ASSESSMENT OF PERSONAL HYGIENE PRACTICE AMONG STUDENTS IN SELLECTED SECONDARY SCHOOLS IN OGBIA BAYELSA STATE, NIGERIA

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ABSTRACT

Aim/Objective: The essence of this study was to assess personal hygiene practice among selected public secondary school in Ogbia town. However, the *objective was designed to assess the level of knowledge of personal hygiene practice among students in public secondary schools.* **Materials/Methods:** Random sampling technique with the aid of structured questionnaires was adopted to capture all 364 respondents for this study. **Results:** The socio-demographic characteristics of the study population shows 45.88% males and 54.12% females while ≤ 10-12yrs was 48.62% and ≥ 13yrs (51.88%) respectively. However respondents in JSS1-3 were 51.65% compared with SS1-3 of 48.35%. Most of the respondents (40%) do not have adequate knowledge regarding personal hygiene due to lack of water supply, religious believers and lack of time. Further findings from this study shows that about 76.42% of the respondents have heard of personal hygiene and 33% had their sources of information through teachers. About 58.24% of the respondents had good knowledge towards personal hygiene practice while 41.76% had poor knowledge. Concerning respondents attitude only 48.88% of the respondents had positive attitude regarding personal hygiene while 51.12% had negative attitude towards personal hygiene practice. Finally it was observed that lesser proportion (46.15%) had good practice towards personal hygiene while 53.85% of the respondents had poor practice towards personal hygiene practice. Concerning respondent practice towards personal hygiene, the interpretation of the overall grand mean score of 2.466 is below the criterion mean 2.5 which implies that majority of the respondents did not practice personal hygiene. **Conclusion:** proper hand hygiene practices should be encouraged during lunch breaks, before eating, and after using the restroom. However, the availability of hand washing facilities, such as sinks with soap and water, is a significant factor influencing whether students adopt this practice. We hereby recommend that government should provide adequate water supply in secondary schools and training be organized for students in all schools on how to maintain proper hygiene at all level regularly to improve their health status.

Keywords: *Bathing, Brushing, Hygiene, hand washing, School*

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INTRODUCTION

Personal hygiene is a public health tool that is used for disease prevention and health promotion among individuals, families and communities. Personal hygiene, also referred to as personal care, includes bathing, hair, nails, foot, genital and dental cares, and washing of clothing among others (llika and Obionu, 2012). Cleanliness among individuals in communities can reduce threats especially by communicable diseases, thereby improving the overall health of a community based on population health analysis (Ahmadu *et al.*, 2013;Olatunji *et al.,* 2017).

In Nigeria, five common health problems of primary school children are fever/typhoid headache, stomach ache, cough/catarrh and malaria (FME,2016). According to Benneth (2023), most challenges to effective hygiene practice were due to inadequate water supply and poor environmental factors. Good personal hygiene forms part of primary health prevention strategy and has been found to be effective by reducing morbidity and mortality in children (Akinyamoju *et al.,*2018).Personal hygiene is a crucial aspect of overall health and well-being, especially among children as it plays a significant role in preventing the spread of infectious diseases, promoting good health and fostering positive self-mage. However studies have shown that many children, particularly those in public primary school do not practice adequate personal hygiene (Adewuya *et al.,* 2018).

It is estimated that unsafe water, and lack of sanitation and hygiene every year claim lives of more than 1.5 million under age children particularly cause by diarrhea (Van &Tineke, 2013). Current research studies indicated that high incidence of infectious diseases are caused by poor personal hygiene practices (Sarkar, 2013 and Ghanim *et al*., 2016). Also Ajay, *et al* (2018) emphasized that poor personal hygiene practices have been found to be a serious public health challenges and people often affected are school children. Outbreak of infectious disease is often very common in an overcrowded environment mostly in public schools and Ogbia public secondary schools are not exempted, therefore since there is no established evidence showing the level of compliance of personal hygiene practice in selected public secondary schools in Ogbia thus, this study becomes paramount to evaluate personal hygiene practice among selected public secondary schools in Ogbia LGA. Personal hygiene is essential for the prevention of diseases and the promotion of overall health (WHO, 2020).

