KNOWLEDGE AND PRACTICES OF PERSONAL HYGIENE IN THE PREVENTION OF COVID-19 DISEASE AMONG SELECTED SUB-URBAN COMMUNITY IN IKORODU, LAGOS STATE

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Abstract
COVID-19 is a global pandemic with a high transmission rate. One of the best measures to address the transmission of COVID-19 is adherence to proper hand hygiene practice. Despite the unprecedented national measures in combating the outbreak, the success or failure of these efforts is largely dependent on public dispositions and behaviour towards personal hygiene. This study therefore examined the Knowledge and Practices of Personal Hygiene in Prevention of COVID-19 Pandemic among Selected sub-urban Community in Lagos State. To achieve these, two research questions and hypotheses were postulated for the study. The descriptive survey research design was used while the population comprised of all Residents of Ikorodu division made up of Ikorodu, Ijede, Ogijo, Igbogbo and Gberigbe *in Lagos state. A mixed sampling technique was used, where convenience sampling was used to select the population area and stratified sampling was used in selecting 500 respondents for the study. The research instrument for the study was a self-developed instrument. Knowledge and Practice of Personal hygiene in Prevention of COVID-19 Questionnaire (KPPPCQ) and a four points Likert's-type rating scale was used. A total number of five hundred (500) questionnaires were distributed, collected and analyzed using frequency counts and percentages for the demographic data while Chi-square statistical tools was used to test the stated hypotheses. Results from this study revealed that there was significant knowledge and practice of personal hygiene in prevention of COVID-19 Pandemic among Selected sub-urban Community in Lagos State. These findings recommend that public lectures should be organized on importance of personal hygiene behavior for both male and female in prevention of COVID-19 pandemic and awareness campaign on hand washing and the use of nose mask when in public place such as market and public gathering.*

Keywords: COVID-19 pandemic, Knowledge, Personal Hygiene and Practice.

Introduction
Coronavirus disease 2019 (COVID-19) has risen as an unpredictable and esoteric infectious disease caused by a newly emergent virus, which resulted in an outbreak in Wuhan, China, in December 2019 (Zheng, 2020). This novel infection is additionally getting to be a mounting risk to the whole world. Genetic sequencing of the virus suggests that SARS-CoV-2 is a beta coronavirus closely linked to the SARS virus (Chinese Center for Disease Control and Prevention, 2020). The causative pathogen was identified as a new coronavirus (COVID-2019), followed

by gene sequence analysis and the development of detection methods. Coronavirus disease 2019 (COVID-19) virus is spreading rapidly, and scientists are endeavoring to discover drugs for its efficacious treatment. Chloroquine phosphate, an old drug for the treatment of malaria, is shown to have apparent efficacy and acceptable safety against COVID-19 associated pneumonia in multicenter clinical trials conducted in China (Gao, Tian and Yang, 2020).

First-line therapy for fevers incorporates antipyretic treatment such as Paracetamol, while expectorants such as guaifenesin may be utilized for a non-productive cough (Wang, Wang, Ye and Liu, 2020). Self-isolation, social (physical) estrangement, and adherence to personal hygiene standards like consistent, thorough hand washing are examples of protective methods embraced during and after the pandemic (Pandit, 2020). One of the most important commitments we can make to abating the transmission of COVID-19 and keeping ourselves and our communities secure is to embrace Practices that support health maintenance and disease prevention which is known as personal hygiene (Oyibo, 2012). Personal hygiene practices involve regular washing of hands, bodies (by bathing), trimming of nails, washing of clothes and hair, regular brushing of teeth among many others (Lal 2016). Hand cleanliness or regular handwashing is presently respected as one of the critical components of disease control exercises (Desai, and Patel, 2020). Appropriate handwashing and individual cleanliness practices are fundamental for all, particularly in the healthcare settings, where it secures patients and healthcare specialists. Also, it provides specific recommendations to promote improved hand-hygiene practices and reduce the transmission of pathogenic microorganisms to patients and personnel in healthcare settings (Mathur, 2011).

Despite the unprecedented national measures in combating the outbreak, the success or failure of these efforts is largely dependent on public behavior. Specifically, public adherence to preventive measures established by the government is of prime importance to prevent the spread of the disease. Adherence is likely to be influenced by the public's knowledge and attitudes toward COVID-19. Evidence shows that public knowledge is important in tackling pandemics (Chirwa, 2020).

