Game-based group exercise programme for community dwelling elderly

Ng CM(1), Kong CH(1), Lam PL(1), Chiu KW(1)
(1)Physiotherapy Department, David Trench Rehabilitation Centre, Queen Mary Hospital

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Introduction
Exercise has been shown to have encouraging effect on muscle strength, balance and functional capacity among elderlies. However, the exercise compliance is usually a challenging problem.

Objectives
The aim of this study is to evaluate the effect of a game-based group exercise programme in enhancing participation and enjoyment in community dwelling elderlies in order to cope with various degenerative disease.

Methodology
A three-month game-based group exercise programme was established in two community centres in 2011. Four sessions of physiotherapist designed game-based group exercises (90 minutes each, two times per week) were launched in each centre with four themes, targeting for shoulder mobilization, trunk mobilization, memory and limbs coordination training. At the beginning of each session, brief information of the concerned body parts or related degenerative disease was given and simple baseline assessment was done. Self-rated happiness index and post-activities satisfaction scores were measured.

Result
The total number of attendance was 115. In average, there were fourteen elderlies participated in each session, with age ranged from 51-91 (mean=73; SD=11). 11 subjects were excluded due to incomplete data. All participants gave high rating in post-activities satisfaction scores. Subjectively, the self-rated happiness index has increased 15% after each session (p<0.001). More than 90% of participants reported the programme was effective in improving their physical condition, and would like to invite families or friends to join in. These preliminary findings suggested that game-based group exercise programme was feasible in community settings in enhancing exercise compliance and quality of life of community dwelling elderlies.
This exercise approach would be a new perspective for allied health professionals in providing community elder care.