



SUPPLEMENT

The relationship between subcutaneous fat thickness and menstrual cycle on obese women

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Abstract

Background: Indonesian health survey shows an increase in obesity rates from 21.8% in 2018 to 23.4% in 2023. Obesity is a condition of excess fat accumulation that can be measured by the thickness of subcutaneous fat. Fat accumulation can disrupt the body's hormonal condition because it also works as an endocrine organ. It produced aromatase that can disrupt the female reproductive hormonal system and causing menstrual disorders. 80% of women experience menstrual cycle disorders based on WHO in 2017.

Objectives: To determine the relationship between the thickness of subcutaneous fat and menstrual cycle on obese women.

Methods: This study used analytic observational research methods with cross-sectional design. The samples used in this study were all obese women of reproductive age at PT. Sango Ceramics Indonesia and meets the inclusion criteria. The sampling technique in this study was consecutive sampling, and data was analyzed by the Gamma test.

Results: A significant relationship was found between the thickness of subcutaneous fat and menstrual cycle on obese women ($p=0.026$).

Conclusion: There is a significant relationship with weak strength between the thickness of subcutaneous fat and menstrual cycle on obese women in PT. Sango Ceramics Indonesia.

Keywords: obesity, subcutaneous fat thickness, menstrual cycle

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