

INFLUENCE OF MENSTRUAL MIGRAINE AND PSYCHOLOGICAL TRAUMA ON THE ACADEMIC PERFORMANCE OF JUNIOR SECONDARY SCHOOL STUDENTS IN EDO STATE.

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Abstract

The aim of this study was to investigate the influence of menstrual migraine and psychological trauma on the academic performance of junior secondary school students in Edo State. Two research questions and two hypothesis was stated. Descriptive research design of the survey type was employed for this study. The population of this study comprised all Public Junior Secondary School female students (JSS1 to JSS 3 in Oredo L.G.A. A multi stage sampling techniques was used for the study. Systematic random sampling techniques was used to select (417) respondents for the study. Self-designed questionnaire validated by four experts. A correlation coefficient of 0.78r was obtained through test re-test method. Data was collected by the researcher and research assistants. Two postulated hypotheses were tested using inferential statistics of Chi-square at 0.05 alpha level of significance. The findings from the study reveal that, menstrual migraine significantly influenced class participation among junior secondary school girls in Egor L.G.A, Edo State. (cal. value =416.72 > crit. v =16.92 @ df of 9); Psychological trauma will not significantly influence ability (dizziness) among Junior Secondary school girls in Oredo L.G.A (cal. value =424.02 > crit. v =16.92 @ df of 9 Based on the findings of this study, it was concluded that there was significant influence of Menstrual Migraine and participation of students in class activities, and also psychological trauma have influence on emotional imbalance among junior secondary school students in Oredo L.G.A, Edo State. It was recommended that, functional clinic should be made available in secondary schools to attend to divers of health challenges through menstruation which affects girl's participation in class/school activities, and Health Educators, counselors and psychologist should be made available in schools to help girls cope with psychology trauma as a result of menstrual challenges

Introduction

Adolescence in girls is a period of transition from childhood to adulthood, This transition is marked with a special features and the onset of

menarche. Although menstruation is a natural process, it is also associated with lots of myths and misconception, especially in developing nations of which Nigeria is part of.

According to Kottoh (2008) menstruation is the monthly discharge of blood and cellular debris from the uterus by non-pregnant women from puberty to menopause. Discharging of blood, secretions, and tissue debris from the uterus that recurs in non-pregnant females at approximately monthly intervals following proliferative changes accompany the preceding ovulation. Muvea (2011) defines menstruation as a period or monthly discharge of blood and mucosal tissue from the inner lining of the uterus through the vagina.

Menstruation is an inevitable part of a girl life and more so an important indicator of normal physical, physiological and functional wellbeing. Menstrual problems are generally perceived as only minor health concern and thus irrelevant to the public health agenda particularly for school girl in Oredo Local Government Area of Edo State. Menstrual migraine, and psychological trauma during menstruation may have a negative effect on female education which may result in absenteeism, distraction, and decrease school attendance, and this may in turn affect academic performance of female students. Most girls missed school during menstruation as a result of pains, or the fear of blood stain which is often characterised by shame and withdrawal.

During menstruation, if the school does not have a good toilet facilities in which they can change when soaked with blood this will pose a problem. The reason is that they don't want to be stained or smell because they do not want to be embarrassed by their friends. However, when they go to school, the fear that makeshift sanitary towel may leak may disrupts their concentration and participation in class. When answering questions in most school in Oredo Local Government Area of Edo State, the students usually stand up which can cause panic and embarrassment for menstruating girls as other students particularly the opposite sex may tease them when their uniform is stained with blood. From the aforementioned problems, it can be concluded that menstruation among girls in secondary schools can cause absenteeism, poor concentration, and performance, dropping out of school, discouragement, and psychological imbalance such as nervousness anxiety fear worry and lack of coordination.

Nepal, Howkins, Bourne and Shaw (2013) reported that many girls often absent themselves from school because they worry that boys would realize their condition. Similar findings were reported by a survey carried out by Glueck, Morrison, Daniels, Wang and Stroop (2011) in which 28 percent of girls did not attend school during menstruation due to lack of cleaning facilities and that 1 in 3 girls missed all or part of a school day during their

menstrual cycle . Today, in Nigeria, menstruation is not only a health concern, it is also an educational challenges which has become a key factor militating against the country's bid to achieve the Sustainable Development Goal (SDG) of eliminating gender disparity in secondary education (Kanyike, Akankwasa & Karungi, 2005). Kirk and Garrow (2009) reported that menstruation is a major stage of puberty in girls. It's one of the many physical signs that a girl is turning into a woman. Menstruation can be confusing, just like other changes that come with puberty. Many female do not have a complete understanding of a reproductive system or what actually happens during the menstrual cycle. This can make the process seem more mysterious. Girls usually start to go through puberty between the ages of 8 and 13. Their bodies and minds change in many ways. Hormones kick off changes like growth and breast development. About 2 to 2½ years after a girl breasts begin to develop, about 6 months before she gets her first period a girl might notice an increased amount of clear vaginal discharge (African Population and Health Research Centre, 2010).

