

## ABSTRACT

The prevalence of dysmenorrhea in Indonesia is reported to be around 64.25%, which is within the range of 60–75% among adolescents. The use of NSAIDs may cause side effects involving the gastrointestinal, renal, and cardiovascular systems. The content of thymoquinone in black cumin and the enzyme bromelain in pineapple can act as analgesics. The purpose of this study was to determine the effectiveness of pineapple juice and black cumin in reducing dysmenorrhea and improve quality of life. This experimental study involved menstruating women experiencing dysmenorrhea. There are 3 treatment groups, namely: JNH1 = pineapple (100%), JNH2 = Black cumin 2 capsules (600 mg/capsule), JNH3 = Combination of pineapple juice (100%) and black cumin 2 capsules (600 mg/capsule), as well as a negative control in the form of mineral water and a positive control in the form of ibuprofen 200 mg. Treatment was given to 30 respondents. Data analysis was performed using one-way ANOVA with SPSS 16.0 and a significance level of 95%. The results of the study for the length of healing days were as follows: JNH 3 (1.83 days), JNH 2 (2.16 days), JNH 1 (2.33 days), KP (2.5 days), and KN (3.33 days). The decrease in pain scores after 3 days was JNH 3 (2.77), JNH 2 (2.89), JNH 1 (3.11), KP (3.66), and KN (4.58). Improvement in quality of life was observed in JNH 3 (80), JNH 1 (75.72), JNH 2 (71.5), KP (69.32), and KN (60.76). This study concludes that pineapple juice and Black Seed (*Nigella sativa*) can accelerate healing time and reduce menstrual pain, although the results are not statistically significant ( $p > 0.05$ ). Pineapple and black seed (*Nigella sativa*) juice may improve the quality of life for menstruating women experiencing dysmenorrhea, although the results are not statistically significant ( $p > 0.05$ ).

**Keywords:** black seed, dysmenorrhea, pain scale, pineapple juice, quality of life

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