Handwashing with soap can reduce the risk of acute respiratory infections by 16% to 23% (*World Health Organization, 2021*) and the Uganda Ministry of Health recommend hand hygiene as one of the essential means to prevent the spread of all infections and in particular COVID-19. Other measures recommended include maintaining social distance, avoiding crowds, practicing respiratory hygiene, avoiding touching eyes, nose, and mouth, keeping up to date on the latest information from trusted sources, self-quarantine, cleaning frequently touched surfaces, and seeking medical care in case of symptoms (UNICEF. 2021). The promotion of safe hygiene is the single most cost-effective means of preventing infectious disease (Curtis, Schmidt, Luby, Florez, Touré and Biran, 2011). During

a global pandemic, one of the cheapest, easiest, and most important ways to prevent the spread of a virus is to wash your hands frequently with soap and water Ejemot-Nwadiaro, Ehiri, Arikpo, Meremikwu, Critchley, (2015). The promotion of hand hygiene behavior remains a complex issue (Stone, Teare and Cookson, 2001). Reasons for non-compliance with recommendations occur at individual, group, and institutional levels (WHO, 2021). Individual factors such as social cognitive and psychological determinants (ie, knowledge, attitude, intentions, beliefs, and perceptions) provide additional insight into hand hygiene behavior (Wolf, Johnston and Freeman, 2019). Perceived barriers to adherence to hand hygiene practice recommendations include inaccessible hand hygiene supplies, forgetfulness, lack of knowledge of guidelines, insufficient time for hand hygiene (Pengpid and Peltzer, 2012).

Despite considerable efforts, compliance with hand hygiene as a simple infection-control measure remains low and hygiene is suboptimal in both community and healthcare settings in African countries (Muiru, 2018). Together with establishing the existing barrier and high-risk areas to hand hygiene, solutions can be formulated on proper infection prevention to limit the spread of COVID-19 in the communities. Therefore, the study examined the knowledge and practice of Personal Hygiene Behaviour in Prevention of COVID-19 Pandemic among Selected sub-urban Community in Ikorodu, Lagos State.

In order to accomplish this task, two research questions were posed and two hypothesis were tested

Research Questions

1. Will there be any difference in knowledge of personal hygiene in prevention of COVID-19 Pandemic among Selected sub-urban Community in Ikorodu, Lagos State?
2. Will there be any difference in practice of personal hygiene and prevention of COVID-19 Pandemic among Selected sub-urban Community in Ikorodu, Lagos State?

Hypotheses

The following research hypotheses were formulated and tested for the study:

1. There will be no significant knowledge of personal hygiene in prevention of COVID-19 Pandemic among selected sub-urban community in Ikorodu, Lagos State.
2. There will be no significant practice of personal hygiene in prevention of COVID-19 Pandemic among selected sub-urban community in Ikorodu, Lagos State.

Methodology

The descriptive survey research design was adopted because of its capability to examine the relationship between variables under study, hypotheses testing and development of generalization. The population of the study consisted of all residents in in Ikorodu Division of Lagos state comprising of Ikorodu, Ijede, Ogijo, Igbogbo and Gberigbe. Mixed sampling technique was used in the course of sampling the population of five hundred (500) residents of Ikorodu Division of Lagos State. Convenience sampling method was used in the selection of different areas in Ikorodu Division while Stratified sampling technique was used in the selection of respondents from each of this considered sub divisions. The research instrument for the study was the Knowledge and Practices of personal hygiene in prevention of COVID-19 Questionnaire (KPPPCQ). The questionnaire was divided into two sections: A and B. Section A contained demographic data of respondents encompassing age, Marital status, highest qualification and occupation while Section B is structured to test the stated hypotheses while the questionnaire adopted a 4-point Likert's attitudinal scale which are Strongly agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD) to enable respondents give near accurate responses to the questions. The face and Content validity of the instrument were ascertained by a panel of three experts in the departments of Human kinetics, Sports and Health Education, faculty of education, Lagos State University, Ojo Lagos. The Cronbach alpha technique was used to get the reliability of the study by checking for the internal consistency of the research instrument which an r-value of 0.86 was obtained and used as basis for the adoption of the instrument for data collection. The copies of the questionnaire were administered with the help of three trained research assistance to the respondents. A total of 500 copies of the questionnaires were distributed and collected by the researcher assistants at the spots and data collection lasted for four weeks. Copies of the administered questionnaires were checked to ensure that they were well completed. Daily review meetings were held at the beginning and end of each day with the research assistants. Data collected were analyzed using appropriate descriptive statistics of frequency counts and percentages for data presentation. While the inferential statistics of Chi-Square was used to test stated hypothesis at 0.05 alpha level of significance. The Statistical Package for Social Science (SPSS) version 23 was used for analyzing the data collected.

