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EFFECT OF 2 YEARS OF THE COVID-19 PANDEMIC ON ANTHROPOMETRIC, HEMODYNAMIC AND FUNCTIONAL VARIABLES OF ELDERLY LOW-INCOME WOMEN

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Background: The COVID-19 pandemic (respiratory infection caused by the new severe acute respiratory syndrome coronavirus 2 "SARS-CoV-2") may have been responsible for the worsening of health indices (such as anthropometric, hemodynamic, and functional), including in the elderly population. Elderly individuals who previously participated in regular physical exercise programs and had their activities interrupted may lose or reduce the benefits acquired by exercise.
Objectives: To investigate the behavior of anthropometric, hemodynamic, and functional variables of previously active low-income elderly women during the first two years of the COVID-19 pandemic.
Methods: 56 low-income elderly women (73.01 $\pm$ 5.4 years) who discontinued their participation in community physical exercise programs (high-intensity interval training + resistance training; moderate-intensity continuous training + resistance training; and isolated resistance) due to pandemic containment measures, had body mass, body mass index (BMI), waist circumference (WC), blood pressure (BP), heart rate (HR), arterial stiffness, flexibility (sit and reach test), handgrip strength (hydraulic wrist dynamometer), lower limb strength (five-time sit to stand test, FTSTS), agility and balance (Timed Up and Go, TUG) and aerobic performance (6-minute walk test, 6MWT) evaluated before and after two years of the pandemic. All ethical procedures required for research were followed.
Results: There was a reduction in body mass (-1.3 kg, $P = 0.046$), BMI (-0.6 kg/m^2, $P = 0.002$) and HR (-4.3 bpm, $P = 0.004$); increased WC (2.6 cm, $P = 0.007$), systolic BP (6.9 mmHg, $P = 0.018$) and arterial stiffness (1.24 m/s, $P < 0.001$); and worse performance on the sit and reach test (-1.8 cm, $P < 0.001$), strength and handgrip (-1.1 kgf, $P = 0.009$) and FTSTS (1.0 s, $P = 0.003$) and 6MWT (-74.2 m, $P < 0.001$) over two years of follow-up.
Conclusion: The first two years of the COVID-19 pandemic were detrimental to the health of previously active elderly women, specifically in terms of WC, systolic BP, arterial stiffness, and functional capacity (flexibility and hand and lower limb grip strength). The worst decline found was in the 6MWT, which demonstrates a relevant worsening of walking (and cardiorespiratory) capacity in this population. Despite this, there were no significant changes in other study variables, which suggests that previously active elderly women may have less deleterious effect of aging even in longer periods of drastic changes in habits and routine, as an example, the COVID-19 pandemic.
Implications: The present study suggests the importance for elderly women to remain physically active and the urgent return of regular physical exercise to maintain (or decrease the loss/worsening) of cardiovascular health and functional capacity of low-income elderly women.
Keywords: Aging, COVID-19 pandemic, Interruption of Physical Exercise

Conflict of interest: The authors declare no conflict of interest.
Acknowledgment: To the Coordination for the Improvement of Higher Education Personnel - Brazil (CAPES), and in part of this work (Financing Code 001).
Ethics committee approval: Faculty of Sciences/UNESP Research Ethics Committee (number CAAE: 21220919.0.0000.5398).

https://doi.org/10.1016/j.bjpt.2024.100653

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EFFECTIVENESS OF CONSERVATIVE THERAPY ON PAIN, DISABILITY AND QUALITY OF LIFE FOR LOW BACK PAIN IN PREGNANCY: A SYSTEMATIC REVIEW OF RANDOMIZED CONTROLLED TRIALS

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Background: The efficacy of conservative therapy for low back pain in pregnancy (PLBP) is unclear.
Objective: To investigate the efficacy of conservative therapy on pain, disability, and quality of life in PLBP.
Methods: The search strategy was conducted on six databases up to August 24, 2020, without date or language restrictions. Minimal intervention (i.e., placebo, sham, waiting list, or no intervention) was the comparator of interest. Selection of randomized controlled trials, data extraction and methodological quality assessment of included trials were conducted independently by two reviewers. The PEDro scale (0-10) was used to assess methodological quality. Effect sizes for specific therapies were pooled when possible, using random-effects models. The quality of the evidence was assessed using the Grading of Recommendations Assessment (GRADE) approach.
Results: Ten included trials provide uncertain evidence (low to very low quality) about the effects of auriculotherapy, education, exercise, exercise plus education, oil treatment, and osteopathy in pain, disability, and quality of life at short- and long-term. At short-term, mean differences (MDs) and 95% confidence intervals (CI) on a 0-10 points pain intensity scale were: for oil treatment, 2.8 points (2.6, 3.1) (n = one trial, 114 participants); for auriculotherapy, 1.6 points (1.2, 2.0) (n = one trial, 112 participants); for exercise, 2.2 points (-1.8, 6.2) (n = three trials, 297 participants).
Conclusion: There is an urgent need for larger, high-quality trials investigating the effects of conservative therapy on pain, disability, and quality of life in this population.
Implications: Our systematic review shows that the evidence is very uncertain about the effect of conservative therapy (e.g., oil treatment, auriculotherapy, and exercise) on pain, disability, and quality of life in the short- and long term.
Keywords: Gestation, Low back pain, Non-invasive

Conflict of interest: The authors declare no conflict of interest.
Acknowledgment: To the Coordination for the Improvement of Higher Education Personnel - Brazil (CAPES), and in part of this work (Financing Code 001).
Ethics committee approval: Faculty of Sciences/UNESP Research Ethics Committee (number CAAE: 21220919.0.0000.5398).

https://doi.org/10.1016/j.bjpt.2024.100654