Pedro and Patricia (2014) revealed that menstrual migraine cause intense throbbing the head and this could affect girls concentration in schools and other academic activities Pedro and Patricia further stated that menstrual migraine is associated with a lower average grade among students, they further reveal that the greater the migraine the poorer the academic performance. This was similar to the findings of El-Gilany (2005) who reported that girls whose period was associated with migraine are disturbed from normal school activities (Davis & Westhoff, 2001; Liasu et al., 2008). In addition, there are physiological and symptomatic challenges that girls go through during their menstrual cycle, which also hinder their full access to education as well as stop them from fully enjoying activities with others.

For instance, before the onset of menstruation, girls can experience tension, depression, tiredness and irritability – symptoms of Premenstrual Syndrome (PMS), which affects the way girls relate to other students in school and their teachers. Thomas and Narayanan (2006) who submitted that menstruation is a physiological phenomenon experienced normally by developing girls and women and its associated with various psychological, trauma which is one of the usual gynaecological problems that affect menstruating women. The common symptoms associated with psychological trauma are irritability, fear, emotional imbalance, worries, anxiety, fatigue, depression, and difficulty in concentrating. It was reveal by Thomas, and Narayanan that psychological trauma affect students' emotional stability because when the girls are depressed or worried, it will affect their abilities to pay attention to the teacher and also concentrate in school.

According to Kulkarni and Durge (2011), menstrual blood is considered dirty and harmful, resulting in girls who are menstruating being restricted from participating in some activities for fear that they may contaminate others and the things they may touch. For instance, in most African communities, menstruating girls are not allowed to be in the kitchen to cook or to dish food, and neither are they allowed to participate in games with other young people during their menstruation period (Kissling, 2011). This in turn fosters stigma as the restrictions create the perception that menstruation is shameful and that menstrual blood is harmful. Secondary education is the form of education children receive after primary education and before the tertiary education (Basnet, 2013). The broad aims of secondary education within Nigeria's overall objectives are preparation of students for useful living within the society and for higher education (Basnet, 2013). According to Park (2005), schools are social institutions in which groups of individuals are brought together to share educational experiences and such interactions may breed positive or negative influences on learners.

According to Basnet (2013) most parents devote a lot of resources to their children's education because they believe that good academic performance will provide a stable future for them. The same authority further states that many educational authorities have sought to find out reasons for the downward trend in the academic performance of secondary school students. Most female students in secondary schools in Nigeria are daily confronted with lots of menstrual challenges such as painful menstruation, premenstrual syndrome, menstrual migraine, and which may have influence on their educational attainment (Dasgupta & Sarkar, 2008). Kirk and Sommer (2006) stressed that educational challenges are not only frustrating to the female students and the parents, but also to the broader society.

Junior secondary school education is the education children receive after completing primary education and before senior secondary education. It is worthy of note that at junior secondary school level, menstruation is a serious challenge because it is a stage that coincides with the experience of menarche (first menstruation) when most girls are just experiencing menstruation. At this level, many of them may not know how to manage menstruation in terms of knowing when it will occur, having the experiences, and how to manage it. This may pose serious challenges to girl's education attainment. There is no doubt that menstruation is a risk factor for various infections at the junior secondary school level which can cause absenteeism in school, distractions and lack of concentration in class. Health may determine one's level of educational attainment. However, with the prime focus of this

study, experiences of menstruation may also be a determinant of educational outcomes of female secondary school students (Gannon 2008).

Through the researcher interaction with students in Oredo Local Government it was observed that students usually experience menstrual migraine and psychological trauma. Menstruation can cause emotional, social and psychological problem in addition to the social effect of teasing from friends particularly from the opposite sex. This may in turn affect concentration, performance, sport participation and other educational activities both at school and at home. In a study conducted in India by Kiase (2015), it was revealed that about 52 percent of female student do not have access to clean and safe sanitary products, or clean and private space to change their menstrual clothes.

