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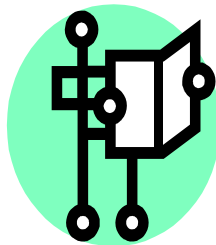
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BRIEF HISTORY OF THE JOURNAL

At the 7th Annual General Meeting of the International Research and Development Network of Children and Youth in Agriculture Programme (CYIAP-Network: visit our website www.cyiap_network.org for more information) held at Tai Solarin University of Education, Ijagun, Ijebu-Ode, Nigeria on the 28th November, 2006, it was resolved that a journal named *Annals of Child and Youth Studies (ACYS)* of the Network be established. Dr. Dixon OlutadeTorimiro, an Associate Professor in the Department of Agricultural Extension and Rural Development, ObafemiAwolowo University, Ile-Ife, Nigeria was unanimously appointed as the Editor-in-Chief and the Department was chosen as the Editorial Office of the Journal.

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From the Editorial Desk

The framing and formation of this Volume is quite fascinating. The authors, although working separately, converge around issues of living and giving meaning to living in our ever-changing world. All the articles in this Volume have accent of structuralism. The Volume begins with menstrual blood, an idiom of dignity, dirt, danger and death in many contexts. Menarche is a marker of rite of passage. It is celebrated with great fanfare in many cultures. Blood, in structuralists' paradigm, is meant to circulate inside and give life to the body (structure). Menstrual blood, however, flows out of the body, and weakens it. The blood is out of its place. It is a form of disorder/out of order, hence, constitutes a danger. Menstrual blood symbolizes a failed reproduction cycle and the preparation for another. It indicates impediment and hope with respect to building and elongating the super-organic structure (society). Blood is life. The loss of it is a symbol of dying and death that depletes the society(structure). These ideas perhaps explain why some religious groups tend to limit activities of menstruators. Olajide *et al's* article, in this Volume, conceptualizes menstrual blood as a decaying dirt that has influence on menstruators' agency. The authors indicate that the blood requires a certain degree of bodily hygiene to ameliorate its negative influences among girls in secondary

schools. They insist that this category of menstruators, due to limited resources and experiences, are prone to problems of inadequate menstrual hygiene such as infections and repugnant odor capable of staining, straining and severing social relationship. Stigmatization, stress, low self-esteem, amongst others, arising from limited bodily hygiene may cause self-rejection, depression, suicide ideation among menstruators. The authors suggest that adequate hygiene education is important for preventing problems associated with menstrual blood, including suicide ideations as implied in Durkheim's *Suicide*.

Suicide and stress are multifactorial phenomena. Associated factors of stress and suicidal ideation among undergraduate students is the focus of Anuodo *et.al's* article in this Volume. These authors offer insights into various ways of reducing suicide ideation and thus deaths among young people.

Death, although a natural process, is anti-structural. The longevity of any structure is predicated on both natural and social processes. Okorie and Torimiro explore ethnocultural relations, as a social process, to indicate how the process might be engineered to engender, elongate and enliven egalitarian structure with respect to nomadic Fulani in Yoruba land. The authors show that inter-marriages,

religious harmony, and coproduction of infrastructure are precursors of inclusive structures even in this era of persistent nomadism and unabating migration

Migration may weaken or strengthen a structure. To this end, Onuekwusi *et al* (in this Volume), highlight the causes and effects of seasonal migration in south eastern Nigeria, paying attention to issues of rural livelihoods. Opportunities in exploiting agrarian-based livelihoods are highly important to the sustenance of any society or structure that has an agrarian economy, like Nigeria. Therefore, issues of agrarian-based livelihood should be a source of concern to every stratum of an agrarian society. Oyegbami *et al* and Kayode *et al* all in this Volume share this view. These authors separately interrogate perceived conditions that might enhance and/or inhibit students' continual eking of a living from the agricultural sector in various geographies in Nigeria. Oyegbami *et al* identify infrastructure as a crucial condition for students in Ibadan whereas Kayode *et al*, discuss crop farmers and herdsmen's conflict as a great inhibitor to in-school youth participation in agripreneurship in Ilorin. Ojo and Akinyemi explore the effectiveness of some communication methods in increasing the participation of youth in Nigerian government agricultural program. They identify social media as one the effective outlets for the

program. Ohiagu underscores the importance of social media in human communication and discusses how malleability of identity fuels cybercrime reduces its usefulness in the society. The author, however, shows how a model of communication might be used to reduce the frauds.



