

Hubungan *Waist to Height Ratio* (WHtR) dan *Conicity Index* (CI) dengan Rasio TG/HDL pada Lansia Obesitas

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ABSTRAK

Latar Belakang : Salah satu indikator manusia memasuki fase lansia ditunjukkan dengan penurunan fungsi tubuh serta berisiko mengalami obesitas. Individu obesitas rentan mengalami abnormalitas profil lipid yang dapat meningkatkan risiko kardiovaskular. Rasio TG/HDL merupakan parameter yang dapat memprediksi individu dengan risiko penyakit kardiovaskular. Beberapa parameter antropometri seperti WHtR dan CI merupakan parameter obesitas yang dapat memprediksi penyakit kardiovaskular.

Tujuan : Menganalisis hubungan WHtR dan CI dengan rasio TG/HDL pada lansia obesitas.

Metode : Penelitian observasional dengan desain penelitian *cross sectional*. Subjek penelitian lansia berusia ≥ 60 tahun dengan obesitas sebanyak 38 orang yang dipilih secara *consecutive sampling* di wilayah kerja Puskesmas Sronдол Semarang. Metode oksidase digunakan dalam pengukuran kadar Trigliserida dan HDL. Analisis statistik menggunakan uji *rank-Spearman* dan uji regresi linear berganda.

Hasil : Hasil penelitian menunjukkan 57,9% subjek memiliki *Waist to Height Ratio* berisiko, 52,6% memiliki *Conicity Index* yang berisiko, serta 63,2% memiliki rasio TG/HDL yang berisiko. Hasil analisis menunjukkan terdapat hubungan positif antara WHtR ($p=0,000$, $r=0,667$) dan CI ($p=0,001$, $r=0,513$) dengan rasio TG/HDL. Uji multivariat menunjukkan WHtR merupakan variabel yang lebih berhubungan dengan rasio TG/HDL dibuktikan dengan nilai $p<0,001$.

Kesimpulan : *Waist to Height Ratio* dan *Conicity Index* memiliki hubungan dengan rasio TG/HDL. *Waist to Height Ratio* merupakan prediktor rasio TG/HDL yang lebih kuat.

Kata Kunci : *Waist to Height Ratio* (WHtR), *Conicity Index* (CI), Rasio TG/HDL, Lansia, Obesitas

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Correlation between *Waist to Height Ratio (WHtR)* and *Conicity Index (CI)* with *TG/HDL Ratio* in Obese Elderly

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ABSTRACT

Background: One of the indicators of humans entering the elderly phase is shown by a decrease in body function and the risk of obesity. Obese individuals are prone to lipid profile abnormalities which can increase cardiovascular risk. The TG/HDL ratio is a parameter that can predict individuals at risk of cardiovascular disease. Several anthropometric parameters such as WHtR and CI are obesity parameters that can predict cardiovascular disease.

Objective: To analyze the relationship between WHtR and CI with the TG/HDL ratio in obese elderly people..

Methods : This study was an observational with a cross sectional research design. Subjects were 38 elderly people aged ≥ 60 years with obesity who were selected by consecutive sampling in the work area of the Sronol Public Health Center, Semarang. The oxidase method is used to measure triglyceride and HDL levels. Statistical analysis used the Spearman rank test and multiple linear regression test.

Results : The results showed that 57.9% of subjects had a risky Waist to Height Ratio, 52.6% had a risky Conicity Index, and 63.2% had a risky TG/HDL ratio. The results of the analysis showed that there was a positive relationship between WHtR ($p= 0.000$, $r= 0.667$) and CI ($p= 0.001$, $r= 0.513$) with the TG/HDL ratio. Multivariate tests show that WHtR is a variable that is more related to the TG/HDL ratio as evidenced by a p value <0.001 .

Conclusion : Waist to Height Ratio and Conicity Index have a relationship with the TG/HDL ratio. Waist to Height Ratio is a stronger predictor of TG/HDL ratio.

Key Word : Waist to Height Ratio (WHtR), Conicity Index (CI), TG/HDL Ratio, Elderly, Obesity

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