

# **The Relationship between Body Mass Index (BMI) and Blood Pressure to Patient at Manado Adventist Hospital**

Andreas Rantepadang and Apriyani Repriance Rame  
Universitas Klabat

## **Abstract**

Body mass index (BMI) is the ratio for body mass to height in quadrant and usually used as general health indicator. Over in body mass index like obesity is the factor that influences the blood pressure. The goal of this research was to know the relationship of body mass index and the blood pressure at Manado Adventist Hospital. Design of the research used was observational analytic trough cross section approach. Sampling technique used was purposive sampling. The amount of samples was 85 respondents comprising of 43 men and 42 women. 40 respondents (47.1%) are obese, 12 (14.1%) are overweight, and 33 (38.8%) are normal. Twenty-nine (34.1%) got systolic blood pressure at pre-hypertension or level 1. Based on diastolic pressure, 31 people (36.5%) are classified at hypertension level 1. Result of spearmen correlation statistic showed the significant relationship between body mass index and blood pressure with  $p$  value =  $0.000 < 0.05$ . Coefficient correlation amount is 0.519 for systolic pressure and 0.446 for diastolic pressure that indicates the medium relationship for both variables. The researchers recommend keeping the body mass index normal so the blood pressure will be normal too.

**Keyword:** *BMI, blood pressure, obesity*