Factors associated with physical frailty in elderly women with low socioeconomic status in urban communities: a cross-sectional study

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Abstrak

Background: there are differences in factors associated with frailty syndrome in elderly population. The aim of this research was to determine frailty status (fit, pre-frail and frail) and to identify factors associated with physical frailty in urban community-dwelling elderly women.

Methods: a cross-sectional study of community-dwelling women aged 60 years and older was conducted in West and Central Jakarta regions, Indonesia, from July until September 2017. The Cardiovascular Health Study (CHS) score was used to determine frailty status (fit/pre-frail/frail). Chi-Square Test and logistic regression analysis were used to determine association between independent variables and physical frailty.

Results: there were 325 female subjects with a median age of 67 (60-94) years; 95,7% had income below the Provincial Minimum Income of DKI Jakarta in 2017 (<3,3 million IDR=238 USD/month), and 92.6% had a level of education 9 years. Subjects were classified into this following groups: fit (12,6%), pre-frail (63,4%) and frail (24%). Factors associated with physical frailty were age above 70 years old with OR 5,27, lower Barthel Index for Activities of Daily Living (B-ADL) with OR 2,85, depressive symptoms with OR 6,79, and Euro Quality of Life-5 Dimensions (EQ-5D) index with OR 1,96.

Conclusion: elderly women in the urban community with low socioeconomic status were classified as fit (12,6%), pre-frail (63,4%) and frail (24%). Factors associated with physical frailty were age above 70 years old, depressive symptoms, lower functional status and health-related quality of life index.

......Latar belakang: terdapat perbedaan faktor-faktor yang berhubungan dengan sindrom frailty pada populasi lanjut usia (lansia). Penelitian ini bertujuan untuk mengetahui proporsi perempuan lansia yang fit/ robust, pre-frail dan frail serta faktor-faktor yang berhubungan dengan physical frailty pada perempuan lansia di komunitas perkotaan.

Metode: studi potong lintang pada perempuan berusia 60 tahun di area Jakarta Barat dan Pusat, Indonesia selama bulan Juli sampai September 2017. Sistem skor frailty berdasarkan Cardiovascular Health Study (CHS) untuk menentukan fit, pre-frail dan frail. Uji Chi-Square dan analisis regresi logistik dilakukan untuk menentukan hubungan antara variabel independen dengan sindrom frailty.

Hasil: terdapat 325 subjek dengan median usia 67 (60–94) tahun, 95,7% dengan penghasilan di bawah Upah Minimum Provinsi/UMP-DKI Jakarta, tahun 2017 (<Rp.3.300.000238 USD/bulan), dan 92,6% dengan tingkat pendidikan 9 tahun ke bawah. Proporsi subjek yang tergolong fit (12,6%), pre-frail (63,4%) dan frail (24%). Analisis multivariat (regresi logistik) akhir mendapatkan faktor usia (>70 tahun) [OR 5,27], skor Barthel Index for Activities of Daily Living (B-ADL) yang lebih rendah [OR 2,85], gejala depresi [OR 6,79], dan indeks Euro Quality of Life-5 Dimensions (EQ-5D) [OR 1,96], yang berhubungan bermakna dengan sindrom frailty.

Kesimpulan: proporsi kelompok perempuan lansia dengan status sosial ekonomi rendah di komunitas perkotaan, yang tergolong fit 12,6%, pre-frail 63,4% dan frail 24%. Faktor-faktor yang berhubungan dengan sindrom frailty adalah usia di atas 70 tahun, adanya gejala depresi, serta skor status fungsional dan indeks

kualitas hidup terkait kesehatan yang lebih rendah.