

## Knowledge, Awareness and Practices towards COVID-19 in Nigeria during the Ascent Time of the COVID-19 Episode

COVID-19 Bölümünün Çıkış Zamanı Sırasında Nijerya'da Bilgi, Farkındalık ve Pratikler

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### ABSTRACT

**Objective:** Coronavirus disease 2019 (curtailed "COVID-19") is an enormous group of infection which causes sickness in creatures or people and later recognized in December 2019 in Wuhan, China. This examination was attempted to explore the knowledge, awareness, and practices towards COVID-19 among occupants in Nigeria during the fast ascent time of the COVID-19 episode.

**Methods:** One thousand and eighty-six (1086) members who were of Nigerian origin, age 18 years or more who comprehended the substance of the banner took an interest in the examination. Depending on the writers' systems with neighborhood individuals living in Nigeria, a two-page enlistment banner was posted/reposted to groups in Whatsapp, twitter and, Facebook. This banner contained a short presentation on the background, objective, methodology, voluntary nature of participation, declarations of anonymity and privacy as well as the link speedy reaction code of the online questionnaire.

**Results:** The outcomes indicated that after samples, majority of respondents ages were 30-50years (44.4%); 51.7% were males and 47.6% were females, and 15.3% of the total respondents from the 36 States in Nigeria, were Benue residents, with leading part of the respondent, 57.4% holding a Bachelor certificate, 23.7% postgraduates and 16% undergraduate. In light of information, majority of the respondents, 92.1% concurred that COVID-19 is a viral contamination, as respect, the method of transmission, lion's share of the respondent, 155(14.3%) concurred sneezing or coughing by infected persons are the major mode of transmission.

**Conclusion:** Majority of the participants claimed that they frequently wash their hands (84.1%) and agreed that they usually employ the use of face masks (59.1%). 59.3% claimed that they took their immunity through diet and 46.5% of the participants preferred the use of surgical mask.

**Key Words:** Knowledge, awareness, practices, Covid-19

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### ÖZET

**Amaç:** Coronavirus hastalığı 2019 ("COVID-19"), yaratıklarda veya insanlarda hastalığa neden olan ve daha sonra Aralık 2019'da Wuhan, Çin'de tanınan muazzam bir enfeksiyon grubudur. Bu inceleme, COVID-19 bölümünün hızlı yükselme süresi boyunca Nijerya'da yaşayanlar arasında COVID-19'a yönelik bilgi, farkındalık ve uygulamaları araştırmaya çalışıldı.

**Yöntem:** Afişin içeriğini kavrayan, 18 yaşında veya daha fazla Nijeryalı kökenli bin seksen (1086) üye incelemeye ilgi gösterdi. Nijerya'da yaşayan mahalle bireyleri olan yazarların sistemlerine bağlı olarak, Whatsapp, twitter ve Facebook'ta gruplara iki sayfalık bir ilan afişi gönderildi. Bu afiş, arka plan, amaç, metodoloji, katılımı gönüllülük, anonimlik ve gizlilik beyanlarının yanı sıra çevrimiçi anketin bağlantı hızlı reaksiyon kodu hakkında kısa bir sunum içeriyordu.

**Bulgular:** Sonuçlar, örneklemelerden sonra, katılımcıların yaşlarının çoğunun 30-50 yaş (% 44,4); % 51.7'si erkek ve % 47.6'sı kadını ve Nijerya'daki 36 eyaletten toplam katılımcıların % 15.3'ü, katılımcıların önde gelen kısmı, % 57.4'ü lisans sertifikası, % 23.7'si mezun ve % 16'sı lisans ile Benue sakinleriydi. Bilgi ışığında, katılımcıların çoğunluğu, % 92.1'i olmak üzere COVID-19'un viral bir kontaminasyon olduğu ve bulaşma yöntemi bağlamında ise katılımcıların 155'i (% 14.3) enfekte kişiler tarafından aksırık ya da öksürük ile olduğu konusunda hemfikirlerdir.

