

ABSTRACT

Background: Low dietary diversity and physical inactivity among young adult females are contributing factors to the double burden of malnutrition. In Islamic boarding schools, students often face unique lifestyle patterns with limited physical activity and food choices restricted by available menu options.

Aim: This study aimed to analyze the relationship between dietary diversity, physical activity, and body fat percentage with the nutritional status of young adult females at the Ndalem Dongkelan Islamic Boarding School in Yogyakarta.

Methods: This cross-sectional study used total sampling (n=103). Dietary diversity was assessed using the MDD-W based on three non-consecutive 24-hour dietary recalls. Physical activity was measured using the IPAQ-SF, and body fat percentage was assessed using the Omron HBF-375 BIA device. Nutritional status was determined by BMI. Data analysis included univariate, bivariate (Chi-Square/Fisher's Exact), and multivariate binary logistic regression.

Results: A total of 85.44% of participants had low dietary diversity, 56.31% were moderately active, and 39.81% had high body fat percentage. Bivariate analysis showed p-values of 0.768 for dietary diversity, 0.001 for physical activity, and 0.001 for body fat percentage. The respective odds ratios were 1.42, 10.9, and 11.7. The 95% confidence intervals ranged from 0.41–4.84, 4.06–29.4, and 4.40–31.0. Multivariate analysis revealed that physical activity and body fat percentage significantly contributed to nutritional status.

Conclusion: Physical activity and body fat percentage significantly affect the nutritional status among young adult females in boarding school settings.

Keywords: Dietary diversity; physical activity; body fat percentage; nutritional status; young adult female.

INTISARI

Latar Belakang: Rendahnya keragaman pangan dan aktivitas fisik pada wanita dewasa berkontribusi terhadap masalah gizi, termasuk beban gizi ganda. Santriwati di pesantren memiliki pola hidup khas, dengan keterbatasan aktivitas fisik serta pola konsumsi yang dipengaruhi oleh ketersediaan makanan. Keragaman pangan, aktivitas fisik, dan persentase lemak tubuh diduga berhubungan dengan status gizi, namun penelitian terkait hal ini masih terbatas di lingkungan pesantren.

Tujuan : Menganalisis hubungan antara keragaman pangan, aktivitas fisik, persentase lemak tubuh terhadap status gizi santriwati di Pesantren Ndalem Dongkelan Yogyakarta.

Metode: Penelitian ini menggunakan desain *cross-sectional* dengan total sampling ($n=103$). Keragaman pangan diukur menggunakan MDD-W, aktivitas fisik dengan IPAQ-SF, dan persentase lemak tubuh dengan alat BIA Omron HBF-375. Status gizi ditentukan berdasarkan IMT. Analisis dilakukan secara univariat, bivariat (Chi-Square/Fisher), dan multivariat dengan regresi logistik biner.

Hasil : Sebanyak 85,44% subjek memiliki pola konsumsi tidak beragam dan 56,31% tergolong cukup aktif. Sebanyak 39,81% memiliki persentase lemak tubuh tinggi. Berdasarkan analisis bivariat, nilai p untuk keragaman pangan, aktivitas fisik, dan persentase lemak tubuh masing-masing adalah 0,768; 0,001; dan 0,001. Nilai odds ratio (OR) pada ketiga variabel berturut-turut adalah 1,42; 10,9; dan 11,7. Sementara itu, interval kepercayaan (CI 95%) menunjukkan rentang 0,41–4,84 untuk keragaman pangan, 4,06–29,4 untuk aktivitas fisik, dan 4,40–31,0 untuk persentase lemak tubuh. Analisis multivariat menunjukkan aktivitas fisik dan persentase lemak tubuh secara signifikan berkontribusi terhadap status gizi santriwati.

Kesimpulan : Aktivitas fisik dan persentase lemak tubuh berpengaruh signifikan terhadap status gizi santriwati.

Kata Kunci : Keragaman pangan, aktivitas fisik, persentase lemak tubuh, status gizi, santriwati.