

KNOWLEDGE AND PRACTICE OF PERSONAL HYGIENE AMONG JUNIOR SECONDARY SCHOOL STUDENTS IN KANO STATE NIGERIA.

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Abstract

This study investigated personal hygiene knowledge and practice among junior secondary school students in Kano state. A descriptive research design of survey type was used for the study. The population of the study comprised all students of junior secondary schools in Kano state. Multi-stage sampling procedure was used to select a sample of 400 students for the study. The instrument used for this study was a researcher's developed questionnaire named Questionnaire on Personal Hygiene Practice among Junior Secondary School Students (QPHKPAJSS). The instrument was validated and standardized with a reliability index of 0.82. Four hundred (400) questionnaire were administered and three hundred and ninety two (392) were duly completed and returned for analysis. Frequency counts and percentages were used to describe the demographic characteristics of the respondents, while chi-square was used to test the hypotheses at 95% confidence level. The results of this study revealed that junior secondary school students have significant knowledge of personal hygiene ($\chi^2 = 211.592, P < 0.05$). Junior secondary school students significantly practice personal hygiene ($\chi^2 = 457.689, p < 0.05$). Based on the finding of this study, it was recommended among others that Government should give more emphasis on Health Education curriculums to help students to make decisions that will affect their health positively.

Introduction

Personal hygiene generally includes cleanliness of the body and proper maintenance of personal appearance. It involves regular washing of the body, washing the hands when necessary, cutting of nails, washing ones clothing, keeping the hair neat and brushing the teeth (WHO, 2011). School students are particularly vulnerable to neglect of personal hygiene the consequences in terms of morbidity and mortality are also more severe among them compared to adults. The increased burden of communicable diseases among students due to poor personal hygiene practices remains a concern on the public health agenda in developing countries. Poor knowledge, practices and attitudes towards personal hygiene play major roles in the high incidence of communicable diseases and therefore has negative consequences for the child's long term overall development (Johnson, 2016). The hands are probably the most important route for transmission of infection in the home, school and community, as they often have indirect contact with the mouth and nose and they also come in contact with food and water that is

to be consumed. It has been revealed that there is a strong and consistent cause link between poor hygiene and gastrointestinal infection, (WHO, 2011).

According to UNICEF (2008), there is evidence which indicates that hygienic practice, in particular, hand washing with soap at critical times, such as after defecating and before eating and preparing food, is very important. Hand washing with soap can significantly reduce the incidence of diarrhoea, the second leading cause of death amongst children under five years old worldwide. Good hand washing practices have also been shown to reduce the incidence of other diseases, notably pneumonia, trachoma, scabies, skin and eye infections and diarrhea-related diseases such as cholera and dysentery. The promotion of hand washing with soap is also a key strategy for controlling the spread of avian influenza.

Mehta and Kaur (2012), reported that personal hygiene practice is one of the essential parts of our daily life. Many people in rural areas may not understand what good or bad personal hygiene practice is. The prevention of communicable diseases, like diarrhoea, trachoma and many others is highly possible through the application of proper personal hygiene. Individual need to learn the proper practice of personal hygiene and use this for the prevention and control of important public health diseases that are prevalent in our locality. Murray (2004), said a person with poor personal hygiene might be isolated from friendship because telling the person about the situation might be sensitive and culturally difficult. The success of a job application or the chance of promotion could be affected by poor personal hygiene, no school wants to be represented by students who do not appear to be able to look after themselves. The body has nearly two million sweat glands. Moistened and dried sweat and dead skin cells all together make dirt that sticks on to the skin and the surface of underclothes. The action of bacteria decomposes the sweat, thereby generating bad odour and irritating the skin. This is especially observed in the groin, underarms and feet and in clothing that has absorbed sweat. Skin infections such as scabies, pimples and ringworm are results of poor personal hygiene (Nefer, 2014). Murray (2004), stated that the health risks to which humans are exposed prove that personal hygiene practice is essential. In fact, the spread of most new-world diseases, like bird flu and swine flu, has been attributed to lack of hygiene. With this in mind it is clear that, if sound hygienic practices were more wide spread, all people would benefit, including future generations.

Oyibo (2012), conducted studies on personal hygiene practice and found that personal hygiene practice among secondary school students in Nigeria was low. The average knowledge and practice scores related to personal hygiene recorded among the school students studied were 74.6 % and 54.9 % respectively. The practice related to personal hygiene reported by the students is low and was not totally reflective of the high level of knowledge related to personal hygiene observed among the students, 29.4 %, 37.0 % and 46.3 % of them wash their hands after using the toilet, washed their uniform daily and washed their hands after

playing respectively. The result of physical inspection of the students revealed that 17.9 %, 45.2 % and 57.4 % of them had dirty hair, dirty uniform and dirty nails respectively. Lawan (2016), who conducted study on knowledge of personal hygiene observed that the average knowledge of personal hygiene among secondary school students in urban areas of Kano State is far higher than those of students in the rural areas. The secondary students in the rural area of Kano State had poor status regarding knowledge of personal hygiene. Students in the urban areas of Kano State had good knowledge of personal hygiene, particularly hand washing. The knowledge about personal hygiene related diseases and its prevention was actually poor among the students, majority of the students had no ideal of personal hygiene related diseases. On personal hygiene practice, students had poor status regarding personal hygiene practice. Approximately, one-seventh of the students were reported not bathing regularly, kept long nails without trimming, washing hands with water only.