Menstruation is supposed to be personal and intimate knowledge and menstruating women and girls are supposed to be invisible and silent. Furthermore, millions of girls and women are subjects to restriction in their daily lives simply because they are menstruating. (Kaise, 2015). All these experiences may push the girl child out of school temporary or permanently. The following research questions and hypothesis were raised to guide this study;

- What is the influence of menstrual migraine on class participation among junior secondary school girls in Oredo Local Government Area?
- What is the influence of psychological trauma on emotional imbalance among junior secondary school girls in Oredo Local Government Area?
- Menstrual migraine will not have significant influence on class participation among junior secondary school girls in Oredo Local Government Area of Edo State.
- Psychological trauma will not have significant influence on emotional imbalance among junior secondary school girls in Oredo Local Government Area of Edo State.

Methods

A survey research design was adopted for this study. The Population of this study comprised of all Public Junior Secondary School female students (JSS1 to JSS 3) in Oredo Local Government Area estimated at 8497. The sample size for this study was 417 female junior secondary school students representing 10 percent of the population .Multi-stage sampling technique was used for the selection. Proportionate sampling technique was use to select 10 percent of the target population. Simple random sampling technique of fish

bow method was used to select five schools out of the nine schools. Systematic sampling technique was used to select the female junior secondary school students. This involves picking every tenth number on the register. This procedure was used to select JSS 1, 2 and 3 female students in junior secondary students in Oredo Local Government Area, Edo State.

Both face and content validity of the instrument was ascertained by three (3) experts in the Department of Health, Safety and Environmental Health Education university of Benin. Test re-test method was used to establish the reliability of the instrument. The Pearson's Product Moment Correlation coefficient Statistics was used to determine the reliability coefficient of the two administrations. The reliability coefficient of 0.78r was obtained. The consent of each respondent was sought for voluntary participation in the study. The instrument was administered with the help of two trained research assistants. Data collected was sort, collated and coded. Inferential statistics of Chi-square was used to analysed the postulated hypotheses at 0.05 alpha level of significance.

Results

Table 1: Chi-square analysis on the influence of Menstrual Migraine on class participation in class activities among junior secondary school girls in Oredo Local Government Area of Edo State.

S/N	Items	SA	A	D	SD	Row Total	Df	Cal. Value	Table Value	Remark
1	Menstruation make me to have constant headache which make me to be absent from school some days	53(12.7%)	229 (54.9%)	97 (23.3%)	38 (9.1%)	417				
2	Menstruation caused in me negative feelings and inability to think, or recall information, tension, and difficulty in understanding	51 (12.2%)	88 (21.1%)	217 (52.1%)	61 (14.6%)	417				
3	I have fever and hotness of the body whenever I am menstruating and this make it difficult for me to concentrate in class	98 (23.5%)	215 (51.6%)	69 (16.6%)	35 (8.3%)	417	9	416.72	16.92	Ho Rejected
4	Menstruation affect my visual ability and this make me not to see the board very well	35 (8.4%)	63 (15.1%)	235 (56.4%)	84 (20.1%)	417				
Column Total		237	595	618	218	1668				

@0.05 alpha level

In the table 1: above, item (1) [282 (67.6 %)], (2) [139 (33.3%)], (3)[131 (75.1%)] and (4) [98 (23.5%)] of school girls who formed the respondents agreed that menstruation causes headache and leads to inactive class participation, menstruation causes negative feelings and inability to think or recall information during menstruation, the students also agree that menstruation leads to fever and hotness of body which makes it difficult to participate in school activities also that menstruation affect their visual ability.

The findings from the analysis in the table1 shows that calculated Chi-square value of 416.72 and the table value of 16.92 with the degree of freedom of 9 at 0.05 alpha level. Since the calculated value is greater than the table value, the null hypothesis III was also rejected. This means that menstrual migraine affects class junior secondary school girls in Oredo Local Government Area of Edo State.

Table II: Chi-square analysis showing influence of psychological trauma on emotional imbalance among junior secondary school girls in Oredo Local Government Area of Edo State.

