

ABSTRAK

HUBUNGAN RASIO LINGKAR PINGGANG-TINGGI TUBUH, RASIO LINGKAR PINGGANG- LINGKAR PANGGUL TERHADAP INDEKS MASSA TUBUH PADA REMAJA DI SMP NEGERI KULONPROGO DAN SMP NEGERI BANTUL

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Latar Belakang : Masalah gizi terutama kegemukan dan obesitas pada anak berisiko berlanjut ke masa dewasa, dan merupakan faktor risiko terjadinya berbagai penyakit degenerative. Beberapa pengukuran antropometri dapat digunakan untuk deteksi dini risiko masalah gizi, di antaranya yaitu rasio lingkaran pinggang-tinggi tubuh (RLPT), rasio lingkaran pinggang-panggul (RLPP), dan indeks massa tubuh (IMT).

Tujuan : Mengetahui hubungan antara RLPT dan RLPP terhadap IMT pada remaja di SMP Negeri Kulonprogo dan SMP Negeri Bantul.

Metode : Rancangan penelitian ini adalah *cross sectional* yang dilakukan pada 318 siswa (160 laki-laki dan 158 perempuan) usia 12-15 tahun. Pada subjek dilakukan pengukuran antropometri meliputi berat tubuh, tinggi tubuh, lingkaran pinggang, dan lingkaran panggul mengikuti prosedur *International Society for The Advancement of Kinanthropometry* (ISAK). Indeks antropometri yang dihitung meliputi RLPT, RLPP, dan IMT. Uji korelasi Pearson, *Chi-Square*, dan *Fisher's exact* digunakan untuk melihat hubungan ukuran antropometri dengan IMT.

Hasil : Rata-rata RLPT adalah $0,46 \pm 0,06$ cm. Rata-rata RLPP adalah $0,85 \pm 0,08$ cm. Rata-rata IMT adalah $18,69 \pm 3,08$. Terdapat hubungan yang signifikan antara RLPT dengan IMT pada subjek laki-laki ($r=0,53$; $p=0,001$) dan perempuan ($r=0,46$; $p=0,001$). Tidak terdapat hubungan signifikan antara RLPP dengan IMT pada subjek laki-laki ($r=-0,003$; $p=0,965$) dan perempuan ($r=-0,060$; $p=0,455$).

Kesimpulan : RLPT memiliki hubungan signifikan dengan IMT sedangkan RLPP tidak memiliki hubungan dengan IMT pada siswa SMP Negeri Kulonprogo dan SMP Negeri Bantul.

Kata Kunci : Rasio Lingkaran Pinggang-Tinggi Tubuh, Rasio Lingkaran Pinggang-Lingkaran Panggul, Indeks Massa Tubuh, Remaja.

ABSTRACT

ASSOCIATION BETWEEN OF WAIST-TO-HEIGHT RATIO, WAIST-TO-HIP RATIO ON BODY MASS INDEX IN ADOLESCENTS IN JUNIOR HIGH SCHOOL IN KULONPROGO AND JUNIOR HIGH SCHOOL IN BANTUL

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Background : Nutrition problems, especially obesity and obesity in children at risk of continuing into adulthood, and is a risk factor for various degenerative diseases. Some anthropometric measurements can be used for early detection of the risk of nutritional problems, including the ratio of waist to height ratio (WHtR), waist to hip ratio (WHR), and body mass index (BMI).

Purpose : Knowing the relationship between WHtR and WHR on BMI in adolescents in junior high school in Kulonprogo and junior high school in Bantul.

Method : The study design was a cross sectional study conducted on 318 students (160 male and 158 female) aged 12-15 years. Anthropometric measurements were carried out on subjects including body weight, height, waist circumference, and hip circumference following the International Society for the Advancement of Kinanthropometry (ISAK) procedure. Anthropometric indices calculated include WHtR, WHR, and BMI. Pearson, Chi-Square, and Fisher's exact correlation tests were used to see the relationship of anthropometric measurements with BMI.

Result : The average WHtR is 0.46 ± 0.06 cm. The average WHR is 0.85 ± 0.08 cm. The average BMI is 18.69 ± 3.08 . There was a significant relationship between WHtR and BMI in male subjects ($r = 0.53$; $p = 0.001$) and women ($r = 0.46$; $p = 0.001$). There was no significant relationship between WHR and BMI in male subjects ($r = -0.003$; $p = 0.965$) and women ($r = -0.060$; $p = 0.455$).

Conclusion : WHtR has a significant relationship with BMI while WHR does not have a relationship with BMI in Junior High School students in Kulonprogo and Bantul.

Keyword : waist-to-height ratio, waist-to-hip ratio, body mass index, adolescents.