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ORIGINAL ARTICLE

Association of Menstrual Problems and Psycological Stress in Young Medical Students

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ABSTRACT

Aim: To see if there was a link between menstruation issues and psychological stress among young medical students.
Methods: A non-probability convenient sampling method was used to conduct an observational (cross-sectional) study on a sample of 180 university-bound students. Students were assessed for menstrual regularity associating with psychological stress by using Perceived Stress Scale in different universities of Lahore.
Results: The study included approximately 92% of females with a regular menstrual cycle and 8% of females with an irregular menstrual cycle.While among irregular menstrual cycles, 5 had high levels of stress, 7 had moderate levels of stress, and 3 had mild levels of stress. The normal menstrual cycle group had 40 females with high levels of stress, 121 females with moderate levels of stress, and four females with low levels of stress.
Conclusion: Although fewer students suffered from menstruation difficulties, the majority of them, including those who did not, experienced psychological stress.
Keywords: Menstrual disorders, dysmenorrheal, abnormal menstrual cycle, stress

INTRODUCTION

Menstruation is a natural process that involves the flow of blood from the uterus via the vaginal canal at more or less regular monthly intervals during a woman's reproductive life[1]. Menstrual issues include dysmenorrhea, premenstrual symptoms, menorrhagia, polymenorrhea, abnormal vaginal bleeding, amenorrhea, oligomenorrhea, and irregular menstruation[2]. Menstruation in teens occurs between the ages of 11 and 14, with a 7-day period and a cycle lasting 21 to 45 days, with an average blood loss of 20-80ml[3].

Adolescent and young adult females frequently experience menstrual issues[4,5]. Menstruation-related health issues affect a high percentage of the female population of reproductive age, according to studies. Previously, abnormal uterine bleeding was referred to as oligomenorrhea, menorrhagia, irregular menstruation, polymenorrhea, amenorrhea, and abnormal veginal bleeding. And now a day's these terms are classified as hyperplasia, polyps, malignancy,adenomyosis, coagulopathy, lieomyoma, endometrial and also ovulatory dysfunctions[6,7].

Prolonged menstrual bleeding, polycystic ovarian disease, severe bleeding throughout the menstrual cycle and irregularity are all present in 10.8%, 3.73%, 23.36% and 7.47% of women, respectively. Dysmenorrheal reported in medical students is 31.67% of prevalence and some are frequently absents in their colleges reported 8.68% of prevalence. This study also told that premenstrual symptoms reported second most disorder that 60.50% of prevalence. On other hand social withdrawal reported about 67.08%[8]. Some women was screened by a physician and he reported that higher rate of abnormal uterine bleeding[9] and declared that 15% of the women found with menorrhagia where as 15% of the women diagnosed with profuse bleeding[10].

Menstrual cycle for most of the women ranges from 21 to 35 days, but according to a study more than 14% of the girls or women suffering with abnormal menstrual cycle including excessive bleeding[11]. These issues can have a negative impact on teenagers' quality of life and, as a result, are commonly a source of concern for them and their families. Dysmenorrhea is one of the most common menstruation problems in adolescents and it can lead to bed-bound women[12].

In the literature, there are a few studies on the prevalence of menstruation issues and their relationship to psychological stress. However, the majority of previous studies used a small sample size or did not use a validated stress questionnaire. As a result, the current research aims to close this gap. Using a validated perceived stress scale questionnaire, the goal of this study is to see if there is a link between psychological stress and menstruation issues (PSS10)[13].

The findings of the study will be useful in further investigating this link and developing a strategy for promoting psychological and reproductive health.

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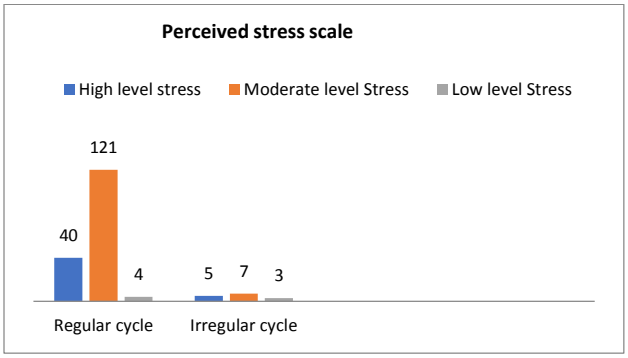
MATERIAL AND METHODS

A non-probability convenient sampling method was used to conduct an observational cross-sectional study on a sample of 180 university-bound students from three different colleges after permission from IRB. PSS for stress and other questionnaires were created to collect the following data. Menstrual cycle duration, Menstrual bleeding duration (days), Use of medicine regulating menstruation and severity of dysmenorrheal were examined. Mean, standard deviation and histogram were used to show the quantitative variables. Some of the question was also used for stress. Young female medical students between age 20-26 years were included in this study. Prior consent was taken before assimilation of study from concernced forams. Married,Pregnant,beast feeding females, females with systemic illness were excluded from the study.

RESULTS



By the age of 13-14 years, 90% of the females (162 out of 180) had achieved menarche. The study included approximately 92% of females with a regular menstrual cycle and 8% females with an irregular menstrual cycle. Among irregular menstrual cycles, 5 had high levels of stress, 121 females with moderate levels of stress, and 4 females with low levels of stress from the regular menstrual cycle group.

