

Physical Aspects in Quality of Life Benefited by Alternative Therapies by Physiotherapy

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Submission: April 15, 2023; **Published:** April 28, 2023

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Abstract

Complementary and alternative therapies to promote health and quality of life such as yoga, the Pilates Method (PM), and whole-body vibration therapy (WBV). The effects of WBV at various frequencies have been studied in osteoarthritis, osteoporosis, diabetes, sedentary older women, metabolic syndrome, patellofemoral pain, overweight and obesity, systemic lupus erythematosus, multiple sclerosis, Down syndrome, and Parkinson's disease, among others. PM is also recognized in other pathological conditions, such as diabetics (II), osteoarthritis, multiple sclerosis to improve balance, pregnant women, lung function, hemodialysis patients, after stroke, and the elderly. Yoga also already plays an important role in the lives of people with various disabilities, contributing to the quality of life and functional independence of the population. Its effects on cognition and mental health of the elderly, on the quality of life and depression of elderly breast cancer patients, on respiratory function, symptom control and quality of life of asthma patients, in schizophrenic patients, on cardiac autonomic balance in patients with refractory epilepsy, on cardiovascular disease risk factors, in the treatment of vasovagal syncope, in the modulation of stress, on stress hormone levels, activities of daily living, falls and physical fitness, and in chronic pain. In the context of the COVID -19 pandemic, yoga may improve mental health status, immunity to viral infections, systemic health parameters, quality of life, and/or survival in patients with comorbidities when the intervention is delivered at moderate intensity with synchronous and asynchronous technology at home in working adults. In this sense, we seek to provide alternative therapeutic methods that can complement current therapies.

Keywords: Yoga; Pilates Method; Whole-Body Vibration; Complementary Therapy; Alternative Therapy; Quality of Life

Alternative Therapies

Currently, there are complementary and alternative therapies to promote people's health and quality of life, whether as part of a preventive or rehabilitative approach in the treatment of various pathologies that affect people at different ages. These include yoga, the Pilates Method (PM) and whole-body vibration therapy.

Whole-body vibration (WBV), in which a mechanical vibration is transmitted to the human body via a platform with or without movement, is becoming increasingly popular. The exercise program is safe, effective, and inexpensive [1-3]. It is commonly believed that vibration stimulates muscle spindles, which respond with tonic vibratory reflexes, thereby increasing muscle activity [4].

The effects of different frequencies of WBV have been studied in some diseases, such as: Osteoarthritis [5]; Osteoporosis [6,7]; Diabetes [8,9]; Sedentary elderly women [10]; Metabolic syndrome [11]; Patellofemoral pain [12]; Overweight and obesity [13]; Systemic lupus erythematosus [14]; Multiple sclerosis [15]; Down syndrome [16]; Parkinson's disease [17,18]. Despite the broad applicability of WBV to individual health, there are differences in WBV protocols in terms of defining amplitude, frequency, and duration to achieve rapid recovery. According to the literature, the Pilates Method (PM) is based on the control of breathing, balance, flexibility, proprioception, and muscle strength of the powerhouse muscles, which include the abdominal muscles, lower back muscles, pelvic floor, muscles around the hips, and gluteal muscles [19].

The powerhouse muscles play an important role in stabilization and mobility and allow for dynamic strength. The CORE, which is part of the powerhouse, is an integrated unit of muscles that support the hip, pelvis, and lumbar complex [20]. The applicability of the PM has been recognized in the literature and demonstrated in some pathological conditions. Rego et al. [21] improved the health status, pain and functionality of older adult women with Osteoarthritis (KOA) in 18 patients with knee (KOA) based on the Mat Pilates concept, according to an appropriate methodological quality; in diabetics type I [22,23] and type II [24]; in multiple sclerosis to improve balance [25]; in pregnant women [26]; on lung function [27], in hemodialysis patients [28]; after stroke [29]; on functional capacity in the elderly [30].

Yoga is also important in the lives of individuals with various disabilities and contributes to the quality of life and functional independence of the population. Kannan et al. [31] studied the preliminary effects and feasibility of using Pilates and yoga to treat urinary incontinence (UI) in older women aged 60 years or older. This study showed that yoga and Pilates can be effective in reducing involuntary urinary leakage in older women with stress urinary incontinence.

The effects of yoga on cognition and mental health in the elderly play an important role according to the review carried out by Chobe et al. [32]; its effects on the quality of life and depression in elderly breast cancer patients [33]; on respiratory functions, symptom control, and quality of life in asthma patients [34]; on the degree of functional recovery in schizophrenic patients [35]; on cardiac autonomic balance in patients with refractory epilepsy [36]; on risk factors for cardiovascular disease [37]; in the treatment of vasovagal syncope [38]; in the modulation of stress [39]; on stress hormone levels, activities of daily living, falls, and physical fitness [40]; in chronic pain [41]; on physical functioning and health-related quality of life in older adults [42].

Scientific literature continues to examine the effects of yoga, such as: on quality of life in women with primary dysmenorrhea [43]; on sleep quality, depressed state, and health-related quality of life in older adults [44]; on older people at risk for falls [45]; in people with Parkinson's disease [46]. While COVID -19 limitations, yoga courses transition to online delivery and the report by Brinsley et al. [47] compares the perceived benefits and barriers to online and face-to-face yoga and determine the preferred format and compare how well each format was perceived to produce common benefits of yoga practice.

The study by Zope et al. [48] concluded, "In the context of the pandemic COVID -19, yoga may improve mental health status, immunity to viral infections, systemic health parameters, quality of life, and/or survival in patients with comorbidities." Another paper published by Phansikar et al. [49] showed that it is feasible to implement a moderate- intensity yoga intervention with synchronous and asynchronous technology at home for working

adults with stress symptoms without compromising contact safety during the pandemic.

Conclusion

The search for a better quality of life is becoming an important aspect in different professional fields and approaches, in a world full of duality in which it is essential to develop methods to obtain more effective treatments and faster results. In this regard, we try to offer alternative therapeutic methods that can complement current therapies. These include yoga, the Pilates Method (PM) and whole-body vibration therapy. We believe that these therapies are often the solution to immediate problems and expand therapeutic boundaries, especially in the elderly, a population that is often therapeutically neglected. Therefore, we have tried to work with this therapeutic variety in this population, and we have achieved significantly positive results in improving the quality of life of these people.

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DOI: [10.19080/JYP.2023.10.555787](https://doi.org/10.19080/JYP.2023.10.555787)

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