During adolescence, students undergo various physical and psychological changes that make them particularly vulnerable to diseases (Moy, *etal*., 2019). Malnutrition, skin infections, and respiratory diseases are some of the health risks associated with poor hygiene. Additionally, adolescence is a time when young people develop social identities, and poor hygiene may lead to social exclusion or bullying, affecting mental health (Nwachukwu *etal*., 2016). Interventions for promoting hygiene in secondary schools are crucial for ensuring that students maintain good health and hygiene practices.

Adolescence is a critical developmental stage, marked by significant physical, emotional, and social changes. As individuals transit from childhood to adulthood, they become more aware of their bodies, self-image, and the social implications of their actions. One of the most important aspects of this phase is the development of personal hygiene habits. Personal hygiene is the practice of maintaining cleanliness through regular activities such as washing hands, bathing, brushing teeth, and maintaining overall body cleanliness (Sweeney, *etal*. (2020).Adolescents who adopt good hygiene habits are less likely to develop preventable health problems and are better equipped to engage with their peers, perform academically, and develop into healthy adults. The importance of personal hygiene in adolescence can be understood from several perspectives, including physical health, emotional well-being, social acceptance, and academic performance. (Sweeney, *etal*., 2020).

Adolescents are highly susceptible to infections, particularly gastrointestinal, respiratory, and skin diseases, due to changes in their immune systems and the increased social interactions that occur during this period. Proper hand washing, for example, is a simple yet effective way to prevent the spread of germs that cause infections (WHO, 2020). Studies have shown that maintaining proper hygiene, especially in school settings, can significantly reduce the incidence of these infections, leading to fewer missed school days and better overall health (Adams *et al.,* 2015).Puberty brings about hormonal changes that can affect the skin, often resulting in acne, oily skin, and other dermatological issues. Proper hygiene practices, including regular washing of the face, using appropriate skincare products, and keeping the skin clean minimize these conditions (Goldman *et al*., 2017). Skin infections such as fungal, rashes, and boils are also common in adolescence, and personal hygiene practices such as regular bathing and avoiding the sharing of personal items like towels and combs can significantly reduce the risk of these infections (Rosenstock, 2019; Sweeney *et al*., 2020).

Dental hygiene is particularly important during adolescence as this is the time when permanent teeth are fully developed. Poor oral hygiene, such as infrequent brushing or neglecting dental care, can lead to cavities, gum disease, and bad breath. These dental issues can have long-term consequences if not addressed early. Proper oral hygiene practices, including brushing teeth twice daily, using dental floss, and visiting a dentist regularly, are essential for maintaining a healthy mouth throughout life (Cunha *et al.,* 2017; Moy *et al.,* 2019).

For adolescent girls, menstrual hygiene becomes an essential aspect of personal hygiene. Menstruation begins during puberty and, if not managed properly, can lead to health complications such as urinary tract infections, vaginal infections, and other reproductive health issues. Maintaining clean menstrual hygiene is critical for preventing these problems. Research has shown that inadequate menstrual hygiene practices are linked to an increased risk of reproductive tract infections, which can have long-term consequences if left untreated (Sommer *et al.,* 2016;Msuya*etal*., 2020),

Adolescents are increasingly conscious of their appearance and are highly sensitive to how they are perceived by others. Hygiene plays a crucial role in shaping self-esteem and mental well-being, as well as social interactions. The development of hygiene habits during adolescence can significantly impact an individual's confidence, self-worth, and emotional health.

