



## Knowledge And Impact Of Analgesics Drug On Menstrual Period Of Female Nursing Students Of Igbinedion University Okada, Ovia North East , Edo State, Nigeria.

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### ABSTRACT

Menstruation is normal process in a girl's transition to womanhood. Lack of awareness thereof, before menstruation and stigmatizing menstrual hygiene management (MHM) perception and experiences predominate in low resource economies and it influences attitude. The main objective of this study is to assess the knowledge and impact of analgesics drug use on menstrual period of female nursing students of Igbinedion University Okada Edo state Nigeria. A descriptive research design was used for this study. Multistage sampling technique was adopted for this study. The study was conducted by means of a well-structured questionnaire. It was revealed from the findings that majority of the respondent 90% are informed about analgesics drugs use during menstruation. Majority of the 100% respondent agreed that their mother informed them about menstruation. Almost, 98% of the respondent said it is necessary for female adolescent to experience menarche. It can easily be deduced that a large number of female adolescents are knowledgeable about menstrual pain and menstrual cycle and larger percentage of female students were not happy with themselves during menstrual period because of the discomfort they used to have. It was recommended that there should be a form of sensitization for the female students on the need to overcome menarche stress and anxiety that associated with menstruation.

**Keywords: Analgesic drugs, Menstruation and Menstrual Cycle**

### I. BACKGROUND OF THE STUDY

Menstruation is natural procedures in a girl's transition to womanhood. Lack of awareness thereof, before menstruation and stigmatizing menstrual hygiene management (MHM) perception

and experiences predominate in low resource economies and influences attitude (Swenson, 2018). Most females see menstruation as a blessing and a curse. A blessing in the sense of proper enlightenment by their parents, guardians and the society and a curse due to the ignorance of limited knowledge about the experience of their first menstruation which signifies the flourishing age of adolescent girls into adulthood (Swenson, 2018).

Analgesics are among the most commonly used medications and proper use is considered safe and effective (Hancock et al., 2020). According to a 2018 US survey of ambulatory adults, OTC analgesics are the most frequently used individual products among U.S. Food and Drug Administration-regulated medications, with 17–23% of the population using such medications in a given week (Kaufman et al., 2020). Furthermore, women reported greater OTC analgesic use than men (Kaufman et al., 2020; Koushede et al., 2020) but analgesic use across the menstrual cycle and the effects of OTC analgesics on hormones and ovulatory function in premenopausal women have not been investigated. Given that OTC analgesics are readily available, commonly used to treat dysmenorrhea, and little is understood about their potential effects on reproductive function, we sought to investigate both the acute and chronic effects of daily-measured OTC analgesic use on reproductive hormones and ovulatory function in healthy, eumenorrheic, premenopausal women with carefully timed, repeated measures of blood hormone concentrations across the menstrual cycle.



Adolescents are aged between 10 and 19 years and constitute one-sixth of the world's population (WHO, 2019). Adolescence signals the transition from childhood, to adulthood, and associated with rapid pubertal development and sexual maturation (Kaur, 2018). During pubertal development, psychological, cognitive, hormonal and physical changes occur with diverse variations in individuals, because of environmental, nutritional and genetic factors (Fatunmbi, 2017). Adolescence heralds menstruation, a rite of passage for girls that signals the transition to womanhood (Coast, 2019). The menstrual cycle has three phases; the follicular, ovulation and luteal (secretory) phases, regulated by hormones (Kaur, 2018). Menstruation sheds two-thirds of the endometrial lining. The intensity and duration of menstrual flow vary (between 3-5 days and occasionally up to seven days) in individuals and at different life phases. The resultant waste during menstruation is termed menses, periods, or monthly bleeding that need to be considered and managed with dignity (Aburshaid, 2017).

