

## ABSTRAK

**Latar Belakang.** Wanita pascamenopause mengalami penurunan estrogen yang menyebabkan penurunan kekuatan otot, fleksibilitas, keseimbangan, dan kebugaran kardiorespirasi, sehingga menurunkan kebugaran fungsional dan kualitas hidup. Latihan jalan nordik dan senam lansia merupakan latihan multikomponen yang berpotensi meningkatkan kebugaran fungsional.

**Metode.** Penelitian quasi eksperimental pre-post test ini melibatkan 26 wanita pascamenopause yang dibagi menjadi dua kelompok: jalan nordik dan senam lansia (masing-masing 13 orang). Intervensi dilakukan tiga kali per minggu selama 12 minggu, dengan sesi masing-masing 60 menit. Kebugaran fungsional diukur menggunakan Senior Fitness Test yang meliputi *arm curl*, *sit to stand*, *back scratch*, *sit and reach*, *8-foot up and go*, dan *6 minutes walking test* (6MWT).

**Hasil.** Kedua kelompok mengalami peningkatan signifikan pada semua parameter Senior Fitness Test ( $p < 0,05$ ). Peningkatan *arm curl* lebih besar pada jalan nordik ( $7,54 \pm 1,05$ ) dibandingkan senam lansia ( $2,08 \pm 0,86$ ;  $p < 0,001$ ). *Sit to stand* ( $7,31 \pm 1,18$  vs  $2,62 \pm 1,76$ ;  $p < 0,001$ ), *back scratch* ( $2,77 \pm 0,93$  vs  $1,69 \pm 1,03$ ;  $p = 0,010$ ), dan 6MWT ( $64,62 \pm 7,76$  vs  $26,15 \pm 15,57$ ;  $p < 0,001$ ) juga meningkat lebih besar pada jalan nordik. Penurunan waktu *8-foot up and go* lebih besar pada senam lansia ( $-0,62 \pm 0,55$  detik) dibandingkan jalan nordik ( $-0,35 \pm 0,38$  detik), namun tidak signifikan ( $p = 0,209$ ).

**Kesimpulan.** Jalan nordik meningkatkan kekuatan otot ekstremitas atas dan bawah, fleksibilitas tubuh bagian atas, serta kebugaran kardiorespirasi, sedangkan senam lansia meningkatkan keseimbangan dinamis pada wanita pascamenopause.

**Kata Kunci:** Jalan Nordik, Senam Lansia, Kebugaran Fungsional

## ABSTRACT

**Background.** Postmenopausal women experience a decline in estrogen levels, resulting in reduced muscle strength, flexibility, balance, and cardiorespiratory fitness, which subsequently impair functional fitness and quality of life. Nordic walking and elderly gymnastics are multicomponent exercises with the potential to improve functional fitness.

**Methods.** This quasi-experimental pre-post test study involved 26 postmenopausal women divided into two groups: Nordic walking and elderly gymnastics (n=13 each). The interventions were conducted three times weekly for 12 weeks, with each session lasting 60 minutes. Functional fitness was assessed using the Senior Fitness Test, including arm curl, sit to stand, back scratch, sit and reach, 8-foot up and go, and 6-minute walk test (6MWT).

**Results.** Both groups exhibited significant improvements in all Senior Fitness Test parameters ( $p < 0.05$ ). The Nordic walking group demonstrated greater increases in arm curl ( $7.54 \pm 1.05$  vs.  $2.08 \pm 0.86$ ;  $p < 0.001$ ), sit to stand ( $7.31 \pm 1.18$  vs.  $2.62 \pm 1.76$ ;  $p < 0.001$ ), back scratch ( $2.77 \pm 0.93$  vs.  $1.69 \pm 1.03$ ;  $p = 0.010$ ), and 6MWT ( $64.62 \pm 7.76$  vs.  $26.15 \pm 15.57$ ;  $p < 0.001$ ) compared to the elderly gymnastics group. The reduction in 8-foot up and go time was greater in the elderly gymnastics group ( $-0.62 \pm 0.55$  seconds vs.  $-0.35 \pm 0.38$  seconds), although this difference was not statistically significant ( $p = 0.209$ ).

**Conclusion.** Nordic walking enhances upper and lower extremity muscle strength, upper body flexibility, and cardiorespiratory fitness, whereas elderly gymnastics improves dynamic balance in postmenopausal women.

**Keyword:** Nordic Walking, “Senam Lansia”, Functional Fitness