S/N	ITEMS	SA	A	D	SD	Row Total	Df	Cal. Value	Table Value	Remark
5	I feel very stressed when am menstruating and this affect my reasoning ability in school some time	71 (17.0%)	182 (43.7%)	121 (29.0%)	43 (10.3%)	417				
6	I get easily annoyed when am menstruating so I try to avoid my friends and this make makes me not to participate in some extracurricular in school	84 (20.1%)	201 (48.2%)	92 (22.1%)	40 (9.6 %)	417				
7	I experience irritability during menstruation and this affect my ability to concentrate in class	68 (16.3%)	192 (46.0%)	115 (27.6%)	42 (10.1%)	417	9	424.02	16.92	Ho Rejected
8	I experienced bad emotion during my period which affect my studying ability.	89 (21.3%)	208 (49.9%)	76 (18.2%)	44 (10.6%)	417				
	Column Total	312	783	404	169	1668				

@0.05 alpha level

In the table II: above, Item (5) [253 (60.7 %)], (6) [285 (68.3%)], (7) [260 (98.0%)] and (8) [297 (97.2%)] of school girls who formed the respondents agreed that they always feel stressed when menstruating which leads to missing school sometimes, they getting easily annoyed and avoid

friends when menstruation, experienced of irritability during menstruation affects ability concentration in class, school activities is not always interesting during menstruation.

The findings from the analysis in the table II indicated that calculated Chi-square value of 424.02 and the table value of 16.92 with the degree of freedom of 9 at 0.05 alpha level. Since the calculated value is greater than the table value, the null hypothesis is rejected. This implies that psychological trauma causes challenges of emotional imbalance among junior secondary school girls in Oredo Local Government Area of Edo State.

Discussion

The finding of the study revealed that menstrual migraine have influence on class participation because majority of the students agrees that menstrual migraine leads to fever and hotness of the body which makes it difficult to participate in school activities, it was also reveal in the analysis that the calculated Chi-square value of 416.72 and the table value of 16.92 with the degree of freedom of 9 at 0.05 alpha level. Since the calculated value is greater than the table value, the null hypothesis I was a rejected. The result of this finding supports the reports of Pedro and Patricia, (2014) who reveal that menstrual migraine cause intense throbbing on the head and this could affect girls concentration in schools and other academic activities Pedro and Patricia further stated that menstrual migraine is associated with a lower average grade among students, they further reveal that the greater the migraine the poorer the academic performance of girls. This was similar to findings of El-Gilany (2005) who reported that girls whose period was associated with migraine are disturbed from normal school activities and this can in turn affect academic performance of female students in junior secondary schools.

The result of the data as shown in table II it was revealed that psychological trauma influences emotional imbalance of junior secondary school students majority of the students agrees that during menstruation they are irritable. The analysis also shows that the calculated Chi-square value of 424.02 and the table value of 16.92 with the degree of freedom of 9 at 0.05 alpha level. Since the calculated value is greater than the table value, the null hypothesis is rejected.

This implies that psychological trauma influences emotional imbalance among junior secondary school girls in Oredo Local Government Area of Edo State This finding buttressed the reports of Thomas, Narayanan (2006) who submitted that menstruation is a physiological phenomenon experienced by normally developing girls and women and its associated with various psychological, trauma which is one of the usual gynaecological problems that

affect menstruating women (Girls inclusive). The common symptoms associated with psychological trauma are irritability, fear, emotional imbalance, worries, anxiety, fatigue, depression, and difficulty in concentrating. It was revealed by Thomas, Narayanan that psychological trauma affects students' emotional stability because when the girls are depressed and worried, it will affect their abilities to pay attention to the teacher and also concentrate in school and this can lead to poor academic performance of female students in junior secondary school in Oredo local government area of Edo state of Nigeria.

Dalton, (2014), who submitted that Menstruation, particularly painful menstruation could cause emotional, social and psychological problem in addition to the social effect of teasing from friends particularly from the opposite sex. This can in turn affect concentration, performance, sport participation and other educational activities both at school and at home.

Conclusions

Based on the finding of this study, the following conclusions were drawn:

Menstrual migraine influence academic performance of junior secondary school girls in Oredo Local Government Area. This shows that menstrual migraine leads to recurrent throbbing headache or other discomfort which affects academic performance.

Psychological trauma has influence on emotional imbalance among junior secondary school girls in Oredo Local Government Area.

Recommendations

Based on the findings of this study, the following were recommended

1. Functional clinic should be made available in secondary schools to attend to diverse health challenges through menstruation which affects girl's participation in class/school activities. School
2. Counselors and psychologist should be made available in schools to help girls cope with psychology trauma as a result of menstrual challenges.

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