According to UBE (2002), junior secondary school is a phase of secondary education in the 6-3-3-4 system and also part of primary education in the U B E system .It is year 7, 8 and 9, which helps to ensure the bridge between primary and secondary education is safe, strong and consistent for all the students. Students attend junior secondary school for grade seven through nine. At this point, majority of students are at least fifteen years old. In the ninth grade, students take the Junior Secondary Certificate Examination (JSCE) to qualify for senior secondary education. The curriculum is a hybrid of prevocational and academic subjects. The essence is to impart knowledge in science, arts and technology and prepare the students for senior secondary school.

Hypotheses

The following hypotheses were formulated to guide the conduct of this study.

- 1 Junior secondary school students do not have significant knowledge of personal hygiene in Kano state.
- 2 Junior secondary school students do not significantly practice personal hygiene in Kano state.

Methodology

The design employed for this study was descriptive design of survey type. The population of this study comprised the entire junior secondary school students in Kano state Nigeria. The sample selected for this study was 400 participants. Multi-stage sampling procedure was used to select the sample for the study. Stage i, stratified sampling technique was used to stratify Kano state into the existing three senatorial zones. (Kano Central, Kano South and Kano North). Stage ii, simple random sampling technique was used to select seven educational zones out of fourteen in the state. Stage iii, simple random sampling technique was also used to select schools from the educational zones in stage two, four schools were randomly

selected from each zones. Stage IV, proportionate sampling technique of equal allocation was used, thereafter, simple random sampling technique was used and arrived at a total of 400 participants.

The instrument for data collection was researchers' developed questionnaire. The questionnaire was validated and standardized with the reliability of 0.82. The instruments was administered by the researchers with help of two (2) research assistants. Descriptive statistics of percentage was used to organize and describe the personal data, chi-square statistics was used to analyse all the hypotheses at 95 % confidence level of significance. i

Results and Discussion

The results of the study were presented in the tables below:

Table 1 Demographic information of the participants

Variables	frequency	Percentage (%)
Ages range in years		
10-12	136	34.7
13-15	224	57.1
16 years and above	32	8.2
Total	392	100
Gender		
Male	221	56
Female	171	44
Total	392	100
Educational zones		
D/Kudu	43	11.0
Wudil	65	16.6
Bichi	66	16.8
Gwarzo	62	15.8
Minjibir	73	18.6
Danbatta	45	11.5
Kura	38	9.7
Total	392	100

The information in table 1, above is based on the age range of the participants, the age range 10-12 years was 136 (34.7%), 13-15 years 224 (57.1%) while 16 years and above were 32 (8.2%). This means that majority of the participants were within the age of 13-15 years. For the gender of the participants, males constituted 221 (56%) while females were 171 (44%). This indicated that majority of respondents were male. Regarding to the educational zones 43 (11.0%) of the respondents were

from D/Kudu, 65 (16.6%) were from Wudil, 66 (16.8%) were from Bichi, 62 (15.8%) were from Gwarzo, 73 (18.6%) from Minjibir, 45 (11.5%) from Danbatta, while 38 (9.7%) were from Kura. This mean that majority of the respondents were from minjibir zone.

Table II Chi square summary on students' personal hygiene knowledge.

	Knowledgeable	not knowledgeable	Total	χ^2 value	df	P-value
FO	340	52	392	211.592	1	0.001
FE	196.3	196.3				

$\chi^2 = 3.841$; .df=1: (P < 0.05)

The information in table II reveals that 340 (86.7%) of participants were knowledgeable about personal hygiene, while 52 (13.3%) of the participants were not knowledgeable about personal hygiene. Looking at the size of frequency observed and expected from the table there is significant difference. The statistical computation revealed a χ^2 value of 211.592 at df 1, (P < 0.05). This means that the null hypothesis was rejected on the account that the students have significant knowledge of personal hygiene.

Table III Chi square summary on students' personal hygiene practice.

Practice of personal hygiene.	Practice	not practice	total	χ^2	df	P-value
FO	327	65	392	457.689	1	0.001
FE	196.3	196.3				

$\chi^2 = 3.841$; df=1: (p < 0.05)

The information in table III indicates that 327 (83.4%) of the participants practice personal hygiene while 65 (16.6%) do not practice personal hygiene. Looking at the size of frequency observed and expected from the table there is significant difference. The statistical computation revealed a χ^2 value of 457.689 at df1, (P < 0.05). The hypothesis is therefore rejected. Hence junior secondary school students in Kano state significantly practice personal hygiene.

