

ABSTRACT

Dysmenorrhea is common menstrual period disorder that occurs in almost all reproductive age women. The aim of this study was to compare between the effect of vitamin B1 and turmeric (*Curcuma longa*) in reducing dysmenorrheal pain severity.

This study use a quasy experimental pretest-posttest design by dividing subjects into three groups (vitamin B1, turmeric and placebo group). Each group consist of 7 Airlangga University Midwifery students. Data was obtained by purposive sampling and was analyzed using spss statistics version 23 by t paired and one way anova test.

Pain severity in two experimental groups (vitamin B1 and turmeric) had a significant difference before and after taken 100mg of vitamin B1 ($p=0,010$) and 500mg of turmeric (*Curcuma longa*); IC 95%. Pain severity had significantly decreased in vitamin B1 and turmeric (*Curcuma longa*) supplementation, and placebo ($p=0,047$) groups with post hoc Games-Howell test vitamin B1 group compared to placebo group ($p=0,035$), vitamin B1 group comparied to turmeric group ($p=0,778$) and turmeric group compared to placebo group ($p=0,163$); IC 95%.

Both vitamin B1 and turmeric (*Curcuma longa*) could reduce dysmenorrheal pain severity. Vitamin B1 more effective than turmeric (*Curcuma longa*) in reducing dysmenorrheal pain severity

Key words: dysmenorrhea, vitamin B1, turmeric (*Curcuma longa*)