

Original Research Article

Evaluating the Economic Impact of Delayed Menstrual Period on the Family of Affected Female Students in South-South Nigeria

Gbaranor K. B.^{1*}, Ureh Aadaeze C.², Adjugah J. U.³, John E. E.⁴, Barinua-Gbaranor N. P.⁵, Mube-William E. C.⁶, Monday N. S.⁷, Ekeng O.⁸, Opara J. C.⁹, Etuk M. S.⁴, Okoish, O. S.⁴, Nmerukini C.¹⁰, Amachree E. E.¹⁰, Moses M. F.¹¹, Kinanen, D. L.¹², Woke H. A.¹³, Ogbor-Omorie O. V.¹²

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

²Ministry of Health, Rivers State, South-South, Nigeria

³Department of Family Medicine, University of Port Harcourt Teaching Hospital, Rivers State, South-South, Nigeria

⁴Department of Obstetrics and Gynaecology, University of Uyo Teaching Hospital, Akwa Ibom State, South-South, Nigeria

⁵Department of Office and Information Management, Faculty of Administration and Management, Rivers State University, Rivers State, South-South, Nigeria

⁶Department of Agriculture Extension and Development Studies, Faculty of Agriculture, University of Port Harcourt, Rivers State, South-South, Nigeria

⁷Cardinal Care Hospital and Maternity, Abuja

⁸Department of Anaesthesia, Nile University, Abuja, Nigeria

⁹Department of Community Medicine, PAMO University of Medical Sciences, Port Harcourt, Rivers State, Nigeria

¹⁰Department of Internal Medicine, College of Medical Sciences, Rivers State University, Rivers State, South-South, Nigeria

¹¹Procure Hospital, Abuja

¹²Department of Emergency Medicine, University of Port Harcourt Teaching Hospital, Rivers State, South-South, Nigeria

¹³Rivers State Primary Health Care Management Board, Rivers State, South-South, Nigeria

Article History

Received: 02.06.2025

Accepted: 19.07.2025

Published: 28.07.2025

Journal homepage:

<https://www.easpublisher.com>

Quick Response Code



Abstract: Delayed in menstrual period is a concern among ladies and this delayed have called the attention of parents to ascertain the caused. In course of finding a solution to this reproductive issue, the family spent a lot of money to get a solution and this may have led the family to face financial problem. This research is to Evaluate the Economic Impact of Delayed Menstrual Period on The Family of Affected Female Students in South-South Nigeria. Sample size for the study was 250 and participant were randomly selected and the questionnaire were issued to the participants to fill and return it to the researcher. Data was analyzed with SPSS version 26 and P value < 0.05 was considered significant. The results revealed that 98.4% of the participants agreed that delayed menstrual period have economic impact on the family, 96.0% took family's attention, 96.0% borrowed money and 94.4% of the family finds it difficult to meet up with its needs. Delayed in menstrual period among students of tertiary institutions have brought economic hardship to families of those students facing the delayed.

Keywords: Evaluating, Economic, Impact, Delayed Menstrual Period, Family, Affected.

Copyright © 2025 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

Menstrual period is a normal and significant process that every female who have attained the age of puberty must experience in life and it is a monthly process. However, delayed in having this normal process every monthly is a concern. Several factors may be responsible for delayed menstrual period experienced by females (Gbaranor *et al.*, 2024). Menstrual cycle is a process that every woman who have attained puberty must undergo and this occur monthly in a normal physiological pattern unless in some cases were certain factors may halt the monthly process (Gbaranor, *et al.*, 2022).

This cycle varies in individual in duration of flow, length of cycle, pattern of flow (scanty, moderate or heavy with or without clot). Virtually every woman who have attained puberty and she has started menstrual period will experience certain physiological changes in her body. These changes may occur before or during the menstrual cycle (Gbaranor, *et al.*, 2022). The length and regularity of menstrual cycles reflect changes in ovarian steroid production (Kato *et al.*, 1999; Harlow SD and Ephross SA, 1995). If an undetected pregnancy and loss occurs, menstrual cycle length may be misclassified if self-reported information is used alone (Harlow SD and Matanoski GM, 1991). Physical activity of many hours

per week has been shown to be associated with an increased cycle length, which could be due to a dampening of FSH pulses during the luteal follicular transition, leading to delayed maturation of the next cohort of follicles (Akaike H. A, 1974).

