THE ASSOCIATION BETWEEN BODY MASS INDEX AND PREMENSTRUAL SYNDROM AMONG FEMALE HIGH SCHOOL STUDENTS IN PADANG LAWAS, NORTH SUMATERA

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ABSTRACT

Background: Premenstrual syndrome (PMS) is a condition that affects a woman's emotions, physical health, and behavior during certain days of the menstrual cycle, generally just before her menses. Earlier studies reported that both physical and mental premenstrual symptoms have significant negative impact on quality of life, assessed as ADL. This study aimed to asses the association between body mass index (BMI) and the risk of nutritional status with premenstrual syndrome (PMS) among females.

Subjects and Method: This study was a cross sectional study conducted at Aliya MAS Robitotul Istiqamah, Padang Lawas, North Sumatera. A sample of 139 female high school students was selected for this study, consisting of 72 students with PMS and 67 students without PMS. The dependent variable was PMS. The independent variable was nutritional status as measured by BMI. Weight was measured by a scale, and height was measured by microtoise. Data on BMI were categorized into 2 groups: BMI <25 (coded 0) and BMI ≥ 25 (coded 1). The other data were collected by questionnaire. The data were analyzed by a logistic regression.

Results: The risk of premenstrual syndrome in female students with BMI ≥ 25 was 7.73 times than counterparts with normal BMI (OR= 7.73; 95%CI= 3.56 to 16.78; p= 0.001).

Conclusion: The risk of premenstrual syndrome in female students increases with high BMI.

Keywords: premenstrual syndrome, body mass index, females

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