The onset of menstruation represents a landmark event in pubertal development of the adolescent girl. Menstruation, and the menstrual cycle are characterized by variability in volume, pattern and regularity, which at the earlier stages of the development of the adolescent can create emotional discomfort particularly to the poorly informed girl. Studies have shown that although most girls viewed themselves as being prepared for menstruation, having 'discussed this with their mothers', obvious misconceptions on the true physiological process and characteristics of menstruation and the menstrual cycle is evident from these studies (Abiyoye-Kuteyi, 2018). There is a tendency for girls to associate a variety of negative physical and psychological changes on their body with menstruation — a situation found to be more marked in blacks compared to white girls. This may indicate an imbibition and internalization of cultural myths and stereotypes associated with menstruation in many cultures which undoubtedly influence menstrual practices amongst girls in these cultures — particularly amongst those who had no formal education on reproductive biology (Drakshayani, 2019). This study has been undertaken amongst nursing student of Igbinedion University Okada, Edo State Nigeria to determine their attitudes towards menstruation with a view to identifying information and practice gaps, and misconception on menstruation requiring address. This was expected to enable the incorporation of correct and appropriate information on menstruation and menstrual practices into the reproductive health education

programmes of school of nursing in Nigeria. Statement of the problem; This study will fill a gap in the literature within the Nigerian context by investigating the attitudes and beliefs of the experience of menstruation thereby, adding to the body of knowledge. Furthermore, this study will provide a contextual and theoretical understanding of menstruation in Nigeria, particularly Southern Nigerian women's attitudes and beliefs of the experience of menstruation. Literature highlights how the negativity surrounding menstruation and menstruation is a product of socio-cultural processes and cultural attitudes, possibly resulting in a form of social control over women (Chadwick, 2018). The medicalization of the female reproductive body also raises issues of social control, negative attitudes towards menstruation, as well as restrictions and secrecy surrounding women and menstruation. These issues are, in turn, assaulting women psychologically, degrading their self-esteem, and creating a feeling of shame, thus highlighting the need to explore the factors associated with the attitudes and beliefs of the experience of menstruation within the West African context especially Nigeria. Studying menstruation may provide the opportunity to trace the patterns of modernized patriarchal domination over women's reproductive bodies and experiences (Cindoglu & Sayan-Cengiz, 2010). It may also provide an understanding of the factors that contribute to the attitudes and beliefs associated with menstruation, and the implications of menstrual symptoms on emotional and physical wellbeing, which is fundamental to the promotion of menstrual health (Wong & Khoo, 2019). Since very little attention has been given to the Edo state context, this study aimed to bring to light the factors present in nursing student of the experience of the use of analgesic drugs on menstruation in Igbinedion University, Okada Nigeria, West Africa.

## II. METHODOLOGY

A descriptive research design was used for this study to determine the knowledge and impact of analgesic drug use on menstrual period of female Nursing students of Igbinedion University Okada. Research Setting was Igbinedion University Okada, a small community in Ovia North East Local Government Area of Edo state Nigeria. The target population consists of 490 nursing students in Igbinedion University Okada, Edo State. Multistage sampling technique was adopted for this study. The sample size was determined using Yamane formula. The researcher used a confidence level of 0.10.



Sample size of 100 students was used for the study. Instrument for data collection by means of a well-structured questionnaire. The questionnaire was designed by the researcher. The questionnaire consists of 20 closed ended questions organized into 3 sections as follows: ABC

The instrument was scrutinized by my supervisor who critically assessed the relevance of various items in the questionnaire to establish fact and content validity.

An instrument is said to be reliable if there is consistency of measurement. The reliability of the instrument was achieved through test and retest method.

**Method of**

**Data Collection** Permission for data collection was obtained from the school management and the head of department of Nursing. The questionnaire was distributed to selected 100 participants; All the students are taught in English language and this made the understanding of the questionnaire very easy. Methods of Data Analysis, the researcher used statistical package for social science (SPSS) version 17.0 and results were presented using descriptive statistical tools such as frequency, percentages, tables, at 0.05 level of significance.