Menstrual period is a natural process that occur monthly in a female after the attainment of puberty and it is the pride of a woman. This natural process is stimulated and aided by hypothamo-pituitary- gonadal axis (HPGA) and any disruption in this pathway will interfere with the normal menstrual flow and if this happened then, it becomes a problem with the lady in question (Gbaranor *et al.*, 2024). The hypothalamus produces the gonadotropin releasing hormone that function to stimulate the anterior pituitary gland to produce the gonadotropic hormones (Follicle stimulating hormone (FSH) and Luteinizing hormone (LH) which enhance the follicular growth and then lead to ovulation (Gbaranor *et al.*, 2024). Disruption in the gonadotropic hormones may lead to anovulation and this may induce delay in menstrual period. However, students in tertiary institutions are facing delayed in their monthly menstrual period and this call for concern among them and their peers (Gbaranor *et al.*, 2024). This delayed could be attributed to certain factors that may not be known to the students unless certain radiological or laboratory

investigations are carry out to ascertain the cause of the delay (Gbaranor *et al.*, 2024).

MATERIALS AND METHOD

This is a cross-sectional study involving 250 female students who are within the age of 18 to 42 years. A well-structured questionnaire was administered to participants. Each participant had one questionnaire to fill appropriately and independently after a well-informed consent was granted. The study lasted for a period of 2 months. Statistical analysis of data was done using SPSS Version 25 and P value < 0.05 was considered significant for data.

RESULTS

The study showed that 246(98.4%) of the participants agreed that delayed menstrual period have economic impact on the family (Table 1), 240(96.0%) of the participants said that delayed menstrual period takes their family’s attention (Table 2). The result of economic impact of delayed menstrual period on the family also indicated that 240(96.0%) of the respondents agreed that delayed menstrual period causes their family to borrow in order to rectify the situation (Table 3). The study also revealed that 236(94.40%) of the respondents agreed that due to delayed menstrual period, the family finds it difficult to meet up with its needs (Table 4).

Table 1: Economic Impact of Delayed Menstrual Period on the Family

Family Income	Frequency	Percent (%)
It has economic implication	246	98.4
Do not have economic implication	4	1.6
Total	250	100.0

Table 2: Takes family’s attention

Family attention	Frequency	Percent (%)
It took family’s attention	240	96.0
It does not take family’s attention	10	4.0
Total	250	100.0

Table 3: Family who’s borrowed in order to rectify the situation

Family Borrowing	Frequency	Percent (%)
Family who’s borrowed	240	96.0
Family who did not borrowed	10	4.0
Total	250	100.0

Table 4: Family needs

Family Needs	Frequency	Percent (%)
Family able to meet up its needs	14	5.6
Family not able to meet up its needs	236	94.4

DISCUSSION

Delayed in menstrual period is a concern among ladies and this delayed have attracted the attention of parents to ascertain the caused. In course of finding a solution to this reproductive issue, the family spent a lot of money and time to get a solution and this may have led the family to face financial problem. Menstrual cycle

is one of the key parameters of female reproductive system and this parameter must be seen regularly in a healthy female. Delayed in seeing monthly menstrual cycle could be due to several factors that require certain investigations and these investigations need money and this money will be provided by the family. The economic impact of a delayed menstrual period on a family differs

especially the cause of the delay and the socio-economic conditions it pose on the family.

The study revealed that majority (98.4%) of the participants agreed that delayed menstrual period has economic impact on the family and these financial implications could be arising from different areas. It could be from unplanned pregnancy where prenatal care and childbirth will require significant expenses for doctor visits, supplements, delivery, and postnatal care. It could also be from loss of income where the mother or breadwinner stop work to care for her grandchild or financial commitments for child's food, clothing, education, and healthcare. The economic impact on the family due to delayed menstrual period may take it toll from developing psychological issues like depression, anxiety or stress and this may affect job performance or decision-making within the household. Again, economic implication could also arise from medical expenses such as pregnancy tests, blood tests and radiological investigations, consultations with general practitioners or specialists. Medication or treatments will be required if the delayed menstrual period is due to hormonal imbalances, polycystic ovarian syndrome (PCOS), thyroid issues, or other medical conditions, treatment may be expensive and this will have impact on the family. Furthermore, if the participant or young woman experiences an unplanned pregnancy, her education may be interrupted and this may lead to long-term economic consequences due to reduced earning potential of the guardians.

Also, 96.0% of the participants said that delayed menstrual period takes their family attention as to know the exact cause of the delayed and this may force the family to support medical checkups or consultations, monitor diet, stress, and lifestyle and this may lead to temporary shifts in family priorities or routines thus, given attention to the delayed in menstrual period. When delayed menstrual period occur in lady while in school, the parents may be focused or attentive or anxious, putting into consideration early pregnancy or reproductive health problems.