Influence of menstrual hygiene on agency of girls in secondary schools in Ile-Ife, Osun state

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Abstract

This study examines the level of menstrual hygiene, attitude and practice among young girls in selected secondary schools in Ile-Ife. Using a multi-stage sampling technique, three secondary schools were selected in Ile-Ife, of which 347 students were interviewed. Data from the study were analyzed using descriptive and inferential statistics. The study shows that majority of the students belong to nuclear family (68.4%), understand the meaning of menstruation (92.3%), have started menstruation (95%) and use sanitary pad (85.7%). Also, about a third (37.5%) do not have access to water during menstruation in school, while about 67% did not have support for pain relief during menstruation. In addition, the study assesses the influence of menstrual hygiene practice on girl's agency using the multiple linear regression technique. Agency is measured using self-esteem and gender social interaction. The study found that father and mother education status as well as the profession are important determinant of good menstrual hygiene and higher agency. Family type is also an important factor to the menstrual hygiene and ultimately the agency of the adolescence girls. This study concludes that education is very important as it has ripple effect in the health and well-being of the family. It, therefore, reaffirms the belief that education is an important tool for closing global inequality and ensuring sustainable development.

Keywords: agency, girls, menstruation, menstrual hygiene, teenagers, agency

INTRODUCTION

Discourse about menstruation has always been shrouded in embarrassment, pride and then fear for girls. Embarrassment because it is perceived as filthy, pride and fear because though it is an indication of biological preparedness for reproduction; this act of reproduction cannot occur before or after matrimony in the traditional cum religious African context (Wilson et al. 2018). The entire awareness about menstruation may appear from one hand to be encapsulated in these perceptions which when projected unto the girl child steadily informs her that her body is a contested domain of wealth creation, health, fiscal and educational policies and urban planning/development. It also signifies that the occurrence and experience of

menstruation and indeed the feelings which come with it stem from a multidimensional axis of tensions between the private and the public sphere. Where hygiene during menstruation is an individual responsibility but the availability of sanitation facilities rests on leadership and decision making in the public sphere (WHO, 2017).

Even though menstruation is a normal biological process which happens between the ages of 10-16, most girls are unprepared for this phenomenon because they lack adequate and accurate information (Thiyagarajan, et al., 2019; Dasgupta and Sarkar, 2008). The shred of information gotten from religious institutions, peers and family members are beclouded by discriminatory perceptions about t

he body of women and can therefore be problematic for girls (Belayneh and Mekuriaw, 2019). It is therefore easy to see that increased accurate information about menstruation and safe hygiene practices surrounding it has the potential to reduce the incidence of peculiar health problems such as urinary tract infections and cervical cancer in women. Not ignoring the fact that social issues such as school absenteeism, poor academic performance, low self-esteem and drop out rates can also be mitigated with this single intervention (Belayneh and Mekuriaw, 2019).

Examining menstruation from a feminist political standpoint, it can easily be understood that the phenomenon is immersed in power relations, those which have created conditions where girls have biological agency of their bodies but a lack of agency over it (Fingerson, 2006). Furthermore, discussion about the management of menstruation and hygiene surrounding it has shifted from health implications to questions about dignity (Phillips-Howard, 2016). This is because menstrual hygiene management (MHM) is as much about the societal construction of the body of the girl child; one which polarizes it as either an instrument of pleasure or production, with no consideration for how a girl relates with every other construct in between, as it is about sanitary towels, water and soap. For instance, how does a girl feel about her menstrual flow when she is at home, at school, has to play sports or run an errand outside of the home? Silence therefore leaves girls with a dearth of information about what to expect from and how to prepare for their lives post menarche (MacRae *et al.*, 2019). This results in poor menstrual hygiene management, an ignored social issue which prevents girls from managing their menstruation with safety, dignity, and privacy, and one with poor research on

its influence on girls' lives (Phillips-Howard *et al.*, 2016).

