

ABSTRACT

THE CORRELATION OF BODY MASS INDEX, SEX AND MENOPAUSAL STATUS WITH URIC ACID LEVELS IN 40-55 YEARS OLD CLIENTS IN PUSKESMAS BABAT

Cross-sectional Study in Puskesmas Babat's Work Area

By: Rosiska Pangestu

Introduction: Hyperuricemia being an unhealthy condition that does not recognized commonly in Indonesia. It was associated with other health conditions such as obesity, while the obesity population in Indonesia increased. The other unmodifiable risk factor had an important role as well, such as sex difference and hormonal. **Methods:** This study used a cross-sectional approach with 105 respondents who were taken by purposive sampling according to inclusion and exclusion criteria. The x variable was BMI, sex and menopausal status. The y variable was uric acid levels. BMI was defined into BMI categories by the Indonesia Health Ministry, data about sex collected base on the identity card, and menopausal status was classified using the NOWAC's categories into premenopausal and postmenopausal. GCU meter was performed as uric acid level measurement device. Statistical software was used to analyses the data and the correlation between BMI, sex and menopausal status with the uric acid level tested using Spearman's rho and Chi-square with the level of significance of 0,05. **Results:** There was a significant, weak and positive correlation between BMI and uric acid levels ($p=0,000$, $r=0,393$). The significant correlation of sex ($p=0,022$, $OR=2,864$ in males) and menopausal status to uric acid level ($p=0,000$, $OR=4,750$ in postmenopause). **Discussions:** Males, postmenopausal women and individuals with higher BMI levels have a higher risk of hyperuricemia, so they should have to take care of the other risk factor to avoid hyperuricemia or maintain ideal BMI for good uric acid levels.

Keywords: hyperuricemia, BMI, sex, menopausal status, uric acid