DISCUSSION

The study's goal was to see if there was a link between menstruation difficulties and psychological stress. Hormonal changes is a major event occurring during menstrual period these changes lead to menstrual symptoms along with increased stress levels. Mean age of the population was about 23.19±1.324 years old, 90.3% of the these girls reached their menarche at the age of 13-14 years. Our study revealed that majority (165 females out of 180) of the population of this study was going through normal menstrual period without having any dysfunctions. Prevalence of the menstruation irreegularity was found to be 2.05% in this study which indicates fewer students suffering from menstruation issues such as dysmenorrhea, menorrhagia, oligomenorrhoea e.t.c . In contrast, Ahmed M. Nooh (2014) performed a research on the incidence of menstruation diseases among young female students at Zagazig University in Zagazig, Egypt, and discovered that 6% of them had oligomenorrhoea, while 2.1% had polymenorrhoea[7].

Hypomenorrhoea was found in 7.1% of the women, whereas hypermenorrhoea was found in 5.3%. 7.8% of the time was spent in irregular periods. Dysmenorrhoea was reported by 65.4% of the participants. 27.9% of those surveyed said their discomfort was light, 23.3% said it was moderate and 14.1% said it was severe. Premenstrual syndrome was reported by 55.8% .When prevalence of menstrual irregularities was correlated to the stress level, It was found that 1.03% females suffered from high stress levels and 1.03% suffered from medium level of stress[10].

In a similar study, Nazish Rafque (2017) discovered that 39% of the students had high perceived stress (HPS). Menstrual difficulties were shown to have a substantial positive connection with high felt stress[14].

Menstrual irregularities were highly prevalent among female medical students, and they were linked to college/class absenteeism, limitations on social, academic, sports, and daily activities, according to Tara W.Strine's (2005) study on Menstrual-Related Problems and Psychological Distress among Women in the United States[15].

CONCLUSION

Although fewer students suffered from menstruation difficulties, the majority of them, including those who did not, experienced psychological stress.

Conflict of interest: Nil

REFERENCES

1. House S, Mahon T, Cavill S. Menstrual hygiene matters: a resource for improving menstrual hygiene around the world. Reproductive Health Matters. 2013;21(41):257-9.
2. Hertweck P, Yoost J. Common problems in pediatric and adolescent gynecology. Expert Review of Obstetrics & Gynecology. 2010;5(3):311-28.
3. Malhotra N, Malhotra J, Saxena R, Bora M. Jeffcoate's Principles of Gynaecology: Jaypee Brothers. Chennai, Tamilnadu: Medical Publishers Pvt Limited. 2008.
4. Rigon F, Bianchin L, Bernasconi S, Bona G, Bozzola M, Buzi F, et al. Update on age at menarche in Italy: toward the leveling off of the secular trend. Journal of Adolescent Health. 2010;46(3):238-44.
5. Chan S, Yiu KW, Yuen PM, Sahota DS, Chung T. Menstrual problems and health-seeking behaviour in Hong Kong Chinese girls. Hong Kong Med J. 2009;15(1):18-23.
6. Karout N, Hawai S, Altuwaijri S. Prevalence and pattern of menstrual disorders among Lebanese nursing students. EMHJ-Eastern Mediterranean Health Journal, 18 (4), 346-352, 2012. 2012.
7. Amu EO, Bamidele JO. Prevalence of menstrual disorders among adolescent girls in Osogbo, South Western Nigeria. International journal of adolescent medicine and health. 2014;26(1):101-6.
8. Singh A, Kiran D, Singh H, Nel B, Singh P, Tiwari P. Prevalence and severity of dysmenorrhea: a problem related to menstruation, among first and second year female medical students. Indian J Physiol Pharmacol. 2008;52(4):389-97.
9. Bang RA, Baitule M, Sarmukaddam S, Bang A, Choudhary Y, Tale O. High prevalence of gynaecological diseases in rural Indian women. The lancet. 1989;333(8629):85-8.
10. Bhatia JC, Cleland J, Bhagavan L, Rao N. Levels and determinants of gynecological morbidity in a district of south India. Studies in family planning. 1997:95-103.
11. Umarji MP, GS J. Evaluation of Efficacy and Safety of a Herbal Formulation Evecare in the Management of Menstrual Irregularities: Meta-Analysis of 8 Clinical Studies.
12. Hillen TI, Grbavac SL, Johnston PJ, Straton JA, Keogh JM. Primary dysmenorrhea in young Western Australian women: prevalence, impact, and knowledge of treatment. Journal of adolescent health. 1999;25(1):40-5.
13. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. Journal of health and social behavior. 1983:385-96.
14. Rafique N, Al-Asoom LI, Latif R, Al Sunni A, Wasi S. Comparing levels of psychological stress and its inducing factors among medical students. Journal of Taibah University Medical Sciences. 2019;14(6):488-94.
15. Strine TW, Chapman DP, Ahluwalia IB. Menstrual-related problems and psychological distress among women in the United States. Journal of women's health. 2005;14(4):316-23.