Furthermore, because the vagina is essentially the avenue through which girls menstruate, it also becomes a repository of shame; transcending constructions about the female genitalia and encompassing the whole body and person of the girl (Schooler *et al.*, 2005). Considering the association of the body and menarche to mostly negative inclinations, it becomes increasingly difficult for girls' self-esteem to remain high and intact. Though some cultures perform rituals and celebrations of a public nature, these activities cause the girls further embarrassment and intensify feelings of confusion because they often face restrictions imposed by some beliefs in their culture (Mutunda Lahme and Stern, 2017)

Indeed, this messaging is spread across social spaces such as religious centres, educational institutions and workplaces. Islamic religion forbids girls and women from entering into mosques and praying when menstruating (Guterman *et al.*, 2008). Orthodox Jewish practices dictate that throughout the period of menstruation and days after, physical contact between a man and woman is prohibited (Hartman & Marmon 2004.) Within learning environments, which adolescent girls should typically spend a substantial part of their time, a vigorous pattern of activities must be observed by girls to conceal the fact that they are menstruating, for shame and to prevent others from being uncomfortable with their menstruating status.

In India for example, it was revealed that about 73.3% of the school girls studied knew that menstruation was unique to women but only 28.7% was aware of the psychological processes menstruation and only 35.8% linked it to pregnancy (Shanbhag *et al.*, 2012).

The lack of suitable facilities to aid private comfortable and hygienic management of menstruation sends a signal about the position of the needs of girls on the institutions' priority scale. Indeed, it signifies a neglect of a public health, social and educational issue and reveals the level of infrastructural gender discrimination prevalent in many spaces (Howard et. al, 2016). The agency aspect of menstruation is directly linked with the silence surrounding the phenomenon because lack of information is a lack of power to make independent choices based on facts. On a more definitive construction of agency, it is instructive to adopt the one posited by Malhorta (2003) which describes the concept as a crucial aspect of empowerment; the ability to make formulate strategic life choices and to control resources and decisions that affect important life outcomes. Kabeer (2008) on another hand, categorizes agency into three different forms. These include agency that manifest in the everyday trivial sense of the word and consequential forms of agency that reflect strategic life choices and also a form of agency that reinforce the status quo and those that seek to question, to challenge, and perhaps to transform the status quo. In Kabeer's explanation, empowerment involves changes in consciousness, or a sense of agency which includes sense of self-worth and social identity, capacity to exercise strategic control over their own lives, and to renegotiate their relationships with others. Poor sociocultural/environmental impediments are also known to impact on girls' self-worth and self-esteem, sexual and reproductive health.

Moreover, insufficient social support, ongoing gender inequality, and social and hygiene taboos around menstruation in numerous countries leave girls experiencing shame, fear, and confusion when trying to cope with their menstrual flow (Enzler 2019). In addition to depriving girls of their self-esteem and

sense of pride, growing evidence suggests that inequitable school environments negatively impact girls' ability to succeed academically, thus limiting their long-term economic potential (Phillips-Howard et al., 2016).

Assuring the ability to manage menstruation safely and with dignity is essential to meeting the Sustainable Development Goals (SDGs) for gender equality, good health, quality education, and sustainable water and sanitation for all; and related human rights (Sommer et al., 2021). As important as this matter is to achieving the SDGs, there are limited studies in Nigeria focusing on the influence of menstrual hygiene on the agency of girls in Nigeria. In many societies around the world, cultural norms and taboos associated with menstruation, in addition with an overall culture of silence around the topic, limit the ability of women and girls to fully and equally participate in the development process of their society (Schooler et al., 2005). This also prevent them from benefiting fully from such efforts. Overall, this undermines their overall social status, self-esteem and potential for improved agency and empowerment. Therefore, this study was aimed to assess the influence of menstrual hygiene on the agency of girls in secondary schools in Ile-Ife, Osun State Nigeria. The result of this study might have a supreme clinical importance and might help for planning, policy preparation and developing appropriate intervention mechanisms.

