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Sustainability of National Health Promotion Policy through Personal Hygiene

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Abstract
Health promotion is a rapidly emerging approach to health development. There is growing evidence, which shows that health promotion makes a positive contribution to the improvement of human health. The Federal Government of Nigeria health promotion policy contains guidelines to assist in creating positive outcomes such as empowerment for health action and increased community involvement. One such guideline is the improvement of heath through personal hygiene. The level of knowledge of personal health and hygiene in the Niger Delta region is perceived to be limited. Poor hygiene and health practices restrict the psychological and health well-being of adolescent, more especially girls. The aim of this study is to investigate personal hygiene among junior and senior secondary school students in Yenagoa Local Government Area of Bayelsa State, the heart beat of the Niger Delta region. The study further examines the practice of personal hygiene with respect to care of the body and clothing. The design of the study was a pretest-posttest design. This involves pretesting participants' knowledge of personal hygiene before a health talk on personal hygiene and also post testing them after the health talk. The population of the study comprises senior secondary two (SS2) and Junior Secondary Two (JS2) students from urban and rural settings. Forty students were randomly selected from each school to be involved in the study making a total sample of eighty students. The Personal Hygiene Test which was developed by the researcher was used to collect data and the data were analysed using mean, standard deviation, t-test and ANOVA. The study reveals that participants do not have adequate knowledge of personal hygiene before the commencement of the study as mean and standard deviation for baseline measurement (pretest) was low for both urban and rural students. But after the health talk (application of treatment – health talk on personal hygiene) the post-test revealed a significant increase in knowledge of personal hygiene by both classes (JS2 and SS2). It is therefore recommended that there should be a strong emphasis of personal hygiene in the school curriculum.
Key words: personal hygiene, school curriculum, health promotion, Nigeria, Niger Delta, Sustainability.

Introduction

The Federal Government of Nigeria is committed to improving the health status of Nigerians and has been doing through health promotion which is a rapidly becoming the emerging approach to health development. There is growing evidence, which shows that health promotion makes a positive contribution to the improvement of human health. The emergence of new dimensions of demographic trends, urbanization and changing lifestyles have been associated as risk factors with implications for health. Studies by Hamilton-Ekeke, 2012a; Hamilton-Ekeke, 2012b; Moronkola, 2012 in Nigeria and around the world by Hamilton-Ekeke and Malcolm, 2005; 2007; 2008; provide convincing evidence of the effectiveness of health promotion strategies in modifying these risk factors and offer practical approaches to pursuing equity in health. National Health Promotion Policy contains guidelines to assist in creating positive outcomes such as empowerment for health action and increased community involvement. The Policy also prescribes an institutional framework for the organization and coordination of health promotion programmes nationally. Health promotion enables individuals acquire information, knowledge, attitudes and skills as well as change attitudes and behavior to facilitate making of healthy choices. Little wonder that Nigeria was able to curtail ebola outbreak in 2014 when it plagued West Africa. Nigerians were able to increase their personal hygiene practices like regular hand washing, improved oral hygiene, general keeping of their surroundings clean.

Hygiene is a set of practices performed for the preservation of health. Hygiene is an old concept related to medicine, as well as to personal and professional care practices related to most aspects of living. In medicine and in home (domestic) and everyday life settings, hygiene practices are employed as preventative measures to reduce the incidence and spreading of diseases. In the manufacture of food, pharmaceutical, cosmetics and other products, good hygiene is a key part of quality assurance i.e. ensuring that the product complies with microbial specifications appropriate to its use. The terms cleanliness (or cleaning) and hygiene are often used interchangeably, which can cause confusion. In general, hygiene mostly refer to practices that prevent the spread of disease-causing organisms. Since cleaning processes (e.g., hand washing) remove infectious microbes as well as dirt and soil, they are often the means to achieve hygiene (Onuzulike, 2001). Other uses of the term appear in phrases including: body hygiene, personal hygiene, sleep hygiene, mental hygiene, dental hygiene and

occupational hygiene, used in connection with public health. Hygiene is also the name of a branch of science that deals with the promotion and preservation of health, also called hygienic. Hygiene practices vary widely, and what is considered acceptable in one culture might not be acceptable in another.

Hygiene is not all about cleanliness of the body, but it is more than just being clean. It is a practice of keeping yourself; living home and working places clean in order to prevent illness and diseases. World Health organization defines personal hygiene as the basic concept of cleaning, grooming and caring for our body. It is also an important part of our daily living at home. A practice or condition conducive to good health and the prevention of disease or the practice of preventing illness and stopping it from spreading by keeping things clean.

Personal hygiene on the other hand is the proper way of maintaining the body parts such as the skin, teeth, ear, finger, nails, clothing and the immediate environment (Akinbote, 2007). In other words, personal hygiene is the safety precaution taken by an individual to get rid of germs and disease causing organism (Nwankwo, Amadi, Nwoga, Chukwuocha, Nwoke, Oguejiofor, & Odom, 2009). Over the years, man's efforts to control and maintain a healthy environment has been one of the greatest problems, especially in taking care of the skin, teeth, hair, ear, finger nails and clothing, the control of body odour, athlete foot, genitals and proper disposal of waste materials from the immediate living environment. Personal hygiene problem has been spread among human beings, hospitals, ministries and as well as institution (Abanobi, 2005).