Again, majority (96.0%) of the participants agreed that their family embarked on borrowing to address the cause of delayed menstrual period. Borrowing money to address the cause of delayed menstrual period may happen where access to reproductive healthcare is limited or where abortion is restricted, expensive, or stigmatized and this act of borrowing rely on the cultural, legal, and socioeconomic background of the extended family or community. Also, this borrowing may occur in order to visit a doctor or clinic, do pregnancy test, pay for laboratory or radiological investigations, if a family suspects that the delay may be due to pregnancy or a health issue. In communities or regions where abortion is illegal or restricted, mothers or guardians may need to travel with their children's long distances or go to private clinics in

order to terminate unplanned and unwanted pregnancy and this might lead the families into borrowing money to cover the expense. In some communities, families might borrow money to pay for traditional or herbal treatments believed to delay menstruation often without confirming pregnancy. In communities or cultures where out-of-wedlock pregnancy is stigmatized or prohibited, a delayed period could create panic. Thus, urgency to correct the situation might lead to borrowing money for medical attention.

Family needs are very important to sustain the family. However, the study revealed that majority of the families could not meet up their needs due to economic implications of delayed menstrual period among students of tertiary institutions in South-South, Nigeria. Delayed menstrual period may affect a family's needs, mostly where reproductive health issues are tied to social, economic, or cultural pressures. Most of the parents took their child to health centers, pay consultations fees and do tests to ascertain the cause of the delayed and this diverted the family's finance that was meant for economic purpose for medical attention, thus affected the family's needs. In some communities or culture, a delayed menstrual period in an unmarried woman or lady, is a taboo and could cause stress, shame, or family conflict. Families may take action to protect reputation, such as arranging a rushed marriage, seeking discreet medical help and moving the girl away temporarily and this require finance. Again, if the delayed menstrual period indicates a pregnancy, especially in a student, the family might redirect resources (money, time, caregiving) to support the child or potential baby or pregnancy may force the family to plan for prenatal care, prepare for a new baby (housing, supplies, caregiving) and rearrange living arrangements and this could affect family's needs.

CONCLUSION

The study revealed that delayed menstrual period has economic impact on the family by absolutely draw the attention, emotional energy, and practical involvement of a family especially when delayed menstrual period is due to health conditions or unplanned pregnancies, thus, leading to ongoing family focus and involvement. The study also revealed that delayed menstrual period especially when unplanned or unexpected in a student that is yet to marry, it affects family needs across health, finances, emotional well-being, and social dynamics. In order to address the cause of delayed menstrual period, families embarked on borrowing money, change plans, or make difficult decisions.

Acknowledgments

We acknowledge Nazor Barinua-Gbaranor, Nuazor Victory Barinua, Kedumle Success Barinua, Tuamene Excellent Barinua and Excellent Support Global Foundation for their moral support, prayers,

understanding, and encouragement during the period of this research.

Funding: No funding.

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

REFERENCES

- Akaike H (1974). A new look at the statistical model identification. *IEEE Trans Automat Control*, 19: 716–23.
- Gbaranor K. B., Mube W. A., Gilbert U. D., Nonju T. I, Daka I.R, Amadi Hebinchi, Wami-Amadi C. F., Nonju I. I., Oriji E. I., Amadi N. C., Emeghara G. I., Nwosu G. N. and Ajumoke O.O (2022). Physiological Variation of Menstrual Cycle Amongst Female Students in Tertiary Institutions of Rivers State. *World Journal Of Pharmaceutical and Medical Research*. 8(1), 17 – 20
- Gbaranor K. B., Ureh Adaeze C., Mube A. W., Adjugah J. U., Ogbonda N. P., Cookey-Gam I. F., Mgbere M., Kue B. J., Ekeng O., John E. E., Maakai B., Kinanen D. L (2024). Determinants of Delayed Menstrual Period among Students of Tertiary Institutions in Rivers State. *International Journal of Pharmaceutical and Bio-Medical Science*. Volume 04 Issue 10, p 851-857.
- Harlow SD, Ephross SA (1995). Epidemiology of menstruation and its relevance to women's health. *Epidemiol Rev.*, 17: 265–86
- Harlow SD, Matanoski GM (1991). The association between weight, physical activity, and stress and variation in the length of the menstrual cycle. *Am J Epidemiol*, 133: 38–49
- Kato I, Toniolo P, Koenig KL, et al. (1999). Epidemiologic correlates with menstrual cycle length in middle aged women. *Eur J Epidemiol*, 15: 809–14.

Cite This Article: Gbaranor K. B., Ureh Adaeze C., Adjugah J. U., John E. E., Barinua-Gbaranor N. P., Mube-William E. C., Monday N. S., Ekeng O., Opara J. C., Etuk M. S., Okoish, O. S., Nmerukini C., Amachree E. E. Moses M. F., Kinanen, D. L., Woke H. A., Ogbor-Omorie O. V. (2025). Evaluating the Economic Impact of Delayed Menstrual Period on the Family of Affected Female Students in South-South Nigeria. *East African Scholars J Med Sci*, 8(7), 291-294.