Furthermore, the increasing enrolment of girls in secondary and senior secondary schools calls for a more comprehensive approach to make schools menstrual hygiene friendly and prevent school dropouts or absenteeism (Tamiru et al., 2015). Assuring the ability to manage menstruation safely and with dignity is essential to meeting the Sustainable Development Goals (SDGs) for gender

equality, good health, quality education, and sustainable water and sanitation for all; and related human rights (Sommer et al., 2021). As important as this matter is to achieving the SDGs, there are limited studies in Nigeria focusing on the social implication of menstrual hygiene and practices, hence the need for this study.

Conceptual Framework

Menstruation and menstrual hygiene have been identified as an important aspect of the lives of every girl and woman (Adika, 2013; Belayneh 2019). Self-care and menstrual hygiene practices such as use of sanitary pad and regular washing of hands are widely acknowledged as basic requirements for promoting a satisfied life and personal esteem in a woman Adika (2013). The type of menstrual hygiene and practices engaged are important determinants of health and psychological status of many women and girls. These factors vary from health, socio-economic and environmental factors which may have significant influence on the total health and well-being of the individual. For instance, Upashe et al. (2015) observed that social demographic factors such as good knowledge of menstruation, educational status of mothers, access to menstrual information and knowledge through radio/TV have positive influence on good menstrual hygiene. Good knowledge and information about menstrual hygiene can help young girls to identify the healthy practices which they need to adopt during their menstrual period. Thakre et al. (2011) also examined that economic status and residential status (urban and rural) important factors influencing menstrual hygiene and practices among adolescence girls. Studies have also confirmed the important influence of access to water both at home and school, good sanitation and lack of privacy on the menstrual hygiene and practices of

adolescence girls (Alam et al. 2017; Fehintola et al., 2017).

Based on Malhorta (2003) and Kabeer (2008) conceptualization of agency, this study composed the agency of the teenage girls using two different issues, self-esteem and gender social interaction, which are important to their agency.

The conceptual frame work gives detail on the association between the dependent variable (agency) and independent variables (demographic characteristics, socio-economic factor, knowledge on menstrual hygiene, access to information, access to resources and cultural norms). Demographic characteristics, socio-economic factors, knowledge and access to resources influences the adopted behavioural pattern of menstrual hygiene Management. Menstrual hygiene in turn influences agency of a girl child.

METHODOLOGY

Data and Sampling

The study uses data collected from teenage girls in secondary schools in Ife Central Local Government Area, in Ile-Ife, Osun state. The data were collected between September to October 2018. Specifically, girls in Senior Secondary Schools one to three (ie., from SS 1 to SS3) in High Schools in Ife Central Local Government formed the population of the study. The breakdown of the sampling procedure and the sample size used in this study are presented in Tables 1 and 2 below.

The study uses a multi-stage sampling technique. First, Ife Central Local Government Area (LGA) was purposively selected for the study. The LGA was purposively selected to contribute to the already existing scholarship in the area of menstrual hygiene management in Ile-Ife. Also, the association between girls' agency and menstrual hygiene management has been sparsely explored in this location, the need to therefore contribute within this discourse is imminent. Second, all four (4) public High

Schools in Ife Central LGA were purposively selected for the study. The selection of public schools is based on the premise that this category of school is meant for persons in the lower economic strata because the cost of attendance is cheap. However, these schools are also underfunded, lack adequate infrastructure and teaching resources (Kainuwa and Yusuf, 2013). This is a precursor to functional hygiene facilities and corresponding practices. Also, the research is action based, in which the researchers provided a kind of intervention in the form of sanitary pads to all the participants of the study. This is to ensure that as many teenage girls as possible in secondary school girls in the LGA benefit from the intervention. The third stage of sampling involved the random selection of one hundred (100) teenage girls from each of the four (4) High Schools selected for the study. This results into a total of four hundred (400) teenage girls that formed the sample for the study.