Proper personal hygiene helps adolescents feel better about themselves, which can have a profound effect on their self-esteem and confidence. Adolescents who practice good hygiene are more likely to feel proud of their appearance and health, leading to improved self-image (Ramla*et al.,* 2015; Jadue*et al.,* 2018). When students maintain clean clothes, fresh breath, and healthy skin, they are more likely to experience a positive self-concept, which can enhance their overall emotional well-being (Rashid *et al.,* 2020).

Secondary school students at this stage, good hygiene practices are essential for both physical health and social acceptance (Adams, *et al*., 2015;Sweeney *et al.,* 2020). Hand hygiene is one of the most fundamental hygiene practices that significantly reduce the spread of infectious diseases, particularly in a school environment. Adolescents in secondary schools are exposed to various pathogens due to the close quarters and shared facilities, making regular handwashing a critical hygiene practice. Regular handwashing with soap and water is essential for removing dirt, bacteria, and viruses that cause illnesses. Studies have shown that students who wash their hands regularly are less likely to suffer from preventable diseases (Sommer et al., 2016;WHO, 2020).(Moy *et al.,* 2019). In situations where water and soap are not readily available, hand sanitizers are often used as an alternative (Adams *et al.,* 2015)(Goldman *et al.,* 2017; ADA, 2020).

MATERIALS AND METHODS

Research Design
An observational descriptive and cross-sectional research survey design was adopted for this study.

Study Setting
This study was carried out in public primary school, Ogbia and Oloibiri communities.

Study Population
The population of this study comprise of students from selected public secondary schools (364)in OgbiaLGA Bayelsa State

Sample size
The sample size of this study was determined using Cochran's formula. $n = \frac{Z\alpha^2 P(1-p)}{d^2}$

Z= s 1.96^2 confidence interval
P= prevalence of previous study by Benneth *et al*, (2023) about 60% of primary school pupils had good knowledge on personal hygiene practices
D= marginal error at 5% or 0.5

$$n = \frac{1.96^2 \times 0.60(1-0.60)}{0.05^2}$$

$$n = \frac{3.8416 \times 0.60(0.4)}{0.0025}$$

$$n = \frac{3.8416 \times (0.60 \times 0.4)}{0.0025}$$

$$n = \frac{3.8416 \times 0.24}{0.0025}$$

$$n = \frac{0.921984}{0.0025}$$

n= 364

multiage stage
Stage 1: Selection of (2) public secondary school in the communities, which includes Government secondary school, and Oloibiri grammar school from JSS1-JSS3, and SS1- SS3
Stage 2: The stratified sampling technique was applied in this study whereas each class for a stratum.

Instrument
Structured questionnaire was adopted for this study. The instrument was divided into five (5) sections. A' reveals the socio-demographic data of respondents. B" contain items concerning respondents knowledge on personal hygiene practice, C" capture data regarding the level of personal hygiene practice, D" elicit the attitude of students regarding personal hygiene while E' contain item showing the barriers influencing personal hygiene practice among students in public secondary schools in Ogbia town, Bayelsa State.

Data Collection
During this process data was collected with the aid of two research assistants, a-face to face method was adopted with the aid of a structured questionnaire to assess the personal hygiene practice among pupils in public secondary school. The questionnaire was administered to the respondents after a verbal consent was obtained and was allowed to fill the questionnaires themselves, after which they were collected back by the researcher.

Data Analysis
Version 25.0 SPSS was used to analyze the data obtained for this study.

Ethical Consideration
Ethical approval was obtained from Ethical Research Committee of **BYCOHTEC**. Permission from principals of the schools and verbal consent was also obtained from all respondents in the study population

RESULTS

Table 1: Socio-Demographic Data of Respondents

Age	Frequency	%
< 10-12years	177	48.62%
>13years and above	187	51.38%
Sex		
Male	167	45.88%
Female	197	54.12%
Ethnicity		
Yoruba	29	7.97%
Igbo	31	8.52%
Hausa	24	6.59%
Ijaw	34	9.34%
Ogbia	224	61.54%
Others	22	6.04%
Religion		
Christianity	280	76.92%
Islamic	84	23.08
Class		
JSS1-JSS 3	188	51.65
SS1-SS 3	176	48.35
Total	364	100

The above table describes the socio-demographic characteristic of respondents, irrespective respondents' age group indicating that majority respondents were within the age group of 13years and above 8-10yers, followed by respondents within the age group less than 10-12years.

