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Ascertaining The Health Consequences of Delayed Menstrual Period Among Students of Tertiary Institutions on The Family In South-South Nigeria

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Abstract

Regular monthly menstrual period is a natural process that occur in female from pubertal stage to certain age before menopause. Delayed menstrual period among female students may pose different health consequences, indicating an underlying cause and this may have impact on both students and their immediate family. These health consequences may hinder students' academic performance. The aim of this study is Ascertaining the Health Consequences of Delayed Menstrual Period Among Students of Tertiary Institutions on the Family in South-South Nigeria. This was a descriptive study involving 250 female students in tertiary institutions who were within the age of 18 to 47 years. A well-structured questionnaire was administered to participants. Each participant had one questionnaire to fill appropriately and independently after instructions were given to them by the Research Assistants. The study lasted for a period of 3 months (April to June, 2024). Data was analyzed with SPSS version 26 and P value < 0.05 was considered significant. Exclusion criteria were those females who are not student. Inclusion criteria are female students that have attained menarche. Results from the study revealed some of the health consequences of delayed menstrual period observed emanated from hormonal imbalance, stress, pregnancy, nutritional disorders, underlying reproductive issues and being on certain medications. Again, 85% of the students had abortion due to unwanted pregnancy, 65% had PID, 25% ectopic pregnancy, 78% had anaemia from bleeding, 65% experienced pains, 55% experienced sycopal attacks, 75% had irregular menstrual period, 85% had weight gain, and 67% experienced body weakness.

Keywords: Ascertaining, Health, Consequences, Delayed, Menstrual Period, Institutions

Introduction

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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 (Gbaranor, et al., 2024). This natural process is stimulated and aided by hypothalamo-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 (Gbaranor, et al., 2024). 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). 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). Dennerstein, et al, 1997; Harlow et al, (1991), revealed that overweight is associated with the occurrence of long cycles in college women. Alcohol consumption has shown to be associated with a reduction in long cycles in young women (Cooper et al, 1996) and changes in hormone dynamics (Reichman et al, 1993; Mendelson JH and Mello NK, 1988). Non modifiable factors, like ethnicity, and potentially modifiable risk factors, like smoking, physical activity. The major cause of menstrual cycle irregularity is functional hypothalamic amenorrhea linked with reduced gonadotropin releasing hormone secretion and hypothalamic–pituitary adrenal (HPA) axis dysregulation (Reindollar, et al, 1986; Loucks AB and Thuma JR, 2003; Liu JH, 1990; Berga S and Naftolin F, 2012). Study, revealed that smoking could cause hypoestrogenism (Westhoff, et al, 1996) and high stress has been demonstrated to affect the HPA axis activity (Westhoff, et al, 2014). Previous study revealed that delayed in menstrual period affected majority (96.00%) of the participants' academic performance (Gbaranor, et al., 2023).

Materials and Method

This was a descriptive study involving 250 female students in tertiary institutions who were within the age of 18 to 47 years. A well-structured questionnaire was administered to participants. Each participant had one questionnaire to fill appropriately and independently after instructions were given to them by the Research Assistants. The study lasted for a period of 3 months (April to June, 2024). Data was analyzed with SPSS version 26 and P value < 0.05 was considered significant.

Exclusion criteria were those females who are not student.
Inclusion criteria are female students that have attained menarche.

Results

Results revealed that 85% of the students had abortion due to unwanted pregnancy (Table 1), 65% had PID (Table 2), 25% ectopic pregnancy (Table 3), 78% had anaemia from bleeding (Table 4), 65% experienced pains (Table 5), 55% experienced sycopal attacks (Table 6), 75% had irregular menstrual period (Table 7), 85% had weight gain (Table 8) and 67% experienced body weakness.