Data were collected through the use of questionnaire. The questionnaire elicits information on socio-economic background, menstrual knowledge and information, menstrual hygiene practices, attitudes and self-esteem of the respondents. Properly completed questionnaire were retrieved from a total of 347 teenage girls from the four schools selected for the study. This formed a response rate of 86.8 percent. Data collected were analysed using STATA do files.

Dependent variables

The girls' agency in this study is constructed from sixteen questions on a 5-scale Likert, assessing respondents' self-worth and self-esteem and gender social interaction required to improve their studies and lives (Table 5). The scale includes strongly agree, agree, indifferent, somewhat disagree and strongly disagree. Respondents who

choose either 'strongly agree' or 'agree' in each of the five questions are assigned a score of 1, otherwise, the respondent is assigned 0. A dummy variable is thus created, with those who have a total score of a minimum of 16 said to have a high agency, otherwise, low.

Independent variables

In estimating the model, the different factors influencing time poverty were assessed. These form the independent variables for the analysis. They include age, family type, position in the family and knowledge of menstruation. Others include experience of stained cloth during menstruation, access to water in school and access to information that can improve menstrual hygiene. The description of the variables is described in Table 3.

Estimation procedure

This study examines the influence of menstrual hygiene and practices on the agency of teenage secondary school girls in Ile-Ife, Osun State using multiple linear regression technique. The regression technique allows the study to examine the relationship between the independent variables and the outcome (dependent) variable, agency measured by two different indicators (self-esteem and gender social interaction). It also provides the opportunity to assess the relationship of each of the explanatory (independent) variables on each of the outcome (dependent) variables. Before using the technique, factor analysis was applied on the independent variables. This reduces a large number of correlated variables to a smaller number of latent dimensions (Tinsley, 1987).

RESULTS

Respondents' Socio-demographics characteristics

The socio-demographics characteristics of the respondents are presented in Table 4. The results show that majority of the students belong to nuclear family (68.4%), understand the meaning of menstruation (92.3%), have started menstruation (95%) and use sanitary pad (85.7%). Majority of the students (52.16%) and (43.44%) respectively have fathers and mothers who are graduates of tertiary institutions beyond the National Certificate of Education (NCE). This implies a family background of educated parents that could have a lot of implication on the physical and psychological well-being of the girls. Most (95%) of the students have started menstruation, also, majority (92.28%) have a good understanding of the meaning of menstruation. On sources from which the respondents get information about menstruation, more than half (59.94%) indicated parents, 12.46 percent indicated getting information from media sources such as TV, radio and the social media and 12.17 percent indicated getting information from their teachers.

The girls' experiences during menstruation are presented in Table 5. The results show that more than half (51.48%) of the respondents indicated that they experienced pain during their menstrual period. Similarly, more than half (59.49%) indicated that they have access to relieve drugs during the period. Majority of the girls (85.67%) indicated that they use sanitary pads during menstruation. Also, about a third (37.5%) do not have access to water during menstruation in school, while about 67% do not have support for pain relief during menstruation. About 20% of the girls confirmed that they feel ashamed during menstruation and almost half (48.84%) reported that they do not experience stain of cloth. More than half of the girls (57.23%) indicated that they have access to water during their menstrual period

while majority (81.73%) indicated that they have access to information on menstrual hygiene. Only a small proportion (37.2%) of the girls indicated receiving any kind of support from people during their menstruation.

Girls' Measure of Agency

The results on the agency of the teenage girls are presented in Table 6. The results show that majority of the teenage girls seem to have low self-esteem necessary to improve their lives and poor gender social interaction. This is because a high proportion of the girls are not positively inclined to statements that portray high self-esteem necessary to improve their lives. For instance, majority of the girls strongly disagree with the fact that they are valuable or have good qualities. In regard to gender social interaction status among the girls, this also appears to be poor among the teenage girls. For instance, majority of the girls believed that males are better than females and that as a female they have the feelings they cannot do enough to make their society better.

