

Ascertaining the Level of Psychological Effects of Delayed Menstrual Period among Female Students in Tertiary Institutions in South-South, Nigeria

Gbaranor, K. B.^{1*}, Dickson, I. C.², Okocha, A. N.², Mube, W. A.³, Ile, V. I.², Kinako, S. E.⁴, Dimkpa, B. M.⁵, Oluoha, R. U.⁶, Kue, D. S.⁷, Dimkpa, C. R.⁸, Chris-Biriowu, H. I.¹, George, A. F.⁹, Nwogu H. C.⁹, Pepple, B. G.¹⁰

¹Department of Human Physiology, College of Medical Sciences, Rivers State University, Rivers State, South-South, Nigeria

²Department of Family Medicine, College of Medical Sciences, Rivers State University, Rivers State, South-South, Nigeria

³Department of Obstetrics and Gynaecology, University of Port Harcourt Teaching Hospital, Rivers State, South-South, Nigeria

⁴Department of Anatomical Pathology, College of Medical Science, Rivers State University, Rivers State, South-South, Nigeria

⁵Department of Community Medicine, University of Port Harcourt Teaching Hospital, Rivers State, South-South, Nigeria

⁶Department of Community Medicine, College of Medicine and Health Sciences, Imo State University, Imo State, Nigeria

⁷Department of Surgery, College of Medical Sciences, Rivers State University, Rivers State, South-South, Nigeria

⁸Department of Paediatrics and Child's Health, College of Medical Sciences, Rivers State University, Rivers State, Nigeria

⁹Department of Anaesthesia, College of Medical Sciences, Rivers State University, Rivers State, Nigeria

¹⁰Department of Nursing Sciences, College of Medical Sciences, Rivers State University, Rivers State, Nigeria

DOI: [10.36348/sjimps.2023.v09i10.001](https://doi.org/10.36348/sjimps.2023.v09i10.001)

Received: 18.08.2023 | Accepted: 23.09.2023 | Published: 02.10.2023

*Corresponding author: Gbaranor, K. B

Department of Human Physiology, College of Medical Sciences, Rivers State University, Rivers State, South-South, Nigeria

Abstract

Menstrual period is a monthly activity that every woman who has attained the age of puberty experienced. It is a natural process and when it does not show or come, the woman in question will be worried and until the root cause of the delayed or stoppage is known and if possible, rectify the cause of the abnormally, the woman will not be happy. The aim of the study is Ascertaining the Level of Psychological Effects of Delayed Menstrual Period Among Female Students in Tertiary Institutions in South South, Nigeria. The study was a cross-sectional study and a total of 250 female students within participated in the study. A well-structured questionnaire was distributed to each participant by the research assistant after consent was granted by the participants. The study was carried out in the six States that make up South-South Geopolitical Zones and it lasted for a period of 3 months. The findings revealed that 243(97.20%) of the participants affirmed being depressed as a result of delayed menstrual period while 7(2.80%) disagreed being depressed due to delayed menstrual period. Also, 240(96.00%) of the respondents isolated themselves due to delayed menstrual period. The results shows that 238(95.20%) of the respondents were ashamed due to delayed menstrual period and 239(95.60%) were deeply thinking. The research revealed that 240(96.00%) of the participants agreed that delayed menstrual period affects their academic performance and 243(97.20%) of the respondents worried about the delayed in their menstrual period. The data were analysed using SPSS version 23 and $P < 0.05$ was said to be significant.

Keywords: Ascertaining, Level, Psychological, Effects, Delayed, Menstrual Period.

Copyright © 2023 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Adolescent age is a difficult phase where many physiological and psychological changes take place. Most of mental health disorders remain unnoticed due to negligence and ignorance on part of their parents (Sivagurunathan *et al.*, 2015).

Ladies experience several stressors, that could be attributed to studies, peer pressures, bad habits, and these may cause deleterious effect on their physical as well as mental health (Nishu *et al.*, 2020). Adolescent

girls, while going through puberty and meet changing expectations of others and cope with feelings that may be new to them. There are various sexual and reproductive problems faced by girls in this age (Mmari and Sabherwal, 2013). Majority of these problems remain unaddressed and unnoticed because of various factors such as inadequate knowledge, familial conditions, hesitancy of revealing problems to family members, and many other environmental and social factors (Mmari and Sabherwal, 2013; Sommer and Mmari, 2015; Salam *et al.*, 2016).

Female reproductive system is characterized by regular cyclic changes known as menstrual cycle. First menstruation (menarche) commonly occurs at a mean age of 13 years (range 11–15 years) (Dutta' 2013). Menstruation is cyclical bleeding from uterus due to shredding of its endometrial wall, which lasts for an average of about 4–7 days and among two-third of women, average cycle observed is of 21–35 days (Salhan 2011).

