

KORELASI LINGKAR PINGGANG DAN RASIO LINGKAR PINGGANG-PANGGUL TERHADAP TEKanan DARAH PADA DIABETES MELITUS TIPE 2 DI RSUD KABUPATEN TEMANGGUNG

Yeni Natalia Susanti
dr. Fenty, M.Kes., Sp. PK.

ABSTRACT

Prevalence of type 2 diabetes mellitus in the world are increase. This disease can increase cardiovascular disease risk because of abdominal obesity and have a risk to become hypertension. Waist circumference and waist hip ratio is an anthropometric technique to describe abdominal fat. This study aim to determine the correlation of waist circumference and waist hip ratio on blood pressure in type 2 Diabetes Mellitus in RSUD Kabupaten Temanggung.

This study was an observational analytic with cross-sectional approach and sampling techniques was non-random, purposive sampling types on 42 male respondents and 58 female respondents. Measurements include waist circumference, waist hip ratio, and blood pressure. Data were analyzed with Shapiro-Wilk Normality test for men and Kolmogorov-Smirnov for women, Mann-Whitney comparative test, and Spearman correlation test with a confidence level of 95%.

The results showed there were positive correlation and no significant between waist circumference and diastolic-systolic blood pressure in the men ($p=0.104$, $r=0.255$; $p=0.148$, $r=0.227$), waist hip ratio and diastolic blood pressure in the women ($p=0.956$, $r=0.007$), waist hip ratio and diastolic blood pressure in the men ($p=0.321$, $r=0.157$), and waist hip ratio and systolic blood pressure in the men and women ($p=0.453$, $r=0.119$; $p=0.610$, $r=0.068$) respondents. Negative correlation and no significant between waist circumference and systolic blood pressure ($p=0.658$, $r=-0.059$), and waist hip ratio and diastolic blood pressure ($p=0.419$, $r=-0.108$) in the women respondents.

Keywords: type 2 diabetes mellitus, blood pressure, waist circumference, waist hip ratio

INTISARI

Prevalensi diabetes melitus tipe 2 di dunia terus mengalami peningkatan. Diabetes melitus tipe 2 dapat meningkatkan risiko *cardiovascular disease* akibat kondisi lemak berlebih pada abdominal dan memiliki risiko hipertensi. Lingkar pinggang dan rasio lingkaran pinggang-panggul merupakan teknik antropometri dalam menentukan timbunan lemak abdominal. Penelitian bertujuan untuk mengetahui korelasi lingkaran pinggang dan rasio lingkaran pinggang-panggul terhadap tekanan darah pada diabetes melitus tipe 2 di RSUD Kabupaten Temanggung.

Penelitian berupa observasional analitik dengan rancangan *cross-sectional*. Pengambilan sampel secara *non-random*, jenis *purposive sampling*, terhadap 42 responden pria dan 58 responden wanita. Pengukuran meliputi lingkaran pinggang, lingkaran panggul, dan tekanan darah. Data dianalisis dengan uji normalitas *Shapiro-Wilk* untuk pria dan *Kolmogorov-Smirnov* untuk wanita, uji komparatif *Man-Whitney*, serta uji korelasi *Spearman* taraf kepercayaan 95%.

Hasil penelitian terdapat korelasi positif dan tidak bermakna antara lingkaran pinggang terhadap tekanan darah sistolik dan diastolik pria ($p=0,104$, $r=0,255$; $p=0,148$, $r=0,227$), lingkaran pinggang terhadap tekanan darah diastolik wanita ($p=0,956$; $r=0,007$), rasio lingkaran pinggang-panggul terhadap tekanan darah diastolik pria ($p=0,321$; $r=0,157$), dan rasio lingkaran pinggang-panggul terhadap tekanan darah sistolik responden pria dan wanita ($p=0,453$, $r=0,119$; $p=0,610$, $r=0,068$). Korelasi negatif dan tidak bermakna antara lingkaran pinggang terhadap tekanan darah sistolik ($p=0,658$; $r=-0,059$) dan rasio lingkaran pinggang-panggul terhadap tekanan darah diastolik ($p=0,419$; $r=-0,108$) responden wanita.

Kata kunci: diabetes melitus tipe 2, tekanan darah, lingkaran pinggang, rasio lingkaran pinggang-panggul