

**ASSESSMENT OF PERSONAL HYGIENE AMONGST PUBERTAL SECONDARY
SCHOOL STUDENTS OF DIVINE CHRISTIAN COLLEGE, UMUAMACHAM,
UMUEZE, ABA, ABIA STATE**

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ABSTRACT

BACKGROUND: Personal hygiene involves those practices performed by an individual to care for one's body, health and wellbeing through cleanliness. Inadequate hygiene practices play major roles in the increased burden of communicable diseases within the developing countries such as Nigeria.

AIM: The aim of this study is to determine the level of knowledge, attitude, and practice of personal hygiene among pubertal secondary school students of Divine Christian College, Umuamacham, Aba.

METHODOLOGY: This study was a cross-sectional descriptive study using self-Interviewer administered questionnaires to obtain data from the study participants. Data collected were analyzed using IBM SPSS version 20 and level of statistical significance was set at $P < 0.05$.

RESULTS: From the study conducted, it was discovered that the study participants had a very good knowledge of personal hygiene with a percentage of 94.3%, only few showed negative attitudes (5%) and the majority had good practice (99.7%).

CONCLUSION: From the outcome of the result, majority had a very good knowledge of personal hygiene with corresponding yield in their practice; this could be attributed to their environmental

exposure, as majority of the study participants heard about personal hygiene from their school, and the high level of education among their parents and guardians.

KEY WORDS: Knowledge, Attitude, Practice, Pubertal, Personal Hygiene, Aba.

INTRODUCTION

The word **Hygiene** according to the Oxford English dictionary is defined as the science of health, promotion of health and its preservation. In ancient Greek religion, **Hygeia** was the name of the Greek goddess of health, cleanliness and sanitation.¹

According to WHO (World Health Organization), hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases². Hygiene in a variety of setting plays an important role in preventing the spread of infectious diseases.³ It includes procedures used in a variety of domestic situations such as hand hygiene, respiratory hygiene, food and water hygiene, general home hygiene etc.

Hand hygiene is a general term referring to any action of hand cleansing or washing of hands with soap and water or using a waterless hand sanitizer. Hand hygiene is central to preventing spread of infectious diseases in the home and everyday life setting.⁴ Routine cleaning of hands, food and drinking water sites, surfaces such as toilet seats and flush handles, doors and tap water handles, work surfaces, bath and basin surfaces in the kitchen, bathroom, and toilets reduces the risk of spread of pathogens.⁵

Personal hygiene involves those practices performed by an individual to care for one's body, health and wellbeing through cleanliness. Personal hygiene can also be described as the principle of maintaining cleanliness and grooming of the external body. Motivations for personal hygiene practices include: reduction of incidence of illness, optimal health and sense of wellbeing, social acceptance and prevention of spread of illness.

Components of Personal Hygiene include the following.⁶

Body Hygiene (Skin Care): this involves regular bathing with soap and clean water twice daily to ensure that the body stays clean.

Good oral hygiene or Oral care: this involves rinsing the mouth after each meal, brushing your teeth with fluoride containing toothpaste twice a day before breakfast and before going to bed.

Hand washing hygiene: this involves mechanical removal of dirt from the surface of the hand using soap and detergents. Hand washing technique involves: wetting the hands first with clean water and lather with soap, next you rub the hands together vigorously and scrub all surfaces up to your wrist. Clean under your finger nails. It is the soap combined with scrubbing actions that help dislodge and remove germs. Rinse your hands well with clean water and air dry to avoid recontamination on a dirty towel. In situations where water is not available, a waterless hand sanitizer such as alcohol hand gel can be used. WHO recommends handwashing with ash if soap is not available in emergencies⁷, schools without access to soap and other difficult situations like post emergencies where use of clean sand is recommended too⁸.

Keeping the finger nails and toes nails trimmed and in good shape weekly is important in maintaining good health.

Proper and regular washing of hair with clean water and soap or shampoo if available, is also an essential part of personal hygiene.

Washing the feet daily or at least twice a day as our feet could accumulate sweats as we walk day and night; the sweat accumulates on all foot surfaces and between the toes. The sweats may stain the shoes and can produce awful odor.

