

Effect of Nintendo Wii-Fit Training on Balance and Risk of Fall in Elderly People Versus Traditional Balance Training Exercises: A Review of the Literature

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Background:

With the increase in the life expectancy around the globe during the 20th century there is an increase in the elderly population which is expected to grow. As one's age advances the problems associated with this also increases and one such problem are falls. Besides environmental hazards, gait and balance disorder or muscle weakness is the major cause of falls in the elderly and accounts for approximately 17% of injuries related to falls. Those who fall but are not injured develop a fear of falling which limits their activity which results in reduced mobility and physical strength and an increased risk of fall. It is hypothesized that the number of falls in elderly population can be reduced by improving balance by balance training.

Purpose:

The purpose of this review was to identify the effects of Wii Fit balance training versus traditional balance training exercises in elderly population with the emphasis of improving balance and the reduction in falls.

Findings:

Benefits of balance training

Body balance is a basic skill and a very important sensorimotor ability of human beings. Without the ability to keep balance a person could not stand, walk or sit upright without aids for more than a few seconds. It is therefore important to do balance training, to prevent the risk of getting injured by falling.

Traditional training programs

Research literature concludes that traditional balance training programs have brought about an improvement in balance amongst the elderly. However, several studies indicate that the traditional training programs are not attractive to participants for a variety of reasons.

Wii Fit balance training

Research indicates that game-based balance training with the Nintendo Wii fit may be suitable in prevention of falls in the elderly, although the overall efficacy of game-based training was not as high as that of traditional training.