The health hazard and growth of bacteria on and inside the body are caused by many factors including lack of good care of the body parts such as not washing of hand, hairs and private parts properly to prevent odour, cutting of fingers nails, brushing of teeth and cleaning of the ear. The study intend to provide adolescents with information on how to practice personal hygiene and to make them know the importance of personal hygiene because a good and quality life can be possibly achieved if students maintain their personal health and hygiene.

Statement of the Problem

The level of knowledge of personal health and hygiene within our society is said to be limited (Abiola, Nwogu, Ibrahim and Hassan, 2012). Poor hygiene and health practice restricts the psychological and health well-being of the adolescent, especially girls. It is been noticed that there is a low level of personal hygiene practice among senior and junior secondary schools students. Hamilton-Ekeke (2012a) found out that students find it difficult to take care of their teeth, hairs, nails, ears and their clothing and these attitude or poor health lifestyle expose them to health hazard, this calls for the attention of parents, health education teachers and researchers to find solution to this problem. This research therefore investigates student knowledge of personal hygiene which probably may be the reason for the poor hygiene practices.

Purpose of the Study

The purpose of this study is to ascertain students' knowledge of personal hygiene practices, its benefit to the overall health of an individual.

Research Questions

The following research questions were formulated to guide the study:

1. What is the knowledge of personal hygiene of secondary school students before the health talk?
2. What is the knowledge of personal hygiene of secondary school students after the health talk
3. What is the influence of gender on students' knowledge of personal hygiene and the interaction effect of gender and health talk?

Significance of the Study

This research work is very important as it brings to fore students' knowledge of personal hygiene and their awareness of its implication and effects to the general health of an individual. Also the awareness of poor personal hygiene practice problems like ring warm, athlete foot and body odour and susceptibility (prone) to diseases.

Method

The study was a pretest-posttest design. This involves pretesting participants' knowledge of personal hygiene before a health talk on personal hygiene. They were also post-tested after the health talk. The population for the study comprised of Senior Secondary Two (SS2) and Junior Secondary Two (JS2) from urban and rural settings. Forty students were randomly selected from each school to be involved in the study making a total sample of eighty students.

The study was in three phases: phase one was the pretest phase which involved eliciting students' understanding of personal hygiene before a health talk (lessons). The pretest was done with a 'Personal Hygiene Test (PHT)' developed by the researcher and validated by experts in measurement and evaluation.

Phase two was the health talk (health lesson) on personal hygiene given to Senior Secondary Two (SS2) students of Community Secondary School Famgbe and Junior Secondary Two (JS2) students of Universal Basic Secondary School Kpansia by the researcher. The Community Secondary School Famgbe is a rural school while the Universal Basic Secondary School Kpansia is an urban school. These two divide was investigated to see if urban dwellers will have a better understanding of personal hygiene than rural dwellers or vice versa. The mid-class (SS2 and JS2) of both schools were involved in the study because it is assumed that they have acquired some secondary education and as such not new in the educational system and as such have had some knowledge of the topic at hand (personal hygiene). This phase involved the researcher teaching the concept of personal hygiene with emphasis of its implication to health especially disease prevention. Ebola was used as a case study where applicable.

Phase three involved eliciting students' understanding of personal hygiene after the health talk (lessons). Students were given the 'Personal Hygiene Test (PHT)' again as post test (this is to avoid instrument bias). The instrument for data collection for the study was the Personal Hygiene Test (PHT), which covers all the aspects of personal hygiene that was taught. The researcher first of all sent consent letters to randomly selected schools soliciting for participation in the research. The consent letter detailed the purpose and objectives of the study as well as the method of data collection. About five schools returned a positive response but two were selected to be involved in the research based on proximity and convenience to the researcher. The researcher visited the selected schools each at a time on their scheduled dates and administered the instrument to get a baseline measurement of participants' knowledge of personal hygiene before given the health talk on personal hygiene, students were then asked to prepare for a test on what has been taught. One week after, the researcher returned to the two participating schools and administered the Personal Hygiene Test (PHT) to the sampled students. The test scripts were retrieved from them for analysis. Mean, Standard Deviation, t-test and ANOVA were used to analyse the data collated.

Results

The pretest scores as well as the post test scores were analysed and the results presented as follows:

Table 1: Pretest Mean and Standard Deviation for SS2 and JS2

School	Number of students	Mean Score (X)	Standard Deviation (SD)
JS2	40	31.50	10.51
SS2	40	31.62	9.96

From the table above, it can be observed that the mean (X) and standard deviation (SD) of the two classes investigated are approximately the same (JS2 X = 31.50, SD = 10.51; SS2 X = 31.62, SD = 9.96) meaning that the two classes (JS2 and SS2) were intellectually homogeneous in terms of their knowledge of personal hygiene before the health talk (lesson).

