

ABSTRAK
EFEKTIVITAS PENAMBAHAN LATIHAN PENGUATAN DENGAN ELASTIC BAND TERHADAP PARAMETER SARKOPENIA
Studi pada Lansia Sarkopenia yang Mendapat Latihan Senam Lansia

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Latar Belakang: Sarkopenia merupakan hilangnya massa dan kekuatan otot skeletal akibat proses penuaan dan mengganggu fungsional lansia. Seiring bertambahnya usia, progresivitas sarkopenia juga bertambah, menyebabkan penurunan kualitas hidup dan angka harapan hidup lansia. Strategi penanganan sarkopenia yang efektif adalah latihan fisik.

Tujuan: Untuk menilai efektivitas dari penambahan latihan penguatan dengan *elastic band* terhadap parameter sarkopenia pada lansia sarkopenia yang mendapat senam lansia

Metode: Penelitian ini merupakan *randomized control trial* pada 29 lansia sarkopenia di Rumah Pelayanan Sosial Pucang Gading, Semarang. Subjek dibagi dalam kelompok perlakuan (n=15) dan kelompok kontrol (n=14). Kelompok perlakuan diberikan latihan penguatan dengan *elastic band* dan senam lansia, sedangkan kelompok kontrol diberikan senam lansia. Intervensi dilakukan selama 8 minggu. Dilakukan pengukuran parameter sarkopenia (massa otot, kekuatan genggam tangan dan nilai *Short Physical Performance Battery* (SPPB)) sebelum dan sesudah intervensi. Terdapat 2 orang yang *drop out* dari kelompok kontrol.

Hasil: Terdapat perbedaan massa otot, kekuatan genggam tangan dan nilai SPPB yang bermakna ($p=0.001$; $p<0.001$; $p=0.001$) sesudah intervensi pada kelompok perlakuan. Terdapat perbedaan selisih massa otot dan nilai SPPB yang bermakna ($p=0.001$; $p=0.024$) sesudah intervensi pada kelompok kontrol. Peningkatan rerata nilai SPPB lebih tinggi pada kelompok perlakuan dibandingkan kelompok kontrol ($1,80\pm 1,01$ vs $0,75\pm 0,97$; $p=0.013$).

Kesimpulan: Penambahan latihan penguatan dengan *elastic band* pada lansia sarkopenia yang diberikan senam lansia menghasilkan perbaikan performa fisik yang lebih unggul dibandingkan dengan senam lansia saja.

Kata Kunci: Sarkopenia, latihan penguatan, *elastic band*, Senam Lansia, massa otot, kekuatan genggam tangan, SPPB

ABSTRACT

EFFECTIVENESS OF ADDING STRENGTHENING EXERCISE WITH ELASTIC BANDS ON SARCOPIENIA PARAMETERS A Study on Sarcopenic Elderly who Received Senam Lansia

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Background: *Sarcopenia is the loss of mass and strength of skeletal muscle due to ageing process and a cause of decreasing quality of life in geriatric people. As the age is increasing, so is the progressivity of sarcopenia, causing further decreasing quality of life and life expectancy. One of effective treatment for sarcopenia is physical exercise.*

Objective: *This study was aimed to evaluate the effectiveness of adding elastic band strengthening exercises to the parameters of sarcopenia in sarcopenic elderly who got Senam Lansia.*

Method: *A total of 27 sarcopenic elderly at Pucang Gading Social Service Center in Semarang were recruited. Subjects were divided into treatment and control groups. Combination of elastic band strengthening exercises and Senam Lansia were given to treatment group, while the control group was got Senam Lansia. All the interventions were given for eight weeks. Pre- and post-intervention measurements were taken for sarcopenia parameters (muscle mass, hand grip strength, and Short Physical Performance Battery (SPPB)).*

Results: *Significant differences were found in muscle mass, hand grip strength and SPPB ($p=0.001$; $p<0.001$; $p=0.001$) after intervention in treatment group. Significant differences were also found in muscle mass and SPPB ($p=0.001$; $p=0.024$) after intervention in control group. The average improvement in SPPB was higher in treatment group than control group ($1,80\pm1,01$ vs $0,75\pm0,97$; $p=0.013$).*

Conclusion: *Additional of elastic band strengthening exercises to Senam Lansia for elderly sarcopenic results in superior physical performance compared to Senam Lansia alone.*

Keyword: *Sarcopenia, strengthening exercise, elastic band, Senam Lansia, muscle mass, grip strength, SPPB*