This study investigated the personal hygiene knowledge and practice among junior secondary school students in Kano state. The outcomes of the study revealed that the junior secondary school students have significant knowledge of personal hygiene with a χ^2 value of 211.592 at df 1, (P < 0.05) which indicates significant knowledge of personal hygiene of the participants investigated, 83.4% were knowledgeable while 13.6% were not knowledgeable. This shows that majority of the participants have knowledge of bathing, brushing of teeth, washing of clothes and cutting of the nails. The finding of this study is consistent with UNICEF (2011), which conducted study on knowledge of personal hygiene in Palestine and found that most of the students have good knowledge of personal hygiene with (78%) of the participants having knowledge and only (22%) were not

knowledgeable of personal hygiene. Similarly, the finding of this study corroborate with a study conducted by Murray (2004), revealed that students have good knowledge of personal hygiene. Approximately (70-75%) of the students investigated had knowledge about general bathing, cutting nails and oral hygiene. The result also is in line with the study conducted by Ilesanmi (2016), which assessed the personal hygiene knowledge and practice of the senior secondary school students of Ambassadors College, Ile-Ife, Osun State, Nigeria where majority of the students (97.9%) have heard about the term personal hygiene. This can be explained by the fact that the subject is taught in ancillary topics especially in primary schools and junior secondary schools in subjects like Basic Science, Health Education and Home Economics. The result obtained in this study is supported by a similar study by Bastos (2010), which showed that students have the knowledge of personal hygiene. In another study conducted by Kumar (2015), found that about 85% of the respondents knew correctly the meaning of personal hygiene. Almost all the respondents agreed that personal hygiene includes cleanliness of the body and clothes. Almost all the participants (99.2%) viewed regular brushing and flossing of teeth as part of personal hygiene. Majority of the respondents (97.8%) viewed regular and proper hand washing as part of personal hygiene. Also, most of the students (88.4%) responded that personal hygiene includes washing of feet, using deodorants and using clean clothes. The finding is in line with a study conducted by Dongre (2006), on the impact of school health education programme on personal hygiene and related morbidities in tribal schools in India which reported that there is a significant knowledge of personal hygiene among students both male and female students. This finding is also in line with a study conducted by Vivas et,al (2010), on the knowledge, attitude and practice of personal hygiene among primary school students in rural Ethiopia which showed that there is significant knowledge of personal hygiene among pupils. A survey done in Palestine by Asha (2013), found that 86.7 per cent of students wash their hands with soap before eating, 84.4 per cent wash their hands with soap after going to the toilet and 78.4 per cent wash their hands after playing, but only 67.9 per cent report doing all three. This shows that they have the knowledge and they significantly practice personal hygiene.

The result of this study also showed that the junior secondary school students practice personal hygiene. Majority of them take their bath every day, wash their hands before meal and after using the toilet, cut their finger nails every week and brush their teeth every morning. This finding is consistent with UNICEF (2011), which conducted a survey on practice of personal hygiene in Palestine and found that 86.7% of the participants wash hands with soap before eating, 84.4% wash their hands with soap after using the toilet, 76.4% brush their teeth in the morning before eating while 78.4% wash their hands after playing. In another similar study by Kumar (2015), on practice of personal hygiene, almost all the reported that respondents 99.6% claimed to have their baths every day. In a similar

study by Murray (2004), 85.17% were accustomed to taking their bath regularly. A similar result was obtained about oral hygiene with 98.2% brushing their teeth every day and 93.8% of the respondents reported brushing their teeth 1- 2 times in a day. Approximately 69 percent of the study sample brushed their teeth at least twice daily in a study by Al- Wahadni (2006). In another study by Talinova (2008), reported that 90 % of the grammar school students said they brushed their teeth twice a day. This result was supported by another study by Ghose (2012), who found 74.2% of the students were found trimming their nails once a week. A survey conducted by Vivas (2010), on the knowledge and practice of personal hygiene among primary school pupils claimed that primary school pupils in rural Ethiopia practice personal hygiene. The result of the finding is also in line with the statement of Ashrafil (2000), who stated that Personal hygiene is the first step to good grooming and good health. Elementary cleanliness is common knowledge, neglect causes problems that individuals may not be aware of it, some problems may not be individual fault, but improving standards of personal hygiene will control these conditions. Marks (2011), conducted a survey in India with 791 individuals on personal hygiene practices, (57 % male, 43 % female). Results of this survey indicated that knowledge of personal hygiene played major role in the practice of personal hygiene.

Conclusion and recommendations

In conclusion, it has been found out that, junior secondary school students in Kano state have significant knowledge of personal hygiene. Also junior secondary school students in Kano state significantly practice personal hygiene which make them appear neat and look healthy: Based on the outcome of this study, we recommended that: Students should be encouraged to maintain their knowledge of personal hygiene more time need to be dedicated for teaching personal hygiene so as to encourage student to maintain their knowledge of personal hygiene.

- i Students should also be encouraged to continue the good practice of personal hygiene such as daily inspection should be maintained to enhance student personal hygiene practice.
- ii Government need to increase public awareness about the importance of personal hygiene practice. Through daily programme on hygiene practice on the radio and television, organizing seminar on personal hygiene practice, etc.

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