Results

Table 1: Data Presentation Based on Age

Age	Frequency	Percent %
18-27	89	17.8
28-37	141	28.2
38-47	164	32.8
48 and above	106	21.2
Total	500	100

Table 1 shows that approximately 17.8% of the respondents were within 18-27 years, while 28.2% of the respondents were within 28-37 years, approximately 32.8 % of the respondents were within 38-47 years and 21.2% of the respondents were 47 years and above.

Table 2: Data Presentation Based on Marital Status

Marital Status	Frequency	Percent
Single	158	31.6
Married	319	63.8
Widowed	10	2.0
Divorced	13	2.6
Total	500	100

Table 2 shows that approximately 31.6% of the respondents were Single, while 63.8% of the respondents were within Married, approximately 2.0% of the respondents were within widows and 2.6% of the respondents were divorced.

Table 3: Data Presentation Based on respondents highest Qualification

Qualification	Frequency	Percent
Primary school	247	49.4
WASCE	171	34.2
First Degree	36	7.2
Second Degree	46	9.2
Total	500	100

Table 3 shows that a total of 49.4% had primary education, while approximately 34.2% of the respondents had WASCE, approximately 7.2% of the respondents had First degree and approximately 9.2% of the respondents had second degree.

Table 4: Data Presentation Based on Respondents Occupation

Occupation	Frequency	Percent
Civil Servant	176	35.2
Business Woman	158	31.6
Housewife	44	8.8
Others	122	24.4
Total	500	100

Table 4 show that a total of 35.2% were Civil servants, approximately 31.6% of the respondents were Business women, approximately 8.8% of the respondents were Housewives while 24.4% of the respondents were in other occupation.

Hypothesis One

Hypothesis one states there will be no significant knowledge of personal hygiene in prevention of COVID-19 among selected sub-urban community in Ikorodu, Lagos State. This hypothesis was tested using Chi-square at 0.05 level of significance. The result is presented on the table below.

Table 5: Chi-square (X^2) result on Knowledge of personal hygiene in prevention of COVID-19 among selected sub-urban

	Observed N	Expected N	Residual	X^2	Sig
Strongly agree	200	125.0	75.0	336.016	0.000
Agree	249	125.0	124.0		
Disagree	50	125.0	-75.0		
Strongly Disagree	1	125.0	-124.0		
Total	500				

From the result presented on table 5 above, it could be observed that a significant Chi-square value (X^2=336.016, p<0.05) was obtained at 0.05 level of significance, therefore hypothesis one as stated is hereby rejected. This implies that there was significant knowledge of personal hygiene in prevention of COVID-19 among Selected sub-urban Community in Ikorodu, Lagos State. The distribution of respondents' responses showed that majority (249) agreed to having knowledge of personal hygiene followed by 200 respondents that strongly agreed, 50 respondents disagreed while just 1 respondent strongly disagreed.

Hypothesis Two

Hypothesis two states that there will be no significant Practice of personal hygiene in prevention of COVID-19 among selected sub-urban community in Ikorodu, Lagos State. This hypothesis was tested using Chi-square at 0.05 level of significance. The result is presented on the table below.

Table 6: Chi-square (X^2) result on Knowledge of personal hygiene in prevention of COVID-19 among selected sub-urban

	Observed N	Expected N	Residual	X^2	Sig
Strongly agree	50	125.0	-75.0	684.016	0.000
Agree	374	125.0	249.0		
Disagree	75	125.0	-50.0		
Strongly Disagree	1	125.0	-124.0		
Total	500				

From the result presented on table 6 above, it could be observed that a significant Chi-square value (X^2=684.016, p<0.05) was obtained at 0.05 level of significance, therefore hypothesis two as stated is hereby rejected. This implies that there was significant practice of personal hygiene in prevention of COVID-19 among selected sub-urban Community in Ikorodu, Lagos State. The distribution of respondents' responses showed that majority (374) agreed to have practiced personal hygiene followed by 75 respondents that disagreed, 50 respondents strongly agreed while just 1 respondent strongly disagreed.