Table 2: Ever heard of personal hygiene practice?

Variables	Frequency	%
Yes	280	76.92%
No	88	23.08%
Total	364	100%

The table 2 above shows that majority 280(76.92%) of the respondents has heard of personal hygiene practice while 88(23.08%) of the respondents have not heard of personal hygiene practice

Table 3: if yes, what is your source of information of personal hygiene practice

Variables	Frequency (n=280)	%
School/teachers	160	58%
Parents	89	31%
Radio/TV	27	9%
Magazine	4	2%
Total	280	100

The table 3 above indicates respondent's source of information concerning personal hygiene practice, out of (n=280) respondents who have heard of personal hygiene practice majority 160(58%) of the respondents had their source from school/teachers, 89(31%) were parents while 4(2%) of the respondents indicates magazine.

Table 4: Knowledge on personal hygiene practice

s/n	Variables	Yes (%)	No (%)	Total (%)
a)	Personal Hygiene includes bathing, washing your hands, brushing your teeth etc?.	244(67%)	120(33%)	364(100%)
b)	Sharing of drinking cups without washing can cause health problem?	203(56%)	161(44%)	364(100%)
c)	Hand washing with or without soap after toilet can cause infection?	181(49%)	183(51%)	364(100%)
d)	Eating vegetables or fruits without washing can cause foodborne diseases?	230(63%)	134(37%)	364(100%)
e)	Washing Hands before meal is more important than doing it after meal?	177(48%)	187(52%)	364(100%)
f)	Keeping once body always clean is very important since poor hygiene may likely cause infection?	237(65%)	127(35%)	364(100%)

The table 4 above revealed the knowledge on personal hygiene practice,

Table 5: Personal hygiene Practice

Variables	Frequency	%
Do you practice personal hygiene		
Yes	168	46.15
No	196	53.85
Total	364	100

The table 5 above revealed that out of (n=364), majority of the respondent affirmed not to practice personal hygiene 196(53.85%), it was observed that only 168(46.15) of the respondents practice personal hygiene

Table 6: If yes, from the below statement how would you say?

s/n	Variables (n=168)	A	S	O	N	$\overline{X\%}$	$\overline{X}$	$\overline{GM}$	$\overline{CM}$	Decision
a)	You Brush your teeth daily?	45	49	24	50	18.9	2.5			Accept
b)	You Cut your Nails?	33	70	45	20	17.6	2.6			Accept
c)	You take your bath every day?	75	60	15	18	20.9	3.1	2.466	2.5	Accept
d)	You wear washed clothes daily	37	30	45	56	14.9	2.2			Reject
e)	You iron your cloth before wearing it?	61	32	40	35	18.2	2.7			Reject
f)	You use soap to wash hands after using the toilet?	15	20	45	88	11.5	1.7			Reject

A=always, S= Sometimes, O=often, N= never

The indicates that out (n=168) of those who practice personal hygiene, it was observed that 45 always brush their teeth daily, 49 were sometimes, 24 and 50 of the respondents often and never brush their teeth daily. However, the table also shows that 33 and 70 of the respondents always and sometimes cut their nails, 45 and 20 of the respondent often and never cut their nails. The table also shows that 75 and 60 of the respondents always and sometimes take their bath every day while 15 and 18 of the respondents often and never take their bath. The table shows that majority 45 and 56 of the respondents often and never wear washed cloth daily while 37 and 30 of the respondents always and sometimes wear washed cloth daily. The table also shows that majority 61 and 32 of the respondents always and sometimes iron their cloth before wearing while 40 and 35 of the respondents often and never iron their cloth before wearing them. Finally the above table also shows that majority 45 and 88 of the respondents often and never uses soap to wash hands after using the toilet, while 15 and 20 of the respondents always and sometimes use soap to wash hands after using the toilet.