Influence of menstrual hygiene and practice on girls' agency

The influence of menstrual hygiene and practice on the girl's agency is presented in Table 7 below. The agency of the adolescence girls in this context is based on their self-esteem and gender social interaction. The study found age ($P=0.002$), family type ($P=0.065$), girls' commencement of menstruation ($P=0.029$), experience of stained cloth ($P=0.090$) and whether the girl receives sex education talk from mother or father ($P=0.076$) to be positively associated with the girls' self-esteem. Also, gender social interaction is influenced by factors such as age ($P=0.043$), mother ($P=0.022$) and father education status ($P=0.031$), father profession ($P=0.025$), whether the girl has started menstruation ($P=0.023$) and experience of stained cloth ($P=0.005$).

The result indicates that the older a girl is, the more likely she will have better menstrual hygiene and the more likely she will have a higher agency. The result also implies that female students with have received information about menstrual hygiene either from their father or mother can have better menstrual hygiene, hence, can have greater self-esteem and good gender social interaction. Access to information that can improve menstrual hygiene will have higher likelihood for good menstrual hygiene and higher agency. The study also showed that father and mother education status as well as the profession are important determinant of good menstrual hygiene and higher agency. Family type is also an important factor to the menstrual hygiene and ultimately the agency of the adolescence girls. This means that students who have access to more people especially those that came from large extended or polygamous family have the higher possibility to learn from variety of sources and are likely to have better menstrual hygiene and an attending positive influence on their agency.

DISCUSSION

Knowledge about Menstruation

The study shows an adequate menstrual knowledge among the teenage girls. Majority of the girls in the study area in Ile-Ife, Nigeria is from family background of educated parents which could have a lot of implication on the physical and psychological well-being of the girls. This may accrue from the mid to high level of educational status of the parents. This confirms other previous studies (Abioye-Kuteyi, 2000; Aniebue et al. 2009) in Nigeria which also shows positive association between parental education and girls' menstrual knowledge. Majority of the girls have started menstruation with substantial proportion indicating access to the use sanitary pad during their menstruation.

Their parents, teachers and the media are the main sources of information on menstrual issues. This corroborates with the study of Srivastava, S. and Madhuri C. (2017) among secondary school girls in India which also shows that parents especially the mothers as the main source of menstrual information and knowledge for the school girls. The study by Ramathuba (2015) among adolescent girls in Limpopo Province of South Africa also confirmed parents, friends and the media as the main source of menstrual knowledge among the adolescent girls.

The study of Deshpande, 2018 found that knowledgeable parents have been recognized to play a crucial role in implementing hygienic practices among adolescent girls. Sudeshna and Aparajita (2012) observed that mothers must play a very important role in the health education of their daughters by discussing different aspects of menstrual matters including clean practices before her attainment of menarche. This is also affirmed by Swakami et al. (2019) who observed that parents and guardians are important agents in determining the menstrual hygiene of adolescent girls. This is because these parents and guardians could be a major source to convene required information which will help to improve menstrual to the girls.

Result from this study indicates that the more sources of information a girl has on menstrual hygiene especially from the father or mother, the more likely she will have a higher agency. Findings from this study agrees with the study of Kaur (2018) who also reported that access to necessary facilities and information are very important for girls to maintain good hygiene during menstrual period. A strong indication from this study shows that female students with access to information that can improve menstrual hygiene will have higher likelihood for good menstrual hygiene and higher agency. The study of Juyal et al. (2012) among adolescent girls in India found that access to correct

information has positive influence on the girls' ability to manage their menarche and their menstrual hygiene. This of course will have a great positive influence on the girls' self-esteem which would result in higher agency.

Findings from this study therefore corroborate with the work of Klugman *et al.*, (2014) which emphasized the important roles of access to different sources information in improving girls' agency. Oyelude and Bamigbola (2013) affirmed that information remains a crucial commodity for empowerment. Therefore, efforts must be directed at provision of adequate and correct information especially to the marginalized and vulnerable groups.