Armpits and external genital hygiene: These body parts easily get sweaty and ventilation here is poor. After puberty our sweat gains a specific and unpleasant odor which may be offensive hence the armpit and genital areas must be washed regularly. This also includes cleaning the anus properly after defecating with clean toilet paper or clean water and washing the hands thoroughly after that. Girls should always wipe from anterior to posterior.

Regular washing of dirty underwear and outer clothes must be done with clean water, soap or detergents. Washed clothes will be dried under the sun and can be ironed when dried to destroy some vectors and to look smart.

Menstrual hygiene in girls: No special care is needed for the external genitalia other than washing with clean water, use of good and absorbent sanitary pads which should be changed regularly to prevent offensive odor, frequent bath at least twice daily, washing of hands before and after changing sanitary pads. Also the soiled pads should be wrapped in paper or nylon before disposing in the waste bin.

Puberty is defined as a period of human development during which secondary sexual characteristics appear or develop in a person, skeletal growth spurts occur, behavioral attitudes are modified and the capacity for fertility is realised⁹. On average, girls begin puberty around ages 10-11 years and end puberty around 15-17 years; boys begin around ages 11-12 years and end around 16-17 years¹⁰. School health education must be included in school curriculum so as to teach proper hygiene behaviors to the adolescents and prevent development of bad habits which are usually difficult to alter later in life

METHODOLOGY

This study took place in Divine Christian College, Umuamacham, Umueze, Osisioma Ngwa Local Government Area, Abia state, Nigeria. This school is a mixed private school located along Umuamacham road close to St. Bridget's College. A major landmark is the Umueze Primary school which serves as a junction from which the school can be located.

All students who agreed to participate were included in the study while those who did not agree to participate in the study were excluded. This study was a cross sectional descriptive study using self/interviewer administered questionnaire. Sample size was statistically determined using the formula $N = Z^2PQ/D^2$ which gave 384 and adjustment for non-response brought it up to 427.

Approval for the work was obtained from the Ethics and Research Committee of the Abia State University Teaching Hospital, Aba and the secondary school management.

RESULTS

Table 1: Socio-demographic variables of respondents

| VARIABLES | FREQUENCY(n=370) | PERCENTAGE (%) |
|----------------------------|-------------------------|-----------------------|
| Age(in years) | | |
| 10-13 | 207 | 55.9 |
| 14-17 | 163 | 44.1 |
| Gender | | |
| Male | 181 | 48.9 |
| Female | 189 | 51.1 |
| Ethnicity | | |
| Igbo | 368 | 99.5 |
| Others | 2 | 0.5 |
| Class | | |
| JSS 1-3 | 207 | 55.9 |
| SS 1-3 | 163 | 44.1 |
| Religion | | |
| Christianity | 368 | 99.5 |
| Others | 2 | 0.5 |
| Father's occupation | N=364 | |
| Trader | 94 | 25.8 |
| Civil servant | 111 | 30.6 |
| Artisan | 14 | 3.8 |
| Others | 145 | 39.8 |
| Mother's occupation | N=363 | |

| | | |
|---|--------------|------|
| Trader | 172 | 47.4 |
| Civil servant | 76 | 20.9 |
| Artisan | 22 | 6.1 |
| Others | 93 | 25.6 |
| Guardian's occupation | N=237 | |
| Trader | 95 | 40.1 |
| Civil servant | 72 | 30.4 |
| Artisan | 21 | 8.9 |
| Others | 49 | 20.7 |
| What is the highest level of your Father's education | N=366 | |
| None | 4 | 1.1 |
| Primary | 30 | 8.2 |
| Secondary | 138 | 37.7 |
| Tertiary | 194 | 53.0 |
| What is the highest level of your Mother's education | N=363 | |
| None | 8 | 2.2 |
| Primary | 17 | 4.7 |
| Secondary | 121 | 33.3 |
| Tertiary | 217 | 59.8 |
| What is the highest level of your Guardian's education | N=256 | |
| None | 9 | 3.5 |
| Primary | 8 | 3.1 |
| Secondary | 61 | 23.8 |
| Tertiary | 178 | 69.6 |
| What type of house do you live in | N=368 | |
| One bedroom in a public yard | 16 | 4.3 |
| 2-bedroom apartment | 60 | 16.3 |
| 3-bedroom apartment and above | 292 | 79.4 |