**Sonuç:** Katılımcıların çoğu sık sık ellerini yıkadıklarını (% 84.1) ve genellikle yüz maskesi (% 59.1) kullandıklarını kabul etmişlerdir. % 59.3'ü bağışıklıklarını diyet yoluyla aldıklarını ve katılımcıların %46.5'inin cerrahi maske kullanmayı tercih ettiğini iddia etti.

**Anahtar Sözcükler:** Bilgi, farkındalık, uygulamalar, Covid-19

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**INTRODUCTION**

Coronavirus are regular human pathogens, causing by and large gentle intense respiratory illness known as the regular cold (1) which was later identified in December 2019 in Wuhan, China. In humans, several coronaviruses are known to cause respiratory infections ranging from the normal virus to increasingly serious ailments, for example, Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).

In China, 18.5% of the patients with COVID-19 develop to the extreme stage, which is portrayed by intense respiratory pain disorder, septic shock, hard-to-handle metabolic acidosis, and, and bleeding coagulation dysfunction(2, 3).

In Nigeria, COVID-19 infection affects all ages. In any case, proof to date proposes that two gatherings of individuals are at a higher danger of getting serious COVID-19 virus. These are older people; and those with fundamental ailments (4). In Nigeria, the primary affirmed instance of the pandemic of coronavirus virus 2019 in Nigeria was reported on 27th February, 2020 when an Italian citizen in Lagos tested positive for the virus, brought about by SARS-CoV-2(4). On 9<sup>th</sup> March, 2020, a second instance of the virus was accounted for in Ewekoro, Ogun State, a Nigerian resident who had contact with the Italian citizen. On 26th, April, there were ninety-one cases: forty-three in Lagos State, eight in Sokoto State, six in Taraba State, five in Kaduna State, five in Gombe State, three in Ondo State, three in Abuja, three in Edo State, three in Oyo State, three in Rivers State, three in Bauchi State, two in Osun State, one in Akwalbom State, one in Bayelsa State, one in Ebonyi State and one in Kebbi State (4).

The continuous COVID-19 scourge has expanded quickly and by April 27, 2020, the virus had arrived at 210 nations by and large, bringing about 2,890,360 affirmed instances of the coronavirus COVID-19 and 201,501 passings, with almost all cases and passings happening in United State of America and Africa (5). In light of this difficult circumstance, the World Health Organization (WHO) proclaimed it a general wellbeing crisis of universal worry on January 30 and called for community oriented endeavors of all nations to forestall the quick spread of COVID-19 (6).

The fight against COVID-19 is as yet proceeding in Nigeria with all out affirmed instances of 1273 as at 27th, April, 2020. To ensure the last achievement, individuals' adherences to these control measures are basic, which is for the most part influenced by their insight, mentalities, and practices towards COVID-19. Lessons gained from the SARS episode in 2003 suggests that information and attitudes towards infectious disease are related with level of frenzy feeling among the populace, which can additionally complicate endeavors to forestall the spread of the disease (7, 8).

To encourage flare-up the board of COVID-19 in Nigeria, there is an earnest need to comprehend the public awareness of COVID-19 at this crucial point in time. Therefore this study was undertaken to investigate the knowledge, attitudes and practices towards COVID-19 among residents in Nigeria during the rapid rise period of the COVID-19 outbreak.

**METHODS**

*Subjects*

The study adopted the cross sectional quantitative research design. One thousand and eight-hundred-six (1086) participants who were of Nigerian origin aged 18 years or more who understood the content of the poster participated in the study.

The study was conducted from March 24th to April 27, the week immediately the lockdown of the three major states (Abuja, Lagos and Ogun) in Nigeria. Because it was not possible to do a community-based national sampling survey during this special period, the authors decided to collect the data online. Relying on the authors' networks with local people living in Nigeria, a two-page recruitment poster was posted/reposted to groups in Whatsapp, twitter and Facebook.

This poster contained a brief introduction to the background, objective, procedures, voluntary nature of participation, declarations of anonymity and confidentiality as well as the link and quick response code of the online questionnaire.

Although the questionnaire was distributed by residents, the authors did not constrict the sample to Abuja, Lagos and Ogun residents only. Residents of other affected states in the country were also eligible for this survey if they were willing to participate.

