

KORELASI SPIRITUALITAS TERHADAP PERSEPSI STRES, DAN PENANDA INFLAMASI PADA LANJUT USIA YANG MENCAPAI USIA HARAPAN HIDUP DI DAERAH ISTIMEWA YOGYAKARTA

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Latar belakang: Populasi lansia diperkirakan akan terus meningkat jumlahnya. Dengan meningkatnya usia harapan hidup manusia, maka upaya mencapai kesehatan di usia tua tengah menjadi fokus bagi tenaga kesehatan, peneliti, dan pembuat kebijakan di seluruh dunia. Berkurangnya kontrol keseimbangan antara sitokin pro-inflamasi dan anti-inflamasi, atau mekanisme penghentian inflamasi, serta *inflamm-aging* adalah karakteristik dari proses penuaan dan penyakit terkait penuaan. Spiritualitas menjadi salah satu faktor yang telah lama diketahui berhubungan dengan kesehatan pada manusia di berbagai kelompok masyarakat dengan berbagai ideologi, orientasi, dan praktik.

Tujuan: Mengetahui korelasi spiritualitas terhadap persepsi stres dan penanda inflamasi pada lansia yang mencapai usia harapan hidup di Daerah Istimewa Yogyakarta.

Metode: Penelitian observasional analitik dengan desain pendekatan *cross-sectional*. Spiritualitas akan diukur menggunakan skala *FACIT-Sp-12 (Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Item Scale Sp-12)*, sedangkan persepsi stres dinilai menggunakan kuesioner *Perceived Stress Scale (PSS)* dan penanda inflamasi diukur dengan melihat kadar *high sensitive-C-Reactive Protein (CRP)* dalam darah subyek. Bekerjasama dengan Posyandu lansia yang terdapat di beberapa wilayah. Melibatkan 90 lansia yang telah mencapai usia harapan hidup DIY, yaitu laki-laki > 74 tahun dan perempuan > 77 tahun. Korelasi antara spiritualitas terhadap stres dan kadar hs-CRP diuji menggunakan korelasi *Spearman*. Probabilitas <0,05 dianggap signifikan secara statistik.

Hasil: Hasil analisis korelasi *Spearman* terdapat hubungan negatif signifikan antara spiritualitas terhadap persepsi stres pada lansia yang mencapai usia harapan hidup ($p=0,001$, $r= -0,524$). Sementara analisis korelasi *Spearman* spiritualitas dan hs-CRP menemukan hubungan negatif yang signifikan ($p=0,001$, $r=-0,493$). Analisis multivariat menemukan spiritualitas berpengaruh signifikan terhadap persepsi stress ($p=0,001$), dengan koefisien regresi $B=-1,2$, dan spiritualitas juga berhubungan signifikan dengan hs-CRP dengan koefisien regresi $B= -0,316$.

Kesimpulan: Spiritualitas berkorelasi negatif terhadap persepsi stres dan hs-CRP pada lansia yang mencapai usia harapan hidup di Daerah Istimewa Yogyakarta.

Kata kunci: Spiritualitas, FACIT Sp-12, persepsi stres, *Perceived Stress Scale*, PSS, lansia, usia harapan hidup

THE CORRELATION OF SPIRITUALITY TOWARDS STRESS PERCEPTION, AND INFLAMMATION MARKERS IN ELDERLY INDIVIDUALS WHO HAVE REACHED LIFE EXPECTANCY IN YOGYAKARTA SPECIAL REGION

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Background: The elderly population is expected to continue to increase. With the increasing human life expectancy, efforts to achieve health in old age are becoming the focus of healthcare professionals, researchers, and policy makers worldwide. The imbalance between pro-inflammatory and anti-inflammatory cytokines, or the termination mechanism of inflammation, as well as inflamm-aging, are characteristics of the aging process and age-related diseases. Spirituality has long been known to be associated with health in humans in various societal groups with various ideologies, orientations, and practices.

Objective: To determine the correlation between spirituality, stress perception, and inflammation markers in the elderly who have reached life expectancy age in the Special Region of Yogyakarta.

Method: An analytical observational study with a cross-sectional approach design. Spirituality will be measured using the FACIT-Sp-12 scale (Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Item Scale Sp-12), while stress perception will be assessed using the Perceived Stress Scale (PSS) questionnaire and inflammation markers will be measured by looking at the level of high-sensitive C-Reactive Protein (CRP) in the subjects' blood. Collaborating with elderly Posyandu located in several regions. Involving 90 elderly people who have reached life expectancy in DIY, namely men >74 years old and women >77 years old. The correlation between spirituality, stress, and hs-CRP levels will be tested using Spearman's correlation. Probability <0.05 is considered statistically significant.

Results: Spearman's correlation analysis found a significant negative correlation between spirituality and stress perception in the elderly who have reached life expectancy age ($p=0.001$, $r=-0.524$). Meanwhile, Spearman's correlation analysis found a significant negative correlation between spirituality and hs-CRP ($p=0.001$, $r=-0.493$). Multivariate analysis found that spirituality significantly affects stress ($p=0.001$), with a regression coefficient of $B=-1.2$, and spirituality is also significantly related to hs-CRP with a regression coefficient of $B=-0.316$.

Conclusion: Spirituality is negatively correlated with stress perception and hs-CRP in the elderly who have reached life expectancy age in the Special Region of Yogyakarta.

Keywords: Spirituality, FACIT Sp-12, Stress, Perceived Stress Scale, PSS, elderly, life expectancy age