CAN CARE HOME RESIDENTS ACHIEVE THE RECOMMENDED DOSE AND INTENSITY OF FALLS PREVENTION EXERCISE? – ANALYSIS FROM THE PREVENTION OF FALLS IN COGNITIVELY IMPAIRED OLDER ADULTS LIVING IN RESIDENTIAL CARE (PROF-COG) STUDY

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Introduction: Exercise effectively reduces falls in older people living in the community but there is less evidence for its effect on those living in care homes. This may be due to difficulty achieving the required duration and intensity of exercise. Effective programmes should be of high dose (>120 minutes weekly over 6 months) and include highly challenging balance training. (Sherrington C, Tiedemann A, NSW Public Health Bulletin, 2011; 22 (4); 78-83). There is limited research to demonstrate that care home residents are capable of meeting this dose and intensity.

Method: Exercise participants (n = 29) from 4 separate care homes (2 nursing:2 residential) involved in a falls prevention study had their twice weekly exercise sessions timed over 3 months. A total of 265 sessions were timed individually including session duration and time challenging balance whilst standing.

Results: Mean exercise session duration was 22.8 minutes with a mean standing time of 11.0 minutes. Those living in residential homes (n = 11) had longer session and standing times compared to nursing home residents (n = 18), (27.4mins vs 20.0mins (p < 0.02) and 14.5mins vs 9.0mins (p < 0.01), respectively). There was no significant correlation between cognition (ACE-R) and mean session and standing times but better functional ability (Barthel) was associated with longer session and standing times (r = 0.63, N = 29, p < 0.001 and r = 0.67, N = 29, p < 0.001, respectively).

Conclusion: This study presents data on time spent standing within a falls prevention exercise programme and provides a unique insight into the actual intensity of balance training undertaken. Results of this small study reveal that even in a research context the recommended exercise dose for falls prevention exercise could not be achieved by care home residents. The dose of exercise achieved was 74 minutes shorter per week than that recommended. Dose and intensity seem to be limited by physical frailty as opposed to cognitive impairment.