

HUBUNGAN INDEKS MASSA TUBUH (IMT) DENGAN LINGKAR PERUT SEBAGAI RISIKO OBESITAS SENTRAL PADA MAHASISWA

Mustika Khasanah¹, Neni Trilusiana², Aviria Ermamilia²

ABSTRAK

Latar Belakang: Obesitas sentral merupakan akumulasi lemak berlebih di area perut. Lingkar perut sebagai indikator obesitas sentral masih jarang diterapkan. Sementara itu, pengukuran tinggi tubuh dan berat tubuh lebih dikenal masyarakat. Indeks Massa Tubuh (IMT) yang dihitung dari tinggi tubuh dan berat tubuh secara umum digunakan untuk menilai status gizi proporsi tubuh dan indikator obesitas umum. Hubungan antara kedua indikator ini penting diketahui untuk meningkatkan kesadaran dan kewaspadaan dalam manajemen berat tubuh dan risiko obesitas.

Tujuan: Mengetahui hubungan Indeks Massa Tubuh (IMT) dengan lingkar perut sebagai risiko obesitas sentral pada mahasiswa.

Metode: Penelitian analitik observasional non eksperimental menggunakan metode penelitian kuantitatif dengan desain penelitian *cross sectional*. Subjek penelitian yang didapat dengan teknik purposive sampling adalah 180 mahasiswa Universitas Gadjah Mada berusia 18 – 24 tahun. Data antropometri yang dikumpulkan berupa berat tubuh dan tinggi tubuh untuk perhitungan IMT, dan lingkar perut. Analisis data menggunakan Uji Korelasi *Kendall's Tau* dan Uji Beda *Mann-Whitney* karena data tidak berdistribusi normal. Jenis kelamin juga dianalisis secara bivariat sebagai dugaan variabel perancu.

Hasil: Analisis hubungan IMT dengan lingkar perut nilai p-value 0.00 ($p < 0.05$), koefisien korelasi 0.576, arah positif. Analisis hubungan jenis kelamin dengan IMT dan lingkar perut nilai p-value 0,377 ($p > 0,05$) dan 0,585 ($p > 0,05$). Analisis perbedaan IMT berdasarkan jenis kelamin nilai p-value 0,291 ($p > 0,05$). Analisis perbedaan lingkar perut berdasarkan jenis kelamin nilai p-value 0,003 ($p < 0,05$).

Kesimpulan: Terdapat hubungan kuat IMT dengan lingkar perut. Tidak terdapat hubungan jenis kelamin dengan IMT dan lingkar perut. Jenis kelamin tidak menjadi variabel perancu dalam hubungan IMT dengan lingkar perut.

Kata Kunci: IMT; lemak visceral; lingkar perut; obesitas sentral.

¹Program Studi Gizi, Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan Universitas Gadjah Mada

²Departemen Gizi Kesehatan, Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan Universitas Gadjah Mada

THE CORRELATION BETWEEN BODY MASS INDEX (BMI) AND ABDOMINAL CIRCUMFERENCE AS A RISK OF CENTRAL OBESITY IN UNIVERSITY STUDENTS

Mustika Khasanah¹, Neni Trilusiana², Aviria Ermamilia²

ABSTRACT

Background: Central obesity is the accumulation of excess fat in the abdominal area. Abdominal circumference as an indicator of central obesity is still rarely used. Meanwhile, measurements of body height and body weight are better known to the public. Body Mass Index (BMI), which is calculated from body height and body weight, is commonly used to assess nutritional status, body proportions, and is a common obesity indicator. The correlation between these two indicators is important to know in order to raise awareness, and precautions in body weight management and obesity screening.

Objective: To determine the correlation between Body Mass Index (BMI) and abdominal circumference as an indicator of central obesity risk in university students.

Methods: This study was a non-experimental observational analytic type that used quantitative research methods with a cross sectional research design. The research subjects obtained by purposive sampling technique were 180 students of Universitas Gadjah Mada aged 18-24 years. Anthropometric data collected were body weight and height for BMI, and abdominal circumference. Data were analysed using Kendall's Tau Correlation Test and Mann-Whitney Difference Test because the data were not normally distributed. Gender was also analysed bivariate as a suspected confounding variable.

Results: Analysis of the correlation between BMI and abdominal circumference resulted in a p-value of 0.00 ($p < 0.05$), correlation coefficient of 0.576, positive direction. Analysis of the correlation between gender with BMI and abdominal circumference resulted in a p-value of 0.377 ($p > 0.05$) and 0.585 ($p > 0.05$). Analysis of differences in BMI based on gender resulted in a p-value of 0.291 ($p > 0.05$). Analysis of differences in abdominal circumference based on gender resulted in a p-value of 0.003 ($p < 0.05$).

Conclusion: There is a strong correlation between BMI and abdominal circumference. There was no correlation between gender, BMI, and abdominal circumference. Gender is not a confounding variable in the correlation between BMI and abdominal circumference.

Keywords: abdominal measurement; BMI; central obesity; visceral fat.

¹Bachelor of Nutrition Study Program, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University

²Department of Health Nutrition, Faculty of Medicine, Public Health and Nursing, Gadjah Mada University