

The Relationship Between Visceral Fat Levels and Body Mass Index Categories and Total Cholesterol in Patients with Hypercholesterolemia: A Case Study in Jember Regency

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ABSTRACT

Hypercholesterolemia is a condition characterized by an increase in total blood cholesterol levels of ≥ 200 mg/d. Body Mass Index (BMI) and visceral fat assessment can be used as indicators to identify risk factors for hypercholesterolemia. This study was a quantitative study using an analytical observational design with a cross-sectional approach. The study was conducted among patients with hypercholesterolemia in Jember Regency involving 108 respondents selected using probability sampling techniques. Data were analyzed using univariate and bivariate analyses with the Spearman correlation test. The results showed a significant relationship between visceral fat levels and total cholesterol levels with a moderate positive correlation ($r = 0.486$; $p < 0.001$). In addition, there was a significant relationship between Body Mass Index (BMI) categories and total cholesterol levels with a weak positive correlation ($r = 0.301$; $p = 0.002$). The conclusion of this study is that visceral fat levels and body mass index categories are significantly associated with total cholesterol in patients with hypercholesterolemia in Jember Regency.

Keywords: *visceral fat levels, body mass index categories, total cholesterol, hypercholesterolemia.*