



ABSTRACT

A correlation between adult body mass index and waist circumference and blood pressure at the primary health care of Gribig

Emmanuela Anandita Anughrayasa¹, Eviana Budiartanti Sutanto¹, Jessica Christanti¹, Jonsinar Silalahi¹, Marcella Trixie Kartika¹

Received: 15 September 2023
Accepted: 18 September 2023
Published: 30 September 2023

1. Faculty of Medicine, Soegijapranata Catholic University, Semarang, Indonesia

Link to DOI:

[10.25220/WNJ.V07.S1.0017](https://doi.org/10.25220/WNJ.V07.S1.0017)

Citation: Anughrayasa E A, Sutanto E B, Christanti J S, Kartika M T. Correlation between adult body mass index and waist circumference and blood pressure at the primary health care of Gribig. World Nutrition Journal. 2023 September 30, 7(S1): 18.



Copyright: © 2023 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Website :
<http://www.worldnutrijournal.org/>

Abstract : Nutri Symposium 2023 – Oral Presentation

Background : Over 17 million deaths are caused by cardiovascular disease due to high blood pressure. It is estimated that nearly 1.3 billion adults have high blood pressure in 2021, according to the World Health Organization (WHO). A significant factor affecting blood pressure is obesity. Body Mass Index (BMI) and Waist Circumference measurements can detect obesity in anthropometric examinations.

Objective : This study aimed to analyze the correlation between BMI, waist circumference, and blood pressure in adults at the Primary Health Care of Gribig, Kudus Regency.

Methods : The method of this study is a cross-sectional approach. The study measured BMI, waist circumference, and blood pressure and questionnaire. Inclusion criteria included men and women (healthcare staff, patient caregivers, and patients), aged 18-59 who agreed to become study subjects. Exclusion criteria included patients with a history of diseases, current conditions, medication intake that affects blood pressure, and being pregnant. Sampling was done with a purposive sampling and statistical analysis using the Pearson test.

Results : There was a significant correlation between BMI with systolic blood pressure ($p=0.000$) and diastolic blood pressure ($p=0.000$). The relationship between BMI with systolic blood pressure ($r=0.473$) and diastolic blood pressure ($r=0.439$) is moderate. There was a significant correlation between waist circumference with systolic blood pressure ($p=0.000$) and diastolic blood pressure ($p=0.000$).

Conclusion : perioperative nutrition is a crucial component of the ERAS protocol. Providing adequate nutrition before, during, and after surgery is essential to support the healing process, minimize complications, and promote faster recovery. By optimizing perioperative nutrition, healthcare providers can improve patient outcomes and increase the overall success of surgical interventions.

Keywords: Body mass index, waist circumference, blood pressure

Corresponding author:

Eviana Budiartanti Sutanto
Faculty of Medicine, Soegijapranata Catholic University,
Semarang
Email: eviana@unika.ac.id