Abnormal menstrual pattern can manifest as either HMB or irregular menstruation. In many cases, immaturity of hypothalamic-pituitary-ovarian axis or hormonal conditions like polycystic ovarian syndrome leading to anovulatory cycles are underlying cause for HMB (Davila and Alderman, 2000).

Duration and regularity of menstrual cycle are influenced by several factors, including sociodemographic profile, psychosocial stress, disturbed sleep level, strenuous physical exercise, diet, etc (Rafique and Al-Sheikh, 2018; Singh *et al.*, 2015; Ansong *et al.*, 2019; Rupa *et al.*, 2013; Tada *et al.*, 2017; Kansal *et al.*, 2016). Unhealthy lifestyle is also a major risk factor for menstrual abnormality (Nishu *et al.*, 2020). Previous study by Gbaranor *et al.*, (2020) revealed that, desired, delayed conception may be due to several factors and some of these factors appear commoner with a certain group of women

MATERIALS AND METHOD

A cross-sectional study was carried out among female students who have attained puberty in tertiary institutions in the six States that make up South-South zone of Nigeria. The study lasted for three months and 250 female students participated with age ranges between 15-19, 20-24, 25-29, 30-34, 35-39, and greater than 40 The questionnaires were well structured and each participant was given a questionnaire to respond to questions on the questionnaire after a well-informed consent was granted. Statistical analysis of data was done using SPSS Version 23 and P value < 0.05 was considered significant for data.

RESULT

The results of psychological effects of delayed menstrual period among the respondents showed that 97.20% agreed being depressed as a result of delayed menstrual period while 2.80% were not being depressed due to delayed menstrual period (Table 1). The study revealed that 96.00% of the participants isolated themselves due to delayed menstrual period while 10(4.00%) said NO, that they do not isolate themselves due to delayed menstrual period (Table 2). Also, results of the study shows that 95.20% respondents were ashamed due to delayed menstrual period (Table 3). The research findings revealed that 95.60% of the respondents agreed that delayed menstrual period affects their level of thinking (Table 4). 96.00% respondents said that delayed menstrual period affects their academic performance (Table 5). 97.20% of the respondents were worried due to delayed menstrual period (Table 6).

Table 1: Depression due to depressed menstrual period

Depression	Frequency	Percent (%)
YES	243	97.2
NO	7	2.8
Total	250	100.0

Table 2: Isolate due to delayed menstrual period

Isolation	Frequency	Percent (%)
YES	240	96.0
NO	10	4.0
Total	250	100.0

Table 3: Respondents ashamed of themselves due delayed menstrual period

Shame	Frequency	Percent (%)
YES	238	95.2
NO	12	4.8
Total	250	100.0

Table 4: Effects on level of thinking

Effects of Delayed Menstrual period on Level of Thinking	Frequency	Percent (%)
YES	239	95.6
NO	11	4.4
Total	250	100.0

Table 5: Effect on academic performance

Effects on Academic Performance	Frequency	Percent (%)
YES	240	96.0
NO	10	4.0

Table 6: Participants worried

Worries	Frequency	Percent (%)
YES	243	97.2
NO	7	2.8
Total	250	100.0

DISCUSSION

Every healthy woman who has attained the age of puberty must experience monthly menstrual period. Regular monthly flow with no abnormality is the pride of a woman. Certain environmental, social and medical factors may hinder or interfere with the regular monthly flow, thereby causing delayed or cessation of the menstrual period. However, when a woman experience delayed or cessation of her menstrual period at a point when she was not expecting, she becomes worried or psychologically destabilized.

The study revealed that the participants experienced several psychological effects as a result of delayed in their menstrual period. The finding shows that 97.20% of the respondents were depressed due to delayed in their menstrual period. As such, this condition could affect them psychologically. Also, 96.00% of the participants isolated themselves due to delayed in their menstrual period. This isolation might be due to the fact that the participants may be wondering what is really responsible for the delayed. Again, majority of the participants were ashamed of themselves and could not boldly speak out. The research revealed that greater percentage of the of the participants have their level of thinking distorted due to delayed in their menstrual period.

The research revealed that delayed in menstrual period affected majority (96.00%) of the participants' academic performance. The participants are students and they are confused why they are not seeing their period and this alone could affect their level of intelligence. Also, 97.20% of them were worried due to delayed in their menstrual period. The participants are female students who might not know the cause of delay in menstrual period and because they do not know the cause of the delayed, that could be the reason why the participants experienced psychological effects as like depression, isolation, ashamed, thinking, worried and poor academic performance. The moment you are psychologically affected due to certain factors, it's also affect virtually every part of your body and this could have severe consequences such as drug abuse and drop-out of school. When you are facing psychological problem due to unwanted issue, it could lead to several social vices such as suicide, alcohol consumption, substance abuse, and isolation. The study revealed that majority of the participants were worried because they

could not actually know the cause of the delayed in their menstrual period. It could be that some of the students might have had unprotected sex with their boyfriends during their unsafe period and did not take cognizance of that day and date. Also, majority of them were isolated and ashamed, probably because they do not know what to explain to their parents, guidance or friends and this self-isolation could lead to suicide. Again, because they have isolated themselves from several gatherings and learning, its affect their academic performance.

