

## Systematic Reviews on Effects of Exercise Therapy on Quality of Life in Elderly People - A Healthy Ageing Perspective

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### Abstract

Healthy ageing is defined as a physiological process of chronological progression in age with a physical, mental, social and spiritual well-being from a biopsychosocial perspective. The objective of this article was to update the role of exercise therapy in elderly people by its effect on quality of life in this population. Five systematic reviews were found in our search of PubMed, and the evidence remains inconclusive. Whilst it is understood that a comprehensive exercise program including stretching, strengthening, balance training, aerobic exercise might be beneficial in terms of improvements in physical functioning and bodily pain domains of health-related quality of life, it is uncertain why improvements in some domains of quality of life were not associated with other domains. This unveils the complex multidimensional interaction of biopsychosocial factors in this population.

**Keywords:** Geriatric Rehabilitation; Geriatric Physiotherapy; Rehabilitation Gerontology; Quality of Life.

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Chou et al [1] searched PubMed, MEDLINE, EMBASE, the Chinese Electronic Periodical Service, CINAHL, and the Cochrane Library databases and found the following findings: "compared with the control group, the exercise group increased their gait speed by .07 m/s, increased their BBS score, and improved their performance in ADLs. The exercise intervention had no significant effects on the Timed Up & Go test performance and the QOL between the groups."

de Vries et al [2] searched the databases PubMed, CINAHL, Embase, PEDro and The Cochrane Library

and found that physical exercise therapy had a positive effect on mobility and physical functioning. High-intensity exercise interventions seemed to be more effective in improving physical functioning than low-intensity exercise interventions. The effect on physical activity and quality of life was not evident and thus inconclusive.

Schechtman et al [3] in their study- Frailty and Injuries: Cooperative Studies of Intervention Techniques (FICSIT) was a linked series of randomized clinical trials focused on the benefits of exercise in the frail elderly. Meta-analysis of FICSIT trials found "(a) exercise produced a small but significant improvement in the emotional health component of QOL, trended toward an improved social component, and did not affect perceptions of general health; (b) exercise-related joint and muscle stresses did not increase bodily pain; and (c) QOL improvements were independent of changes in physical functioning."

Spiriduso and Cronin [4] opined that the most consistent results were that long-term physical activity is related to postponed disability and independent living in the oldest-old subjects. In older individuals with chronic disease, systematic participation in physical activities enhanced physical function.

Weening-Dijksterhuis et al [5] reviewed 27 studies on older people to propose criteria for an evidence-

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based exercise protocol aimed at improving physical fitness, activity of daily living performance, and quality-of-life of frail institutionalized older people."The training should contain a combination of progressive resistance training, balance training, and functional training. The proposed intensity is moderate to high, assessed on a 0-10 scale for muscle strengthening activities. The training frequency was three times a week, and the total duration was at least 10 wks."

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