Relationship Between The Consumption of Vitamin B1, Magnesium and Sleep Patterns with the Incidence of Premenstrual Syndrome in Students of Jember State Polytechnic

Cindy Arum Hardiyanti
Clinical Nutrition Study Program
Department of Health

ABSTRACT

The increase in reproductive hormones and the onset of symptoms of premenstrual syndrome will be experienced by a woman during the post-ovulation phase. A teenager had premenstrual syndrome (PMS) as much as 63.1%. The incidence of PMS in Indonesia is experienced by women of reproductive age by 70-90% and 2-10% of them experience severe PMS symptoms. Preliminary studies conducted on students of the Jember State Polytechnic found that all subjects experienced PMS symptoms, namely 19 female students experienced mild PMS symptoms and 12 other female students experienced moderate PMS symptoms. The purpose of the study was to determine the relationship between vitamin B1 consumption, magnesium and sleep patterns with the incidence of PMS in jember state polytechnic students. This study used an analytical observational method with a cross-sectional approach. The number of research subjects was 104 students of the Jember State Polytechnic obtained by purposive sampling. The hypothesis test was carried out using the Chi-square test. The results of the study were that the majority of subjects had a frequency of consumption of vitamin B1 rarely (63.46%) and insufficient intake (65.4%). Vitamin B1 affects tryptophan levels which triggers the neurotransmitter and causes emotional disturbances. The majority of subjects had a frequency of frequent magnesium consumption (68.27%) and adequate intake (70.19%). Magnesium deficiency affects the imbalance of the hormones estrogen and progesterone and causes PMS symptoms. The majority of subjects had good sleep patterns (58.7%). Changes in sleep time affect the release of hormones and cause PMS complaints. The advice is for women of reductive age to meet nutritional needs and pay attention to sleep patterns. For researchers, they can then develop nutritional status variables by measuring BB / TB directly.

Keywords: magnesium, sleep patterns, premenstrual syndrome, vitamin B1