs lies in their generalisable and successful translation into mainstream health services or real-world settings. In many cases, for various reasons programs that have been found to be efficacious in controlled conditions do not yield similar gains in normal conditions. This study, however, shows the feasibility of implementing a group-based intervention under real settings without undermining the existing dynamics of the community centres. It also appeared that the effects gained were attained without taking away resources from other areas while still succeeded in drawing on the existing local capacities. It was unclear if the program was offered free of charge or at some costs to the participants; the latter may partially explained the findings reported. Nonetheless, the paper underscores the importance of maintaining high attendance rates to ensure program fidelity and maximum exposure by the participants, further highlighting the important but often neglected role of process evaluation in all program design and implementation. In this context, the application of the RE-AIM framework as proposed by Glasgow and colleagues (Glasgow, R. E., Vogt, T. M., & Boles, S. M. (1999). Evaluating the public health impact of health promotion interventions: The RE-AIM framework. American Journal of Public Health, 89(9), 1322–1327.) offers a potential approach for assessing the translatability of physical activity interventions from efficacious trials to demonstration studies of significant public health impact.