Table 7: Attitude on Personal hygiene Practice among public primary school Children

s/n	Variables	SA	A	D	SD	$\overline{X\%}$	$\overline{X}$	$\overline{GM}$	$\overline{CM}$	Decision
a)	I brush my teeth twice a day?	60	91	125	88	16.5	2.3			Reject
b)	I take my bath twice a day with clean water and soap?	82	63	93	126	12.9	1.8			Reject
c)	I always keep my finger nails and toes short and Clean?	50	51	12	251	12.2	1.7	2.24	2.5	Reject
d)	I cut my hair regularly and keep it clean and tidy all Time?	240	106	12	6	25.8	3.6			Accept
e)	I usually Clean and wash our toilets and bathing facilities regularly?	82	63	93	126	12.9	1.8			Reject

Key; SA=strongly agreed, A=agreed, D=disagreed and SD=strongly disagreed
The table 7 above revealed the attitude of respondents towards personal hygiene, it indicates that majority 128 and 88 of the respondents disagreed and strongly disagreed to brush their teeth twice a day, while 60 and 91 of the respondents strongly agreed and agreed that they brush their teeth twice a day. The table revealed that 28 and 68 of the respondents strongly agreed and agreed that they bath twice a day with clean water and soap while majority 93 and 126 of the respondents disagreed and strongly disagreed. The table shows that majority 12 and 251 of the affirmed not to keep their fingers nails and toes short clean while 50 and 51 of the respondents strongly agreed and agreed that they to keep their fingers nails and toes short clean. The tables revealed that, majority 240 and 106 of the respondents strongly agreed and agreed that, they cut their hair regularly and keep it clean and tidy all Time, while 12 and 6 of the respondents disagreed and strongly disagreed. Finally the table shows that majority 93 and 126 of the respondent affirmed not to usually clean and wash their toilets and bathing facilities regularly while 82 and 63 of the respondents strongly agreed and agreed that they usually clean and wash their toilets and facilities regularly.

Table 8: Barriers influencing personal hygiene

s/n	What made you not to involved in personal hygiene practice (n=364)	Frequency	%
a)	I don't have understanding on what personal is	144	40
b)	Inadequate water supply	102	28
c)	Lack of time	55	15
d)	Religious believe	28	8
e)	Laziness	35	9
f)	Total	364	100

The table 8 above shows barriers influencing personal hygiene practice, it indicates that majority 144(40%) of the respondents do not really understand what personal hygiene is, 102(28%) of the respondents say's inadequate water supply made them not to practice personal hygiene, 55(15%) of the respondents say's lack of time, 28(8%) of the respondents say's religious believes while lesser proportion 35(9%) of the respondents mentioned laziness.

Table 9: Summary of overall knowledge, attitude and practice of personal hygiene

Variables	Good	Poor
Knowledge on personal hygiene practice	58.24%	41.76%
Attitude	48.88%	51.12%
Practice	46.15	53.85%

The table indicates the overall knowledge, attitude and practice of personal hygiene in selected public secondary school, out of (n=364) it indicates that majority 58.24% of the respondents had good knowledge towards personal hygiene practice while 41.76% had poor knowledge. Concerning respondents attitude only 48.88% of the respondents had positive attitude regarding personal hygiene while 51.12% had negative attitude towards personal hygiene practice, finally it was observed that lesser proportion 46.15% had good practice towards personal hygiene while 53.85% of the respondents had poor practice towards personal hygiene practice.