Ethical permission was gotten from the university ethical committee to carry out the study.

**III. DATA ANALYSIS**

The collected data were analyzed using descriptive statistics in IBM SPSS Statistics software Version 23x86.

Results

**Socio-Demographic Characteristic**

The questionnaires administered at random were completed by 100 nursing students of Igbinedion University Okada. In terms of the age distribution of the respondents in Table 1: 90% of the respondents were 17-18 years and above, while 10% of the respondents were 14-16 years of age. Religion distribution of the respondents in Table 2: shows that 80% of the respondents were Christians, 13% were muslim, 3% were traditional and 2% belongs to other religions. However 2% of the respondents fail to indicate their religion. In Table 3: the tribal distribution

of the respondents show that 40% were Binis, 1% was Yorubas, 30% were Ibos, and 29% were from other tribes. As shown in Table 4: 71% of the respondents were not living with their parents, 25% were living with their parents and 4% failed to indicate whether they were living with their parents or not. In terms of marriage status as shown in Table 5: 88% of the respondents were single, 10% were married while 1% did not indicate whether married, single or divorced. For the state of origin distribution in Table 6: 40% of the respondent were from Edo State, 30% were from Imo State and 30% were from other states.

Table 1: Age of the correspondent

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 14-16	10	10.0	10.0	10.0
17-18 years above	90	90.0	90.0	100.0
Total	100	100.0	100.0	



**Table2:Religion ofthecorrespondent**

		Frequency	Percent	ValidPercent	CumulativePer cent
Valid	Christainity	80	80.0	81.6	81.6
	Muslim	13	13.0	13.3	94.9
	Traditional	3	3.0	3.1	98.0
	Others	2	2.0	2.0	100.0
	Total	98	98.0	100.0	
Missing	System	2	2.0		
Total		100	100.0		

**Table3:Tribeof thecorrespondent**

		Frequency	Percent	ValidPercent	CumulativePercent
Valid	Bini	40	40.0	40.0	40.0
	Yoruba	1	1.0	1.0	41.0
	Ibo	30	30.0	30.0	71.0
	Others	29	29.0	29.0	100.0
	Total	100	100.0	100.0	



Table5:MarritalStatusof thecorrespondent

	Frequency	Percent	ValidPercent	Cumulative Percent
Valid .00	1	1.0	1.0	1.0
Single	88	88.0	88.0	89.0
Married	10	10.0	10.0	99.0
11.00	1	1.0	1.0	100.0
Total	100	100.0	100.0	

Table6:Stateof originofthecorrespondent

	Frequency	Percent	ValidPercent	Cumulative Percent
Valid Edo	40	40.0	40.0	40.0
Imo	30	30.0	30.0	70.0
Others	30	30.0	30.0	100.0
Total	100	100.0	100.0	

Knowledge of female nursing students towards the use of analgesic during menstrual period

The descriptive analysis performed on the second subsection on the questionnaire (Knowledge of female nursing students towards the use of analgesic during menstrual period) in Table 8: shows that 89% of the respondent from Igbinedion University nursing students have knowledge on the use of analgesic drugs during menstrual period while 11% did not know that an analgesic drug could be used during menstrual period. In addition, 79% of the respondent indicated that their parents informed them about the use of analgesic drugs during menstrual period while 21% of the respondents agreed that they were informed by a nurse as shown in Table 9:. Moreover, as shown in Table 10: 77% of the respondents have started

using analgesic drugs before the questionnaire were administered while 23% had not started the use of analgesic drugs before the administering of the questionnaire. Table 11: shows that 32% of the respondents who have started the use of analgesics felt happy the first day of use, 13% felt afraid, 18% felt sad, 18% felt indifference while 19% did not respond to this particular question on the questionnaire. It is shown in Table 12: that 49% of the respondents experienced their first menses at the age 10-12 years old, 39% experienced theirs at the age of 13-15 years old, and 12% experienced theirs at



16 – 18 years old. On the reduction of menstrual flow with analgesic drugs as shown in Table 13:78% of the respondents agreed to the fact that analgesic drugs reduces their menstrual flow whereas 22% believe that analgesic drugs

doesnot reduce their menstrual flow. In addition, Table 14: shows that 54% of the respondents believe that the menstrual cramp is hereditary while 46% indicated that menstrual cramp is not hereditary.

