THE ASSOCIATION BETWEEN AGE, BODY MASS INDEX, HORMONAL CONTRACEPTIVE, AND NON COMMUNICABLE DISEASE: A STUDY USING THE INDONESIAN FAMILY LIVE SURVEY-5

Danies Tunjung Pratiwi¹⁾, Vitri Widyaningsih²⁾

¹⁾Masters Program in Public Health, Universitas Sebelas Maret

²⁾Faculty of Medicine, Universitas Sebelas Maret

ABSTRACT

Background: Non-communicable diseases (NCDs) are the main sources of disease burden. Obesity is a challenging epidemic and increased body mass index (BMI) influences on almost all body systems leading to development of non-communicable diseases. The purpose of this study was to examine the association between age, body mass index, hormonal contraceptive, and NCD.

Subjects and Method: This was a cross sectional study carried out in 13 provinces in Indonesia. A sample of 10,233 women of reproductive age was selected for this study. The dependent variable was non-communicable disease (NCD) for hypertension and cholesterol. The independent variables were hormonal contraceptive, overweight, and age. The data were obtained from Indonesian Family Live Survey 5 (IFLS). The data were analyzed by a multiple logistic regression.

Results: Hormonal contraceptive users were 79.2%. Prevalence of hypertension and cholesterol was 13.6%. The risk of NCD increased with overweight (aOR= 1.90; 95% CI= 1.67 to 2.16; p<0.001) and age (aOR= 1.08; 95% CI= 1.07 to 1.09; p<0.001). Hormonal contraceptive was positively associated with NCD but it was statistically non-significant (aOR= 1.09; 95% CI= 0.93 to 1.29; p= 0.285).

Conclusion: The risk of NCD increases with overweight and age. Hormonal contraceptive is positively associated with NCD but it is statistically non-significant.

Keywords: hormonal contraception, non-communicable disease, hypertension, cholesterol, age

Correspondence:

Danies Tunjung Pratiwi. Masters Program in Public Health, Universitas Sebelas Maret, Jl. Ir. Sutami 36 A, Surakarta 57126, Central Java, Indonesia. Email: daniestunjung@gmail.com. Mobile: +6285229209108.