CONCLUSION

Menstrual period is a monthly activity experienced by women who has attained the age of puberty. The research revealed that majority of the participants experienced psychological problems such as depression, isolation, worried, ashamed, poor level of thinking and poor academic performance and this could lead to drop-out of school, substance abuse, and suicide.

ACKNOWLEDGMENTS

We acknowledge Nazor Barinua-Gbaranor, Nuazor Victory Barinua-Gbaranor, Kedumle Success. Barinua-Gbaranor, Barinadaa Sarah Diginee and Excellent Support Global Foundation for their moral support, understanding, and encouragement during the period of research.

Funding: No funding.

Conflict of Interest: None declared. Ethical Approval: Not required.

REFERENCES

- Ansong, E., Arhin, S. K., Cai, Y., Xu, X., & Wu, X. (2019). Menstrual characteristics, disorders and associated risk factors among female international students in Zhejiang Province, China: a cross-sectional survey. *BMC women's health*, 19(1), 1-10.
- Gbaranor, B. K., Barinua-Gbaranor, N. P., Orupabo, C. D., Kalio, D. G., & Okpara, P. E. (2020). Determinants of Delayed Desired Conception among Reproductive Women of Port Harcourt. *IOSR-JDMS*, 19(3), 60-65.
- Davila, J., & Alderman, E. M. (2020). Heavy menstrual bleeding in adolescent girls. *Pediatric annals*, 49(4), e163-e169.

- Dutta's, D. C. (2013). Textbook of Gynecology. 6th ed. Delhi, India: Jaypee Publishers; p. 82.
- Kansal, S., Singh, S., & Kumar, A. (2016). Menstrual hygiene practices in context of schooling: A community study among rural adolescent girls in Varanasi. *Indian journal of community medicine: official publication of Indian Association of Preventive & Social Medicine*, 41(1), 39-44.
- Mmari, K., & Sabherwal, S. (2013). A review of risk and protective factors for adolescent sexual and reproductive health in developing countries: an update. *Journal of Adolescent Health*, 53(5), 562-572.
- Jha, N., Bhadoria, A. S., Bahurupi, Y., Gawande, K., Jain, B., Chaturvedi, J., & Kishore, S. (2020). Psychosocial and stress-related risk factors for abnormal menstrual cycle pattern among adolescent girls: A case-control study. *Journal of Education and Health Promotion*, 9.
- Rafique, N., & Al-Sheikh, M. H. (2018). Prevalence of menstrual problems and their association with psychological stress in young female students studying health sciences. *Saudi medical journal*, 39(1), 67-73.
- Veena, K. S., Subitha, L., VR, H. K., & Bupathy, A. (2013). Menstrual abnormalities in school going girls—are they related to dietary and exercise pattern?. *Journal of clinical and diagnostic research: JCDR*, 7(11), 2537-2540.
- Salam, R. A., Faqqah, A., Sajjad, N., Lassi, Z. S., Das, J. K., Kaufman, M., & Bhutta, Z. A. (2016). Improving adolescent sexual and reproductive health: a systematic review of potential interventions. *Journal of adolescent health*, 59(4), S11-S28.
- Salhan, S. (2011). Physiology of menstruation. Textbook of Gynecology. 1st ed. Delhi, India: Jaypee Publishers; p. 56.
- Singh, R., Sharma, R., & Rajani, H. (2015). Impact of stress on menstrual cycle: a comparison between medical and non medical students. *Saudi J Health Sci*, 4(2), 115.
- Sivagurunathan, C., Umadevi, R., Rama, R., & Gopalakrishnan, S. (2015). Adolescent health: present status and its related programmes in India. Are we in the right direction?. *Journal of clinical and diagnostic research: JCDR*, 9(3), LE01-6.
- Sommer, M., & Mmari, K. (2015). Addressing structural and environmental factors for adolescent sexual and reproductive health in low-and middle-income countries. *American journal of public health*, 105(10), 1973-1981.
- Tada, Y., Yoshizaki, T., Tomata, Y., Yokoyama, Y., Sunami, A., Hida, A., & Kawano, Y. (2017). The impact of menstrual cycle phases on cardiac autonomic nervous system activity: an observational study considering lifestyle (diet, physical activity, and sleep) among female college students. *Journal of nutritional science and vitaminology*, 63(4), 249-255.