Table 8: Informed about analgesic drug used during menstruation

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	89	89.0	89.0	89.0
No	11	11.0	11.0	100.0
Total	100	100.0	100.0	

Table 9: Who informed the respondent about the analgesic drug during menstruation

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Parents	79	79.0	79.0	79.0
Nurse	21	21.0	21.0	100.0
Total	100	100.0	100.0	

Table 15: Is analgesic drug necessary to reduce menstrual pain?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	87	87.0	87.9	87.9
No	12	12.0	12.1	100.0
Total	99	99.0	100.0	
Missing System	1	1.0		
Total	100	100.0		



Table 16: Is the use of local remedy better than analgesic drugs?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	77	77.0	77.8	77.8
	No	22	22.0	22.2	100.0
	Total	99	99.0	100.0	
Missing	System	1	1.0		
Total		100	100.0		

**Impact of Analgesic Drugs during menstrual period**

As shown in Table 15: 87% of the respondents believes that analgesics drug is necessary for reduction of menstrual pain, whereas 12% believed it is not necessary. 77% of the respondent are of the opinion that local remedy is better than analgesics, while 22% believe that local remedy is not better than analgesic as shown in Table 15. Table 17: shows that 89% of the respondents agreed that analgesic drug stopped their menstrual pain, whereas 10% are of the opinion that analgesic drugs do not stop their menstrual pain. Table 18 shows that 46% of the respondents accepted the fact that analgesic drug stopped their menstrual pain after 30 minutes of intake. 28% accepted that their menstrual pain stop in 1 hour after the intake of analgesic drugs. 13% of the respondents believe that their menstrual pain stop after 2 hours of taking analgesics drug. 5% believe that their menstrual pain stop at other times not 30 minutes, 1 hour, or 2 hours.

**IV. DISCUSSION OF FINDINGS**

The majority of the adolescents in the present study (90%) have good knowledge about the use of analgesic drug during menstruation as pain-relief method. Analgesic is believed to bring relief for many types of pain, but unfortunately, it is not practiced by many. It was also shown that some students (33%) avoided physical activity during their menstrual period in a study conducted by Pourslami & Ashtiani, (2020). Traditionally, in our culture, physical activity is minimized during menstruation.

Almost all students (70%) in the present study stated that they seek answers for their menstrual problems from their mothers, and this is a natural phenomenon for countries, such as Sri Lanka, where mothers and daughters generally have a good relationship. Sri Lankan society still comprises extended families to a large extent, where parental and grandparental advice is given to children. When a girl reaches puberty, males are not allowed to see her until the ceremonial bathing is done. The mother bathes the child at an auspicious time, and she is the one who looks after the child during menarche. Other sources of help were friends, sisters, healthcare providers, mass media, and teachers. None sought help from their fathers. These findings are in line with other studies, including Lee et al. (2016), who indicated that mothers are the most important people girls turn to for advice regarding menstruation, followed by friends, sisters, the mass media, teachers, and healthcare providers. The same observation was made by Gayatri et al. (2017) regarding urban Indian girls. However, Ghattargi and Deo (2018) indicated that some girls are reluctant to discuss menstrual problems, even with their mothers.

In the present study, 84% of students said that pain was a natural thing for them, and 9% believed that it would disappear after marriage. Twenty two percent admitted that they had not sought medical treatment, as they felt embarrassed to discuss their menstruation with anybody. Higher proportion (98%) of adolescents stated that Analgesics is necessary for female to reduce the experience during menses. Interestingly, bathing was perceived to affect pain, as reported



by 90% of the students in contrary to our study is the study done by Gayatri (2017) where 95% of the respondents used traditional and cultural influences by elders as their best method for staying healthy during their menses. This could be due to traditional and cultural influences by elders. Usually bathing is avoided by most girls during the first 3 days of menstruation.