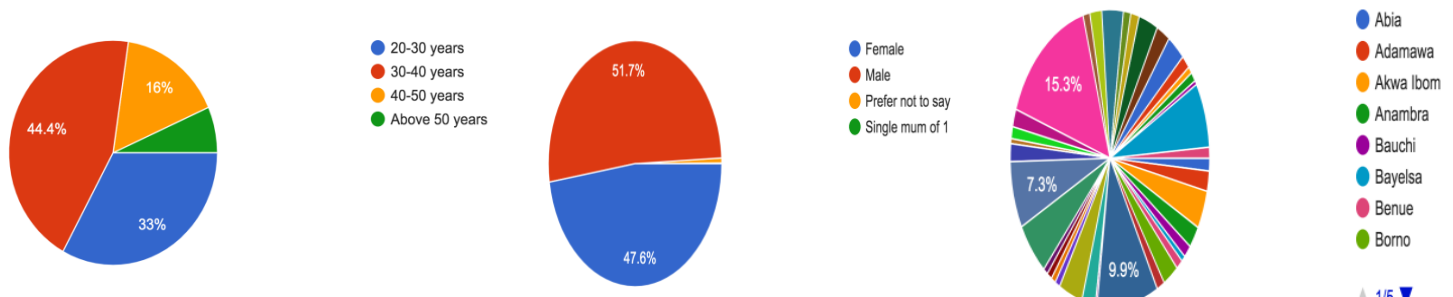
The questionnaire consisted of two parts: demographics and knowledge, attitude and practice. Demographic variables included age, gender and, place of a current resident.

A COVID-19 knowledge questionnaire was developed by the authors. The questionnaire had 29 questions, 14 regarding knowledge, 7 regarding awareness and, 8 regarding practices of COVID-19. These questions were answered on a yes/no/don't know and maybe basis.

The data obtained from the study were analyzed with the aid of the Statistical Package for Social Sciences (SPSS, 20.0). The chi-square test was used in testing the statistical significance of the study hypotheses.

**RESULTS**

A total of one thousand and eighty-six respondents completed the survey questionnaire. After samples, majority of respondents ages were 30-50 years (44.4%); 51.7% were males and 47.6% were females, and 15.3% of the total respondents from the 36 States in Nigeria, were Benue residents, with a majority of the respondent, 57.4% holding a Bachelor degree, 23.7% postgraduates and 16% undergraduate.



