

Efficacy of Exercise Intervention on Promoting Mobility and Physical Performance of an Elderly Nursing Home Resident with Major Depressive Disorder: A Case Study

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• Objective

Exercise training has often be adopted to maintain or promote physical performance and functional independence of elderly people. The study aimed at assessing the efficacy of exercise intervention on prompting mobility and physical performance of an elderly female nursing home resident with major depressive disorder.

• Intervention

The case study recruited an elderly female nursing home resident with no obvious physical disability and willing to receive exercise training in the form of an intervention designed by a physical therapist. The planned intervention incorporated torso and lower-limb endurance training, aerobic exercise, and functional training and lasted eight weeks with each week containing three daily 30~40-minute exercises. Short Physical Performance Battery (SPPB), 3-meter Timed up and go (TUG) test, and 6-minute walking test (6MWT) were used to assess pre- and post-intervention effectiveness.

• Results

Results of the study showed the following improvements after the 8-week exercise intervention: speed of 4-meter walking from 1.65 to 1.50 second/meter, completion time of crossed-arms sit-to-stand test from 8.57 seconds to 7.74 seconds, completion time of 3-meter TUP from 6.93 seconds to 6.19 seconds, and distance of 6-minute walking test from 333.86 meters to 526.66 meters. Improvement was most significant in 6-minute walking test.

• Conclusions

Regular exercise exerts positive influence on the physical and mental health of elderly people. Planned exercise helps promote limb endurance and aerobic capacity among elderly people, thereby improving their mobility and physical performance.

• Relevance to HPH

In response to their aging-induced physiological changes, elderly people need help to improve their mobility and functional ability by making exercise a regular habit. Healthcare providers should therefore perform comprehensive assessment to develop individualized exercise intervention to help older adults achieve the goal of healthy aging.

Keywords : Exercise training、Major Depressive Disorder、Physical Performance