Discussion

Result from this study shows that majority of the respondents were aware of personal hygiene and was obligated to have good knowledge regarding personal hygiene practice. This findings is in agreement with the study of Bennett, (2023) whose studies was reported that majority (57.8%) of the respondents are aware of personal hygiene practice with 60.7% of the respondents obliged to knowledge that personal hygiene including bathing, washing your hands, brushing your teeth, etc. Thus majority (67%) of the respondents say's personal hygiene includes bathing, washing your hands, brushing teeth etc. while (44%) of the respondents say's personal hygiene does not includes bathing, washing your hand and brushing of teeth. The above also revealed that majority answered yes' response (56%) among the respondents saying sharing of drinking cup without washing it can cause health problem while (44%) of the respondents disagreed to the above statement. Majority (51%) of the respondents affirmed that washing hand without soap or water after toilet will not cause infection, while (49%) of the respondents were of strong opinion that washing hand without soap or water is likely to cause health problems. Majority (63%) of the respondents strongly agreed that eating vegetable or fruit without washing them can cause foodborne diseases while 37% of the respondents disagreed. The results also shows that majority (52%) of the respondents say's Washing hands after meal is more important than doing it before meal while 48% of the respondents say's washing hands before meal is more important than doing it after meal. Also majority (65%) of the respondents agreed that keeping once body clean always is very important since poor personal hygiene may likely cause infection.

The result shows that high proportion from the study population affirmed to practice poor personal hygiene. This might be due to misconception, in that sense most individual feel frequently bathing may likely lead to illness, or teacher are not fully trained and grounded in imparting students on personal hygiene practice. This finding is in agreement with the studies of Jadue *etal*., (2018) indicating that in some areas, there are widespread misconceptions and myths about personal hygiene which prevent adolescents from adopting good hygiene practices. For example, some might believe that bathing frequently could lead to illness or use of soap is unnecessary for certain hygiene tasks. Another studies conducted by (Goldman *et al., 2017*), In many low-resource settings, formal health education may be lacking, and adolescents may not be taught how to properly care for their bodies. Teachers may not receive sufficient training to impart proper hygiene practices to their students.

The findings from this study also revealed that one fourth of the respondents 48.88% had positive attitude regarding personal hygiene. In as much respondents had good knowledge they were influence by their peer or families who understand the significance of personal hygiene practice. This finding is in line with preposition of the **theory of Planned Behavior by**Ajzen's (2018), posits that behavior is driven by attitudes, subjective norms, and perceived behavioral control. Students' attitudes towards hygiene practices, the social pressure from peers and family to maintain hygiene and their perceived ability to practice good hygiene can significantly influence their behavior (Ajzen, 2018). For example, students from supportive families with access to hygienic resources may have a positive attitude and feel capable of maintaining proper hygiene.

The results from this study further shows that majority of the respondents say they did not really understand what personal hygiene practice is, coupled with inadequate water supply. This finding is in agreement with the studies of Msuya*etal*., (2020), who affirmed that even when products are affordable, adolescents may lack access to proper hygiene facilities such as bathrooms, running water, and handwashing stations in schools or homes. The lack of these basic amenities can make it difficult for adolescents to practice personal hygiene regularly, even if they have the necessary products. In such settings, adolescents may not understand the importance of regular handwashing, tooth brushing, or maintaining personal cleanliness (Goldman *et al.,* 2017).

Conclusion

In conclusion, majority of the respondents have heard about personal hygiene moreover, higher proportion from the study population mentioned teachers as their source of information about personal hygiene. Despite the high level of knowledge their practice remains low. Moreover majority of the respondents had positive attitude towards personal hygiene and this might be as a result of most respondents don't really understand what personal hygiene is reported as notable barriers influencing personal hygiene practice. Therefore, there is a need for education awareness campaigns, and improvement for access to hygiene resources which in turns help to improve personal hygiene practices among students thereby contributing to their overall health and well-being.

Conflict of Interest; None declared

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