Biological, behavioral factors and self-compassion as predictors of the severity of dysmenorrhea among female college students in South Korea

Hoon Jung Jeon¹, Sung Hee Lee¹, Gi Young Youk¹, Gun E Gu² and In Ju Kim¹

¹Kyungpook National University, Republic of Korea
²Gumi University, Republic of Korea

**Purpose:** The purpose of this study is to identify predictive factors to affect the severity of dysmenorrhea of Korean female college students.

**Methods:** The participants were 761 female college students in three universities. Data collection was performed from May to June, 2017 through face-to-face interviews with four researchers using structured questionnaires and Google online surveys. The data were analyzed using the multiple logistic regression analysis with the SPSS version 20.0 to identify predictive factors of severity of dysmenorrhea.

**Results:** Biological and behavioral factors, and self-compassion were all included to find out the predictive factors on severity of dysmenorrhea. The zero-hypothesis would be rejected because the fit of the model was $\chi^2=169.466$ ($p<0.001$) and the total coefficient excluding the constant value is zero. According to the age of the subcategories of biological factors, the mild dysmenorrhea is more increased 1.74 times (AOR 1.74, CI 1.01~3.01, p<0.048) at 21-22 years and the moderate dysmenorrhea is more increased 16.23 times (AOR 16.23, CI 1.89~139.47, p<0.011) at over 25 years than under 20 years. On the amount of menstrual, the mild dysmenorrhea was 8.53 times (AOR 8.53, CI 1.75~41.58, p<0.008) and the moderate was 16.07 times (AOR 16.07, CI 3.20~80.61, p<0.001) more increased, respectively than the low amount of menstrual. As to the family history of menstrual disorders, mild dysmenorrhea was 2.49 times (AOR 2.49, CI 1.37~4.53, p<0.003) and the moderate of dysmenorrhea was 6.48 times (AOR 6.48, CI 3.50~12.02, p<0.001) more increased, respectively than no family history. According to the sleep satisfaction as the subcategories of behavioral factors, the moderate dysmenorrhea is more increased 2.78 times (AOR 2.78, CI 1.24~12.02, p<0.013) than they were dissatisfied with sleep. When a point of self-compassion is decreased, the mild dysmenorrhea was 0.96 times (AOR 0.96, CI 0.92~0.99, v<0.030) and the moderate dysmenorrhea was 0.94 times (AOR 0.94, CI 0.90~0.98, v<0.004) more increased.

**Conclusion:** The results of this study demonstrated that biological and behavioral factors and self-compassion were the predictive factors on the degree of dysmenorrhea of female college students. According to this study, it would help to predict the high risk group on dysmenorrhea in clinical area and it provides basic data to develop future nursing interventions on improving self-management of dysmenorrhea patients.

**Biography**

Hoon Jung Jeon is currently a part-time Lecturer of the College of Nursing at Kyungpook National University. She is Acute Care Nurse Practitioner.  
jjhij1024@naver.com

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