Table 1: Participants who had abortion

	Frequency	Percent (%)
Participants who had abortion	213	85

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Participants who do not have abortion	37	15
Total	250	100.0

Table 2: Participants who had pelvic inflammatory disease (PID)

	Frequency	**Percent (%)**
Participants who had PID	162	65
Participants who do not have PID	88	35
Total	250	100.0

Table 3: Participants who had ectopic pregnancy

	Frequency	**Percent (%)**
Participants who had ectopic pregnancy	63	25
Participants who do not have ectopic pregnancy	187	75
Total	250	100.0

Table 4: Participants who had anaemia from bleeding

	Frequency	**Percent (%)**
Participants who had anaemia	195	78
Participants who do not have anaemia	55	22
Total	250	100.0

Table 5: Participants who experienced pains

	Frequency	**Percent (%)**
Participants who experienced pains	163	65
Participants who do not experienced pains	87	35
Total	250	100.0

Table 6: Participants who experienced syncopal attack

	Frequency	**Percent (%)**
Participants who experienced syncopal attack	138	55
Participants who do not experienced syncopal attack	112	45
Total	250	100.0

Table 7: Participants who had irregular menstrual period

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	Frequency	Percent (%)
Participants who have irregular menstrual period	188	75
Participants who do not have irregular menstrual period	62	25
Total	250	100.0

Table 8: Participants who have weight gain

	Frequency	Percent (%)
Participants who have weight gain	213	85
Participants who do not have weight gain	37	15
Total	250	100.0

Discussion

Regular monthly menstrual period is a natural process that occur in female from pubertal stage to certain age before menopause. Delayed menstrual period among female students may pose different health consequences, indicating an underlying cause and this may have impact on both students and their immediate family. These health consequences may hinder students' academic performance.

The study revealed that majority of the participants had abortion due to unwanted pregnancy and this shows the participants (female students) are sexually active and as such had delayed menstrual period due pregnancy. The aftermath of unwanted pregnancy mostly when are a student or single is termination of the unwanted pregnancy which may have serious health consequences on the participants. Early pregnancy symptoms such as nausea, breast tenderness, and fatigue may occur.

Also, 65% of the participants had pelvic inflammatory disease (PID) and this could be as a result of the termination of the unwanted pregnancy. PID is a serious health condition especially to a young female in their early reproductive age. Infections in the reproductive organs can cause irregularities in the menstrual cycle and this could lead to complications like infertility or chronic pelvic pain.

Again, 25% of the participants had ectopic pregnancy and this could also be arisen from attempt to remove unwanted pregnancy. Majority (78%) of the participants had anaemia from bleeding and this bleeding could be from the termination of unwanted pregnancy thus leading to the development of anaemia. Most of these of termination of unwanted pregnancy may be done in an unauthorized facility with unskilled health personnel. Furthermore, 65% of the participants experienced pains and this could be from retained product of conception due to the termination of unwanted pregnancy.

Syncopal attacks is another health consequences experienced by the participants and could be from excessive bleeding and 55% of them have this condition and 75% of the participants had irregular menstrual period and 85% were on birth control pills. Again, because majority of the participants were on birth control pills, it could be the reason why most of the participants have irregular period. hormonal contraceptives can lead to delayed or missed periods. The study also revealed that majority (85%) of the participants had weight gain and this weight gain may be from the termination of unwanted pregnancy by these young females who are still living in an academic environment and 67% experienced body weakness.

Also, high levels of stress could affect the hypothalamus, the part of the brain that regulates hormones responsible for the menstrual cycle. Chronic stress can lead to irregular or absent periods and may increase the risk of mental health issues like anxiety and depression. Hormonal imbalances experienced by the participants may be related to chronic amenorrhea (like low estrogen) can increase the risk of cardiovascular disease.

Conclusion

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Regular monthly menstrual period is a natural process that occur in female from pubertal stage to certain age before menopause. Delayed menstrual period among female students may pose different health consequences, indicating an underlying cause and this may have impact on both students and their immediate family. These health consequences may hinder students' academic performance. Delayed menstrual period among female students may pose different health consequences, indicating an underlying cause and this may have impact on both students and their immediate family. The study revealed hormonal imbalance, PID, syncopal attacks, ectopic pregnancy, unwanted pregnancy, pains, bleeding, weight gain and body weakness are the health consequences experienced by the participants facing delayed menstrual period.

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