Table 1 above shows the socio-demographic variables of the respondents. Majority of the students (55.9%) were within the age range of 10-13 years. 181(48.9%) of the students were males while 189(51.1%) were females. This gives a fair distribution in their gender. Also, the majority of the students were from the Igbo tribe while the rest were Yoruba and Delta regions. Two hundred and seven students (55.9%) were within the classes of Junior secondary, while the remaining students, 163(44.1%) were in senior secondary, although these excluded those in JSS3 and SS3 following their vacation after their examinations. About 38% of the parents were traders, 27% were civil servants, 6% were artisans while the remaining 29% had other occupations different from the listed ones. About 60% of the parents and guardians attained tertiary level of education, 31% stopped at secondary education, 5% had only Primary education while the remaining 4% had no formal education. 79% of the respondents lived in a comfortable 3-bedroom apartment, 17% lived in a 2-bedroom apartment while 4% lived in a 1-bedroom public yard.

TABLE 2: KNOWLEDGE OF PERSONAL HYGIENE

| VARIABLE | FREQUENCY | PERCENTAGE (%) |
|--|--------------|----------------|
| Have you ever heard of personal hygiene | N=370 | |
| Yes | 368 | 99.5 |
| No | 2 | 0.5 |
| If yes, how did you hear it | N=366 | |
| Family | 100 | 27.3 |
| Friends | 6 | 1.6 |
| Mass media | 13 | 3.6 |
| Church | 2 | 0.5 |

| | | |
|---|--------------|------|
| School | 237 | 64.8 |
| Others | 8 | 2.2 |
| At what age did you hear about it | N=369 | |
| 2-5 years | 102 | 26.0 |
| 6-9 years | 212 | 53.9 |
| 10-13 years | 52 | 13.2 |
| 14-17 years | 3 | 6.9 |
| In what class were you when you heard about it | N=369 | |
| Nursery | 100 | 27.1 |
| Primary | 246 | 66.7 |
| Junior Secondary | 16 | 4.3 |
| Senior Secondary | 7 | 1.9 |
| What do you understand by personal hygiene | N=368 | |
| Practices that maintain health and prevent diseases | 361 | 98.1 |
| Practices that increase our mental awareness | 5 | 1.4 |
| Practices that increase our social status | 2 | 0.5 |
| Practices required for sound academics | 0 | 0 |
| What methods of personal hygiene do you know | N=362 | |
| Body hygiene | 339 | 93.7 |
| Oral Hygiene | 6 | 1.7 |
| Hair Hygiene | 0 | 0 |
| Fingers/Toe hygiene | 0 | 0 |

| | | |
|--|--------------|------|
| Clothes hygiene | 14 | 3.9 |
| Face hygiene | 1 | 0.3 |
| Hand hygiene | 2 | 0.4 |
| Do you know about global handwashing day | N=363 | |
| Yes | 234 | 64.5 |
| No | 129 | 35.5 |
| Was it conducted in your school | N=356 | |
| Yes | 217 | 61.0 |
| No | 139 | 39.0 |
| How and when should you practice personal hygiene | N=370 | |
| Regularly | 361 | 97.6 |
| Only at home | 6 | 1.6 |
| Only at school | 1 | 0.3 |
| Never | 2 | 0.5 |

Table 2 shows the respondents' knowledge of personal hygiene. About 93.6% of them have heard of personal hygiene and 60.3% of them heard it from school which is over half of the students. 53.9% of them heard it about the age range of 6-9 years mostly in primary school. 91.9% of them could tell what personal hygiene was. Half of them (about 55.2%) knew about the global handwashing day with close to similar amount (55.2%) noting that it was conducted in their school. The majority (91.9%) indicated that personal hygiene should be practiced regularly.