### Relationship with other findings

Several researchers have expressed concerns about the observation that post-menarche girls, even when they are intellectually well prepared for menstruation, report more feelings of shame, apprehension and disgust and less pride than their pre-menarche peers (Lawal, 2019). If girls are mentally prepared for menarche, then the chances of depression or low self-esteem after experiencing menarche decrease; Ulman has reported such a finding (Ulman, 2019).

Puberty initiation rites heralding menarche are common in many cultures. Paige reflected that societies with the highest levels of social rigidity and male solidarity also have the strongest codification of menstrual taboos (Adinma, 2018). This may reflect a need to maintain clear sex roles, often by controlling women and their fertility. Social and cultural factors impact adjustment to menses and have an effect on the early experiences of menarche. Certain common features were observed, however, in that most girls reported their mothers as a principal source of information and received some limited education about menses in school with frequent emphasis on the hygienic aspects of menstruation. Since it is a very sensitive issue, girls prefer to report such things first to the woman they trust most (Ali, 2017).

This highlights the need for health education and inclusion of such topics in their school and college curricula. Education about the menarche has come a long way in the last 50 years, although it is still given in very few schools and colleges in India. However, in trying to convey menstruation as normal and natural, and in directing girls to continue with their lives as usual, we have ignored some of the nuisance aspects of menstruation. Girls are left to find these things out for themselves, perhaps contributing to post-menarche feelings of apprehension, shame and disgust. There is a need to acknowledge both positive and negative feelings about menstruation. In addition to the facts about physiology and hygiene, girls need an opportunity to talk about their reactions to body changes, looking older, growing up and parental and peer

expectations. Because girls' attitudes and ways of thinking changed during early adolescence, menstrual education needs to be an ongoing process.

### Implication to Nursing Practice;

It is already known that menstruation is a sensitive issue surrounded by social taboo and supernatural perceptions. Females, particularly adolescent girls often afraid of discussing topics related menstruation. Therefore, we recruited clinical nurses for data collection by considering that clinical nurse can have better experience to communicate people regarding sensitive topics with therapeutic relationship. It is already known that menstruation is a sensitive issue surrounded by social taboo and supernatural perceptions. Females, particularly adolescent girls often afraid of discussing topics related menstruation. Therefore, we recruited clinical nurses for data collection by considering that clinical nurse can have better experience to communicate people regarding sensitive topics with therapeutic relationship.

Limitation of the Study; There are several challenges in course of this research project work ranges from time constraints to financial constraints. The field survey poses another challenge as many of the sawmill workers refused to give their consent and some could not be reached easily. Other school activities were also a limited factor to the study.

Summary; The study was designed to assess the impact of analgesics drug on menstrual period of female nursing students of Igbin Edion University Okada. There is need for parent (mother) to educate their female child on the necessities in coping with menarche challenges.

Conclusion; Impact of analgesics drug use on menstrual period of female nursing students at the study setting was satisfactory. Negativity surrounding the menstruation which is a normal physiological process can still be improved upon by reproductive health education by individuals and society. From the findings, it can be deduced that a large number of female adolescents are knowledgeable about menstrual pain and menstrual cycle and a larger percentage of female students were not comfortable with pain that associated with menstrual period.

Recommendations; Mothers should educate their children on the importance of coping with menarche challenges which is common in girls. There should be a form of sensitization for the female students on the need to overcome menarche stress and anxiety.





Female children should develop positive view of the menarche and menstrual cycle hence it is a normal process in women.

Suggestion for further studies

More studies should be carried out on the topic to determine other factors that contributed to menarche hygiene among female students in other communities.

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