

ABSTRACT

Dysmenorrhea is a pain that occurs during menstruation. Menstrual pain or dysmenorrhea is common in the lower abdomen and is a common gynecologic problem in women. Approximately 49-95% of women of reproductive age in Indonesia have dysmenorrhea. Calcium is a mineral that has an important role in the human body as in the body's metabolism, calcium can also be a liaison between nerves, affect the work of the heart, and play a role in muscle movement. Decreased calcium levels can cause muscle contractions that can cause dysmenorrhea. This study was conducted to determine the effectiveness of calcium combination to decrease the level of dysmenorrhea pain and its effect on the quality of life using Visual Analog Scales (VAS) research instrument with a scale of 0-10 to describe the level of pain felt by subjects and Brief Pain Inventory (BPI) for her quality of life.

This study is a quasi experimental with pretest and post test design. This research was conducted at Muhammadiyah University of Yogyakarta in September 2017-June 2018. The research subjects were 60 female students of the Faculty of Social and Political Sciences of Muhammadiyah University of Yogyakarta, experiencing primary dysmenorrheal pain and aged 15-22 years divided into 2 groups, control and treatment were randomly assigned to a combination of calcium in the treatment group beginning on the 15th day of each menstrual cycle until the last day of the menstrual cycle.

The results showed that the measurement of pain intensity with VAS in the treatment and control group resulted in changes in pain intensity measured by VAS respectively of 2.80 ± 1.99 and 0.97 ± 1.52 with p-value <0.05 which means there are significant differences while the quality of life measurements with BPI in the treatment and control group led to changes in quality of life respectively of 2.75 ± 0.43 and 0.69 ± 0.24 with p-value <0.05 means there is a significant difference. There is an effect of giving a combination of calcium to the reduction of dysmenorrhea pain and improvement of quality of life in the treatment group.

Keywords: dysmenorrhea, combination of calcium, decreased pain, quality of life