TABLE 3: KNOWLEDGE SCORE OF RESPONDENTS

Key:

Total possible score = 14

Score considered as good knowledge: ≥ 7

Score considered as poor knowledge : < 7

| Knowledge | Frequency | Percentage(%) |
|------------------|------------------|----------------------|
| Good Knowledge | 349 | 94.3 |
| Poor Knowledge | 21 | 5.7 |
| Total | 370 | 100 |

TABLE 4: ATTITUDE TOWARDS PERSONAL HYGIENE

| VARIABLES | FREQUENCY/PERCENTAGE (%) | | |
|---|---------------------------------|------------------|--------------|
| | ALWAYS | SOMETIMES | NEVER |
| Do you wash your hands before eating | 338(86.0) | 30(7.6) | 1(0.3) |
| Do you wash hands before | 328(83.5) | 33(8.4) | 9(2.3) |

| | | | |
|--|------------------|-----------------------|---------|
| preparing your meals | | | |
| Do you wash your hands after using the toilet | 343(87.3) | 22(5.6) | 5(1.3) |
| Do you wash your hands after playing or working | 308(78.4) | 56(14.2) | 6(1.5) |
| Do you wash your hands after coming from school | 278(70.7) | 70(17.8) | 20(5.1) |
| Do you wash your hands with soap or detergents | 317(80.7) | 43(10.9) | 9(2.3) |
| | FREQUENCY | PERCENTAGE (%) | |
| If “Never” for any of the above reasons why? | | | |
| No time | 1 | 0.3 | |
| No need | 2 | 0.5 | |
| Always forgetting | 15 | 3.8 | |
| Others | 2 | 0.5 | |

Table 4 shows the attitude of the respondents towards personal hygiene. Majority of the students wash their hands before eating (86.0%), wash their hands before preparing meal (83.5%), wash

their hands after using the toilet (87.3%), wash their hands after playing or working (78.4%), wash their hands after coming from school (70.7%), and wash their hands with soaps or detergents (80.7%)

TABLE 5: PRACTICE OF PERSONAL HYGIENE

| VARIABLES | FREQUENCY | PERECNTAGE (%) |
|---|------------------|-----------------------|
| How often do you bath? | N=366 | |
| Once everyday | 8 | 2.2 |
| Twice everyday | 307 | 83.9 |
| More than once everyday | 51 | 13.9 |
| Do you have a personal towel? | N=366 | |
| Yes | 309 | 84.4 |
| No | 57 | 15.6 |
| Do you use a deodorant or antiperspirant after having your bath? | N=354 | |
| Yes | 258 | 72.8 |
| No | 96 | 27.2 |
| Do you change into clean clothes after each bath? | N=365 | |
| Yes | 357 | 97.8 |
| No | 8 | 2.2 |
| Do you brush your teeth? | N=370 | |
| Yes | 370 | 100 |
| No | 0 | 0 |

| | | |
|--|--------------|------|
| How often do you brush your teeth? | N=370 | |
| Once everyday | 95 | 25.7 |
| Twice everyday | 251 | 67.8 |
| After every meal | 22 | 5.9 |
| Every other day or alternatively | 2 | 0.6 |
| What do you use to brush your teeth? | N=368 | |
| Toothbrush and toothpaste | 367 | 99.7 |
| Toothbrush and salt | 1 | 0.3 |
| Others | | |
| How often do you change your underwear? | N=368 | |
| Everyday | 345 | 93.8 |
| Alternate days | 5 | 1.4 |
| Twice or three times every week | 14 | 3.8 |
| Others | 4 | 1.0 |
| Do you trim your nails? | N=367 | |
| Yes | 352 | 95.9 |
| No | 15 | 4.1 |
| Do you have a personal comb | N=365 | |
| Yes | 279 | 76.4 |
| No | 86 | 23.6 |
| Do you wash your hair with shampoo or soap? | N=367 | |
| Yes | 354 | 96.5 |
| No | 13 | 3.5 |

| | | |
|---|--------------|------|
| Do you think practice of personal hygiene can affect your health positively? | N=361 | |
| Yes | 282 | 78.1 |
| No | 79 | 21.9 |

Table 5 above is on the practice of personal hygiene. The majority (78.1%) had their bath twice every day, 78.6% had personal towels, 72.8% use deodorant or antiperspirant after having their bath, 90.8% changed into clean clothes after each bath, 63.9% of the respondents brushed their teeth twice every day, mostly with toothpaste and toothbrush (93.4%), 87.8% changed their underwear every day, with 89.6% trimming their nails, 71.0% had personal combs, 90.1% washed their hair with shampoo or soap; and over 86.3% of them did so every time they had their bath.