Table 2: Post-test Mean and Standard Deviation of JS2 and SS2

School	Number of students	Mean Score (X)	Standard Deviation (SD)
JS2	40	60.75	13.37
SS2	40	61.75	13.17

From Table 2, it can be observed that the post test mean and standard deviation of both classes (JS2 and SS2) increased after the health talk (lesson) on personal hygiene, meaning that the participants acquired knowledge after the teaching on personal hygiene. It will be nice to carry out further research to see if this knowledge will translate to behavioural change in terms of its application to personal hygiene (care of the body).

Table 3: t-test of difference between pretest and post test mean scores of JS2 and SS2 at P<0.05

Scores	Mean	Standard Deviation	Number of Students	df	t-cal	t-crit
Pretest JS2	30.50	10.51	40			
				78	10.00	1.98
Posttest JS2	60.75	13.37	40			
Pretest SS2	31.62	9.96	40			
				77	10.38	1.96
Posttest SS2	61.75	13.17	40			

From the table above, the t-calculated is greater than the t-critical for both JS2 and SS2 students meaning that there is a statistically significant difference between the pretest and post test scores of students on the personal hygiene test used in testing participants knowledge of personal hygiene before and after the health talk (lesson).

Table 4: ANOVA on gender influence on students' knowledge of personal hygiene and interaction effect of gender and health talk

Sources of variance	Sum of squares	df	Mean squares	f-cal	f-crit
Row (Gender)	37.8	1	37.8	019	3.96
Column (Health talk)	3187.8	1	3187.8	16.1	3.96
Interaction (Gender x Health talk)	525.4	1	525.4	2.6	3.96
Within	15073.7	76	198.3		
Total	18824.7	79			

From Table 4 above, the calculated f-value for gender is 0.19 while the critical value (table value) is 3.96 with 1 and 76 degree of freedom at 5% level of confidence. It can then be said that the calculated value is less than the critical value so there is no statistically significant difference between the knowledge of personal hygiene of boys and girls who participated in the study.

Discussion of Findings

The findings from this study reveals that participants do not have adequate knowledge of personal hygiene before the commencement of the study (as mean and standard deviation for baseline measurement – pretest) was low for both urban and rural students. But after the health talk (application of treatment – lesson on personal hygiene) the post-test revealed a significant increase in knowledge of personal hygiene by both classes (JS2 and SS2). From the post-test scores there is no statistically significant difference between urban and rural students' knowledge of personal hygiene. ANOVA also reveals no statistically significant difference between boys and girls knowledge of personal hygiene. These findings from this study contrast as well as collaborate with findings from Ghose, Rahman, Hassan, Khan & Alam (2012). Ghose *et al* carried out a research on knowledge and practicing behavior related to personal hygiene among the secondary school students of Mymensingh Sadar Upazilla, Bangladesh. The study was performed to assess and compare the level of knowledge and practicing behavior of urban and rural students in regards to hand washing, bathing, tooth brushing and taking care of nail and hair.

All the students were interviewed with a semi-structured questionnaire and observed with an observational check list. It was found out that in some of the personal hygiene variables investigated, rural students out-performed urban students while in some the urban students have a better understanding than students from the rural areas still in some variables, there is no difference (e.g. the knowledge of the students regarding tube well water for drinking was significantly higher in rural area compared to urban area. Whilst hand washing before meal with soap and water was found almost similar among urban and rural students but hand washing with soap and water after defecation was found significantly better practiced in urban students. Practice regarding tooth paste use was higher in urban area and charcoal use was still found in rural areas. The mean frequency of tooth brushing was significantly higher in girls compared to boys and was significantly higher among urban students). In terms of finding on gender variable, there is a contrast with the present study as the present study found no difference in boys and girls understanding of personal hygiene before and after the health lesson.

A study carried out by Oyibo (2012) on basic personal hygiene knowledge and practices among school children aged 6-14 years in Abraka, Delta State, Nigeria also revealed a similar finding with finding of the present study. Although Oyibo (*ibid*) research was with primary and junior secondary students, it was concluded that a sizeable number of the children studied had adequate knowledge related to basic personal hygiene. Oyibo's research when further to relate knowledge to practice, and found out that participants' practice of personal hygiene was poor despite their demonstration of adequate understanding of personal hygiene.

Conclusion

An increase in the trend of knowledge about personal hygiene was observed among the school students investigated. The increase in knowledge of personal hygiene among participants is down to the imparted knowledge of personal hygiene through the health talk (lesson) which was given to both rural and urban students. Implying that, with adequate and appropriate knowledge of personal hygiene, geographical location is not a barrier to children understanding of it neither is gender.

It is therefore recommended that there should be a strong emphasis of personal hygiene in the school curriculum as well as a strong synergy of commitment and dedication between communities, Government and schools to enhance the knowledge of personal hygiene.

Since this study covered only two schools in the State, it is recommended that other studies which will cover more towns and villages in the State as well as more States in the country should be embarked upon so that the findings of such studies can be generalized. Also further research linking knowledge to practice is desirable as hygiene promotion is not simply a matter of providing information.

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