Access to water and Sanitation

This study shows that a good proportion of the girls do not have access to water in their school environment during menstruation in school. The study of Egbinola and Amanambu (2015) which assessed water supply, sanitation and hygiene education in secondary schools in Ibadan, Nigeria also confirmed the poor and debilitating state of water and sanitation facilities. This poses a great health risk for the students especially the female students who have greater risk of exposure to diseases and other reproductive tract infections

Quite a small proportion of the girls in the study area indicated receiving any kind of support from people during their menstruation. The study found age, family type, father and mother education status, mother profession, experience of stained clothes, exposure to sex talk from mother or father and the type of material used in collecting menstrual blood have positive implication on the girls' self-esteem, gender social interaction and access to resources.

Gender Social Interaction

The importance of parents and family members in improving the well-being and agency of women and girls is also affirmed in this study. This is because this study observed that girls who have access to information and support from their parents and other family members have greater possibility of higher agency. These girls could be more opportune to learn from variety of sources and are likely to have better menstrual hygiene which could have an attending positive influence on their agency. In line with this study, Israel (2001), highlighted the importance of family and community as forms of social capital that have positive influence on girls' agency in term of their education achievement. The study of Morgan and Haglund (2009) shows that social capital is an important determinant for young people's health. The study confirmed a positive relationship between different social indicators and the health and health-related outcomes selected for study. Also, Marume *et al.* (2018) observed that social capital has a good influence on wellness and well-being of individuals in a refugee camp in Zimbabwe.

CONCLUSION AND RECOMMENDATIONS

This study examines the level of menstrual hygiene, attitude and practice among young girls in selected secondary schools in Ile-Ife. The study assesses the influence of menstrual hygiene practice on girl's agency (self-esteem, gender social interaction). Majority of the girls sampled reported poor state of water and sanitation facilities in their school. This negatively influence their access to water during menstruation. The results show that majority of the girls have good menstrual information and knowledge through their parents, teachers and the media. This study concludes that mother and father education status, mother's profession and ensuring support from fathers and mothers through girls' child access to information are very

important for menstrual hygiene and ultimately required to improve girls' child agency. This reaffirms the importance of education in closing global inequality and ensuring sustainable development.

This would have a lot of influence on other development outcome especially in achieving girls' child empowerment which constitute the target of many development agenda especially the goal 5 of the UN Sustainable Development Goals (SDG 5).

The study recommends that development strategies need to lay more emphasis on education for all. Strategies also need to target teenage female students to enhance their capacity and information sources in maintaining good menstrual hygiene.

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Table 2: Breakdown of sample size in the study

High Schools	No of respondents selected	No of Responses
1	100	82
2	100	90
3	100	82
4	100	93
Total	400	347

Table 1: Sampling Stages

Sampling Stages	Activities
Stage 1	Purposive selection of Ife Central LGA for the study
Stage 2	Purposive selection of all the 4 High Schools in the LGA
Stage 3	Random selection of 100 teenage girls from each of the 4 High Schools selected for the study

Table 3: Definition of Independent Variables

	Puberty/maturity	2.68
	Release of unfertilised eggs	1.15
Source of information on menstruation (n = 243)	Parents	59.94
	Teachers	12.17
	Relatives	4.75
	Media	12.46
	Friends	10.68

Table 5: Respondents' Experience about Menstruation

Girls that have started menstruation (n = 340)		95.00
Experience pain during menstruation (n = 174)	Yes	51.48
	No	20.41
	Maybe	28.11
Have access to drugs during menstrual pain (n = 167)	Yes	26.22
	No	73.78
What do you use during menstruation (n = 335)	Tissue paper	3.58
	Sanitary pad	85.67
	Clothe	9.85
	Wool	0.90
Experience stained cloth (n = 301)		
	Yes	51.16
	No	48.84
Access to water in school (n = 325)		
	Yes	57.23
	No	37.54
	Sometimes	5.23
Always wash hands with soap after the change of pad	Yes	94.38
	No	5.62
Menstruation affect my attendance in school	Yes	18.14
	No	81.76
Good understanding in class during menstrual period	Yes	79.28
	No	20.72
Support during menstruation	Yes	37.42
	No	62.58
Access to information to improve menstrual hygiene (n =323)	Yes	81.73
	No	18.27
Mother or Father have ever talked to you about sex before	Yes	66.96
	No	33.04