**Figure 1:** Demographic distribution

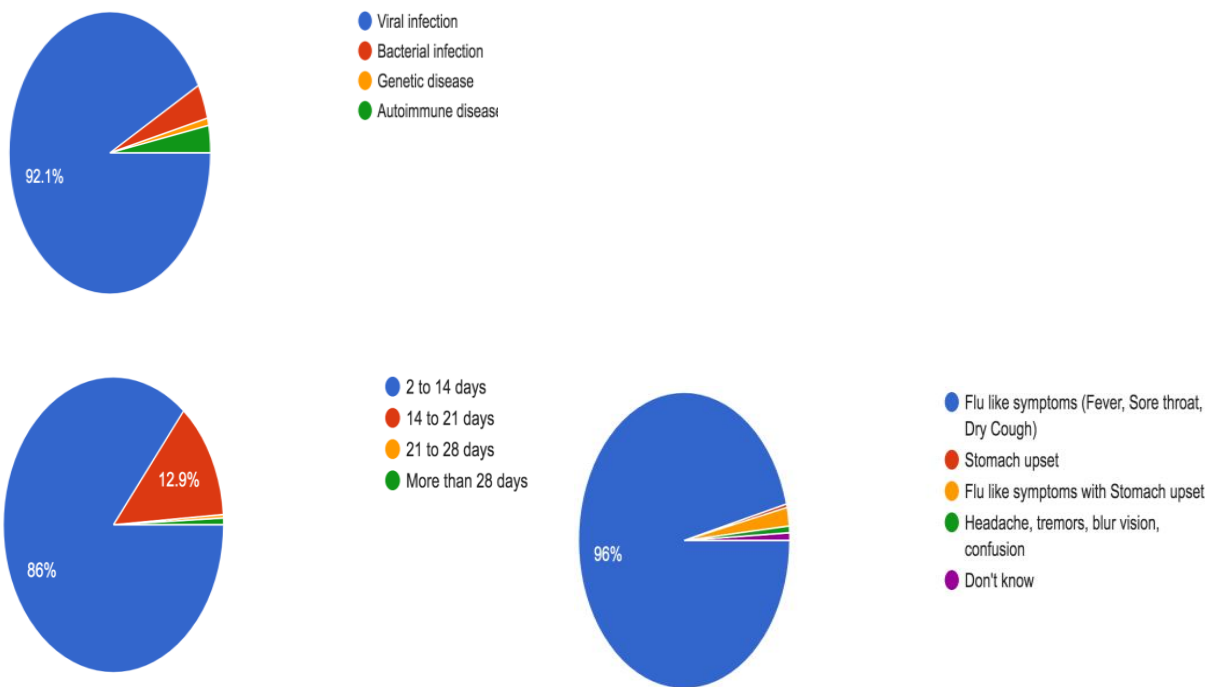
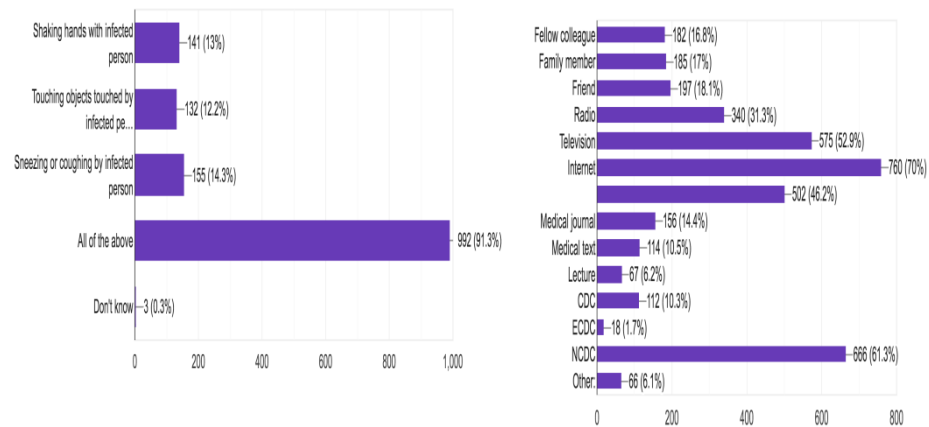


Figure 2a: Level of knowledge on the outbreak of COVID-19

Based on knowledge, majority of the respondents, 92.1% agreed that COVID-19 is a viral infection, as regards the mode of transmission, majority of the respondent, 155(14.3%) agreed to sneeze or coughing by infected persons are the major mode of transmission. 760(70%) claimed to have gotten information on COVID-19 on the internet, 666(61.3%) from NCDC, 575(52.9%), from television, 340(31.3%) from radio, 197(18.1%) from friend, 185(17%) family

member, 156(14.4%) from Medical Journal, 114(10.5%) Medical text, 112(10.3%) from CDC, 67(6.2%) from lectures and 18(1.7%) from ECDC. Based on the incubation period of the virus, the majority, 86% of the participants agreed to be 2-14 days. The majority of the participants claimed that fever, sore throat and, dry cough were the major signs and symptoms of COVID-19.

