

## ABSTRACT

Premenstrual syndrome (PMS) is a collection of symptoms consisting physical symptoms, emotional symptoms and behavioral symptoms experienced by women before menstruation period, which usually occurs 7-10 days before menstruation. The occurred symptoms can cause activities disturbance and affect someone's level of productivity. PMS caused by several factors, including nutritional status and intake of micronutrients such as calcium, magnesium, and vitamin B6. The purpose of this research was to analyze the correlation between nutritional status and adequacy levels of micronutrients (calcium, magnesium, and vitamin B6) with the incidence of Premenstrual Syndrome (PMS) in female students at Faculty of Public Health, Airlangga University.

This research used a cross sectional study. The sample consisted of 83 female students at the Faculty of Public Health, Airlangga University, class year 2015-2017. Data collection used measurements of body weight and height to get nutritional status variable, filling the Food Recall 2x24 hours form to get adequacy levels of micronutrients (calcium, magnesium, and vitamin B6) variable and SPAF (Shortened Premenstrual Assessment Form) questionnaire to get incidence of Premenstrual Syndrome (PMS) variable. Data were analyzed using chi square test.

The results showed that 53% of female students experienced mild PMS and 47% experienced moderate PMS. Based on the results of statistical tests it was known that there was a correlation between nutritional status ( $p = 0.012$ ) with Premenstrual Syndrome (PMS) and there was no correlation between micronutrients (calcium ( $p = 0.878$ ), magnesium ( $p = 1$ ) & vitamin B6 ( $p = 1$ )) with the incidence of Premenstrual Syndrome (PMS).

The conclusions of this study is there is a significant correlation between nutritional status with Premenstrual Syndrome (PMS) and there is no correlation between micronutrients and the incidence of Premenstrual Syndrome (PMS).

Keywords: nutritional status, calcium, magnesium, B6, PMS, premenstrual syndrome.

## ABSTRAK

*Premenstrual syndrome* (PMS) merupakan kumpulan gejala yang terdiri dari gejala fisik, gejala emosional dan gejala perilaku seorang wanita menjelang masa menstruasi, yang biasanya terjadi pada 7-10 hari sebelum datangnya menstruasi. Gejala yang timbul dapat menyebabkan gangguan pada aktivitas dan memengaruhi tingkat produktivitas seseorang. PMS dapat disebabkan oleh beberapa faktor yaitu status gizi dan asupan zat gizi mikro seperti kalsium, magnesium, dan vitamin B6. Tujuan penelitian ini adalah untuk menganalisis hubungan status gizi dan tingkat kecukupan zat gizi mikro (kalsium, magnesium, dan vitamin B6) dengan kejadian *premenstrual syndrome* (PMS) pada mahasiswi Fakultas Kesehatan Masyarakat Universitas Airlangga.

Penelitian ini menggunakan studi *cross sectional*. Sampel terdiri dari 83 orang mahasiswi di Fakultas Kesehatan Masyarakat Universitas Airlangga tahun angkatan 2015-2017. Pengumpulan data menggunakan pengukuran berat badan dan tinggi badan untuk mendapatkan variabel status gizi, pengisian form *Food Recall 2x24* jam untuk mendapatkan variabel tingkat kecukupan zat gizi mikro (kalsium, magnesium, dan vitamin B6) dan kuesioner SPAF (*Shortened Premenstrual Assessment Form*) untuk mendapatkan variabel kejadian *Premenstrual Syndrome* (PMS). Data dianalisis menggunakan uji *chi square*.

Hasil penelitian menunjukkan bahwa sebanyak 53% mahasiswi mengalami PMS ringan dan 47% mengalami PMS sedang. Berdasarkan hasil uji statistik diketahui bahwa ada hubungan antara status gizi ( $p=0,012$ ) dengan *Premenstrual Syndrome* (PMS) dan tidak ada hubungan antara zat gizi mikro (kalsium ( $p=0,878$ ), magnesium ( $p=1$ ), & vitamin B6 ( $p=1$ )) dengan kejadian *Premenstrual Syndrome* (PMS).

Kesimpulan dari penelitian ini adalah terdapat hubungan yang signifikan antara status gizi dengan *Premenstrual Syndrome* (PMS) dan tidak ada hubungan antara zat gizi mikro dengan kejadian *Premenstrual Syndrome* (PMS).

Kata kunci: status gizi, kalsium, magnesium, B6, PMS, premenstrual syndrome.