Table 6: Girls' measure of agency

		Strongly agree	Agree	Indifferent	Somewhat disagree	Strong disagree	
Self esteem	I feel that I am valuable	1.19	3.87	1.19	35.42	58.33	
	I feel that I have good qualities	0.59	2.95	2.06	36.58	57.82	
	I feel that I am intelligent and smart	0.90	3.28	3.58	36.12	56.12	
	I always find a way to solve problems I face.	2.95	6.49	5.90	35.69	48.97	
	I am proud of myself when I succeed at something	0.29	3.82	1.47	34.71	59.71	
	When I look in the mirror, I like myself the way I am	0.59	3.86	2.67	37.09	55.79	
	Gender social interaction	I defend myself when I feel mistreated	2.08	7.44	6.25	38.10	46.13
		I blame myself for everything that goes wrong	8.88	17.46	5.92	33.43	34.42
		I make bad choices	32.64	39.17	7.72	10.68	9.79
I feel that others are		31.79	32.41	5.25	15.74	14.81	

	better than me					
	I feel that I can be a change agent to my society	7.23	11.95	4.09	30.19	46.54
	I feel males are better than females	41.69	35.65	3.02	7.85	11.78
	As a female, I think that I cannot do enough to make my society better	39.88	28.87	3.57	11.90	15.77
	I feel less valued than my brother(s)	29.31	25.98	4.53	21.75	18.43
	I feel that girls can be better leaders	1.81	3.63	3.02	32.33	59.21

	Self-esteem			Gender Social Interaction				
	Coef.	S.E.	P Value	Coef.	S.E.	P value		
Olajide <i>et al.</i>	Influence of menstrual hygiene on agency of girls in secondary schools							
Age	-0.156	0.050** *	0.002	0.100	0.049**	0.043		
Family Type	0.167	0.090*	0.065	-0.032	0.084	0.708		
Position	0.014	0.040	0.729	-0.018	0.039	0.635		
Father Education Status	0.111	0.100	0.269	-0.211	0.097**	0.031		
Mother Education Status	-0.131	0.103	0.206	0.232	0.100**	0.022		
Father's Profession	0.012	0.017	0.473	-0.037	0.016**	0.025		
Mother's Profession	0.018	0.023	0.438	0.003	0.023	0.901		
Start of Menstruation	-0.690	0.313**	0.029	0.677	0.295**	0.023		
Experience Pain in Menstruation	0.049	0.076	0.518	-0.041	0.074	0.583		
Access to drug during menstruation	-0.082	0.157	0.603	-0.183	0.153	0.233		
Other female members in the household	0.121	0.132	0.361	-0.025	0.125	0.843		
Material use for menstruation	-0.026	0.158	0.868	0.111	0.151	0.465		
Experience stain of cloth	0.234	0.137*	0.090	-0.378	0.134***	0.005		
Menstruation affects school attendance	-0.164	0.197	0.407	0.241	0.193	0.213		
Access to water in school	-0.154	0.110	0.164	0.168	0.114	0.142		
Access to information	-0.155	0.177	0.381	0.017	0.175	0.924		
Understand menstruation	-0.001	0.170	0.994	0.070	0.167	0.674		
Receive support	0.095	0.136	0.483	0.074	0.133	0.581		
Mother and father provide sex education	-0.257	0.144*	0.076	0.029	0.144	0.841		
Wash hand regularly	0.257	0.300	0.392	-0.153	0.282	0.589		
Constant	3.080	1.186**	0.001	-2.139	1.139*	0.062		

Table 7: Influence of menstrual hygiene and practice on girl's agency
 *p<0.05; **p<0.01