TABLE 6: PRACTICE SCORE OF RESPONDENTS

Key:

Total possible score = 13

Score considered as good practice : ≥ 6

Score considered as poor practice : < 6

| Practice | Frequency | Percentage (%) |
|-----------------|------------------|-----------------------|
| Good Practice | 369 | 99.7 |
| Poor Practice | 1 | 0.3 |
| Total | 370 | 100 |

Table 6 gives a clear view on the practice level of the respondents. There was high level of practice amongst them.

DISCUSSION

Personal hygiene is a vital aspect of growth and development of an individual especially in the pubertal phase of life; hence this study is essential to know the compliant rate of secondary students to personal hygiene.

Following our study carried out among 370 secondary school students of the Divine Christian College, Umuamacham, Aba, it was observed that there was a fair distribution in both gender 46.1% of males, and 48.1% of female which is similar to a study carried out on students of Senior Secondary school students, Ile-Ife, where the males were about 50.7% and females 49.3%¹⁴. Also it was observed that majority of our respondents (52.7%) were within the 10-13 years age group. This is different from a work on Knowledge, attitude and practice of personal hygiene among secondary school students in Bogura city, Bangladesh where majority age group was 10-19 years¹⁵.

Our study showed a high knowledge of personal hygiene among the respondents (93.6%). This is similar to a study on Knowledge, Attitude and Practice of Personal Hygiene among senior secondary school students of Ambassador College, Ile-Ife¹⁴. In another study carried out in Senegal, it was reported that the health knowledge of students significantly improved after education¹⁶ which is comparable to our study where it was observed that the majority of the students (60.3%) heard of personal hygiene in school. Also 91.9% realized that personal hygiene should be practiced regularly. The reasons for the high level of knowledge among our respondents include the fact that personal hygiene is taught consistently in major subjects in school. Also most of our respondents have educated parents that recognize the importance of personal hygiene.

In a study conducted in Senegal, in assessing their attitudes, reasons given for not washing hands included stubbornness (not wanting to follow what adults say), laziness, rush to go to breaks, the time it takes away from playing, and the dirt and smell of the toilets. Despite these negative attitudes towards handwashing, many children exhibited good handwashing practices¹⁶. In contrast to our study; the major reason given was forgetfulness.

Majority of the students (94.3%) had good knowledge of personal hygiene, which could be due to their quality of school education and parents support with majority of the hygiene practices being body hygiene (86.3%) which is similar to a study carried out in Ile-Ife with a knowledge of 98.2% with good hygiene practices such as taking their bath(99.6%), brushing their teeth (98.2%), and

washing their hands(65.9%), although this contrasts with a study carried out in Kuwait on personal hygiene where the highest practice was on hand hygiene

In our study, 94.3% had good knowledge of personal hygiene with a corresponding higher level of practice (99.7%). This is in contrast to a study carried out on oral health knowledge and practice of secondary school students in Tanga, Tanzania where majority of the students had adequate knowledge of oral health but low level of oral health practice¹⁷.

CONCLUSION

From the assessment of the study conducted, there is adequate level of knowledge, attitude and practices among the students. This could be due to their earlier exposure to health knowledge in school from dedicated teachers in the private secondary school setting and parental factor because majority of the parents and guardians attained tertiary level of education.

RECOMMENDATION

Based on the knowledge of this study carried out, the following are recommended:

1. The provision of a good school facility in which health education is inculcated in their curriculum as well as provision of a healthful environment both at home, school and otherwise will ensure good hygiene practices among them.
2. There should be regular and adequate health education on personal hygiene through the mass media.
3. Schools should introduce and maintain school health services.

4. Further studies should be carried out to compare the knowledge, attitude, and practice of personal hygiene amongst other tribes, and religion from other secondary schools.

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