

13

**COMMUNITY BASED PROGRAMME FOR FALL PREVENTION IN HOME DWELLING ELDERLY: RANDOMISED CONTROLLED TRIAL**

doi:10.1136/injuryprev-2012-040590e.13

<sup>1</sup>JY Bae, <sup>2</sup>SI Cho, <sup>3</sup>DH An. <sup>1</sup>Director, International Safe Community Research Center of Busan Metropolitan and Professor, Inje University, Korea; <sup>2</sup>Physical therapist, Dong-Eui Medical Center, Korea; <sup>3</sup>Associate Professor, Department of Physical Therapy, Inje University, Korea

**Background** Fall related fractures in elderly are major health problems in Korea. Falls can result in injuries, a loss of confidence and a subsequent reduction in physical activity and community participant.

**Purposes** The purposes of this study was to develop community based programme for fall prevention and to investigate effects of this programme on muscle strength, balance and fall efficacy in home dwelling elderly.

**Methods** 96 elderly were recruited from the community and randomised into two groups: the experimental group, submitted for balance exercise and elastics resistance exercise and the control, without intervention. Muscle strength, balance and fall efficacy were evaluated before and at the end of the trial, using the power-track II, tetrax and the fall efficacy scale-K. The intervention was performed for twice a week in the senior centre and three times a week at home for 8 weeks. Participants received daily support physiotherapists through a telephone call.

**Results** Developed programme was based predominantly on the social cognitive model of behavioural change to successfully increased activities participation in elderly. This programme is very useful because it not only focuses on exercise, but participants also learn fall prevention strategies. There were significantly improved in muscle strength, balance ( $p < 0.001$ ) and fall efficacy ( $p < 0.001$ ) in experimental group.

**Contribution to the Field** This study demonstrated that an community based intervention are effective in improving muscle strength, balance and fall efficacy. It is concluded that this programme is a valuable tool for the prevention of fall in home dwelling elderly.