Discussion of Findings

The study was carried out to examine the knowledge and practices of personal hygiene in prevention of COVID-19 among selected sub-urban Community in Ikorodu, Lagos State.

In testing hypothesis one which states that "there will be no significant knowledge of personal hygiene in prevention of COVID-19 among selected sub-urban community in Ikorodu, Lagos State". A significant Chi-square value (X^2=336.016, p<0.05) was obtained at 0.05 level of significance, therefore rejecting the stated hypothesis. It thus implies that there was significant knowledge of personal hygiene in prevention of COVID-19 among selected sub-urban community in Ikorodu, Lagos State. This finding therefore corroborates Adetunji, Baothman, Alserhan, Almunyif, Alsharbe, and Samaren (2018) study where they evaluated the knowledge, attitudes, and practices (KAP) of hygiene among rural school children in Ethiopia. They assessed the extent to which proper knowledge of hygiene was associated with personal hygiene characteristics and how it prevents diseases occurrence using a cross-sectional study which comprised 669 students who were interviewed by trained researchers. Participants were pupils in grades 1-6 at Angolela Primary School, located in rural Ethiopia. Result revealed that 52% of students were classified as having adequate knowledge of proper hygiene which were more likely to wear clean clothes, observe hand washing practices and protect them from disease occurrence.

Altaher, Elottol, Jebril, and Aliwaini,(2021) also agrees with the findings of this study while evaluating basic knowledge and awareness of personal hygiene regarding COVID-19 during its outbreak in Palestine using a cross-sectional survey on 458 sampled participants from five Gaza Strip governorates and different socio-economic status. Results from this study shows that most of the Gazan adults had very good knowledge of personal hygiene and COVID-19 epidemiology. Despite level of knowledge and practices of personal hygiene recorded at 74% many of the respondents still find it difficult complying with measures that prevent COVID-19 infection.

In testing hypothesis two which states that "There will be no significant practice of personal hygiene in prevention of COVID-19 Pandemic among selected sub-urban community in Ikorodu, Lagos State". A significant Chi-square value

(X^2=684.016, p<0.05) was obtained at 0.05 level of significance, therefore rejecting the stated hypothesis. It thus implies that there was significant practice of personal hygiene in prevention of COVID-19 among selected sub-urban Community in Ikorodu, Lagos State. This finding is in agreement with Lestari, Kadir, Idham, Azwar, Ramadhany, Sembiring, and Kusminanti, (2021) where they evaluated and performed survey on personal hygiene practices related to COVID-19 prevention and control among Indonesian communities. The researchers gathered from 34 provinces in Indonesia through the Indonesia National Safety and Health Council network and Universities network a total of 771 Respondents who voluntarily submitted their response to a predesigned online questionnaire. The results show that wearing mask, spraying of disinfectant and personal hygiene practices of regular handwashing were significant in COVID-19 prevention.

Further, This findings is consistent with Zakout, Khatoon, Bealy, Khalil, and Alhazimi, 2020) in their study aimed at assessing the role of the Coronavirus Disease 2019 (COVID-19) pandemic in improving personal hygiene in Saudi Arabia. Data were got with the help of an online survey while Improvement at different levels was detected in all examined personal hygiene items. The percentages of respondents who always washed their hands after coming back home (34.1%), used soap to wash their hands (58.8%), used a hand sanitizer outside (5.2%), wore a face masks while outside (1.4%) and washed their hands before preparing and/or eating food (74.9%) was increased before the pandemic to 89.6%, 90%, 63.5%, 59.2% and 89.1% during the pandemic, respectively.

Conclusions and recommendations

Based on the findings of this study. It was concluded that there was significant knowledge of personal hygiene in prevention of COVID-19 among selected sub-urban Community in Ikorodu, Lagos State. Also there was significant practice of personal hygiene in prevention of COVID-19 among selected sub-urban community in Ikorodu, Lagos State.

This finding led the researchers to recommend that public lectures should be organized on importance of personal hygiene in prevention of COVID-19 and awareness campaign on hand washing, the uses of nose mask when in public place such as market and social gathering.

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