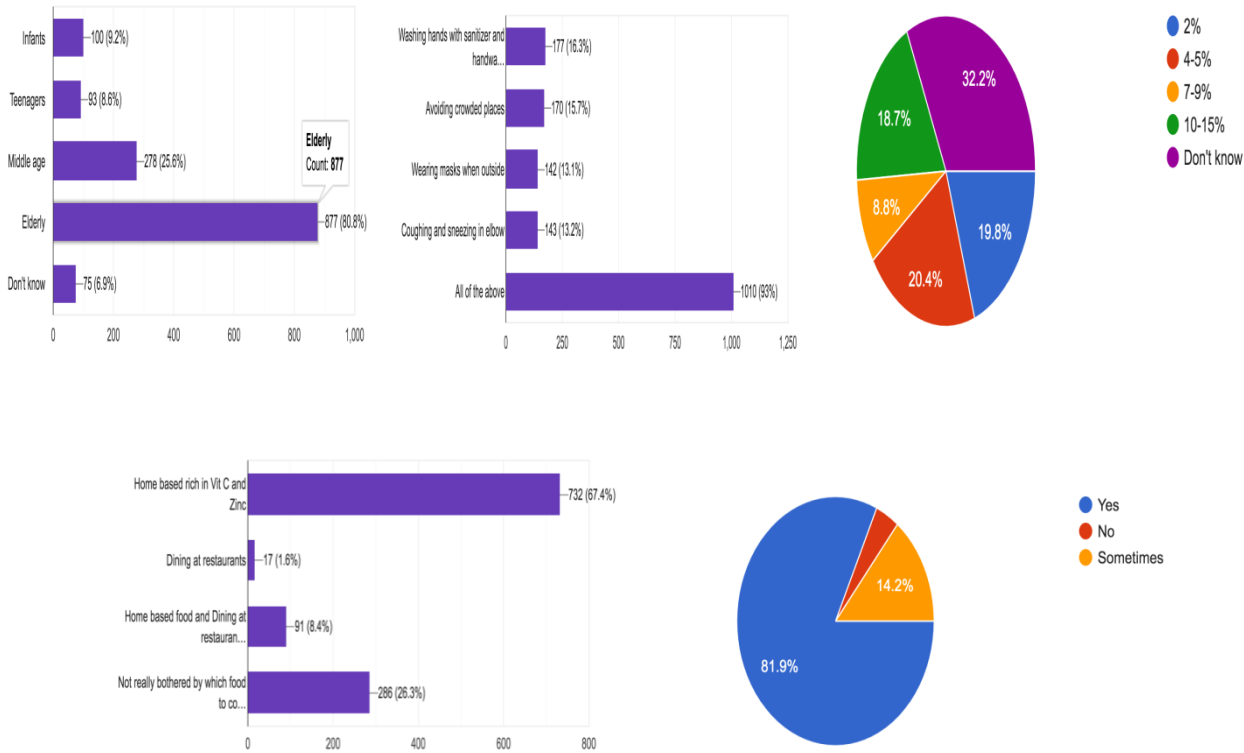


Figure 2b: Level of knowledge on the outbreak of COVID-19

Based on knowledge, majority of the participants agreed that elderly ones, 877(80.8%) were the age group most affected, the death rate of COVID-19 was not known by majority, 32.2% of the participants, majority, 177(16.3%) claimed that washing of hands with sanitizer and hand wash is a major way of preventing COVID-19 and majority, 732(67.4%) claimed to have been consuming a lot of

home-based rich in vitamin C and Zinc. 81.9% of the correspondent agreed that claimed that they do avoid going outside and therefore obey the stay at home order by the Nigerian Government.

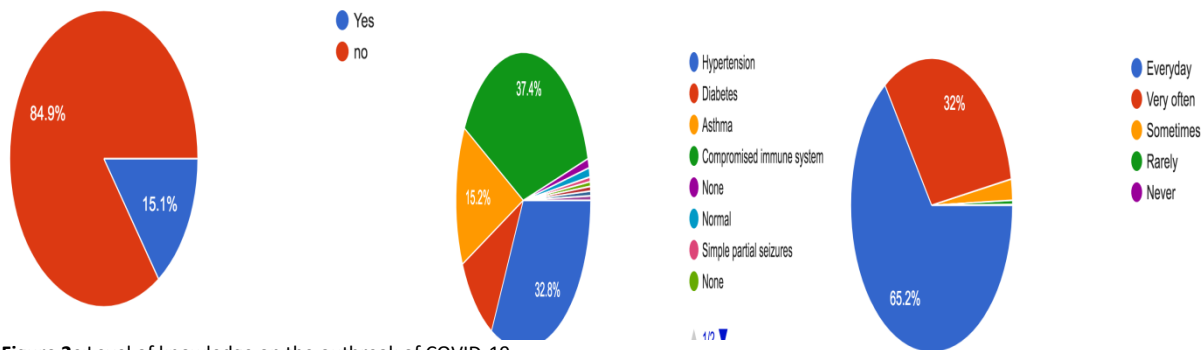


Figure 2c: Level of knowledge on the outbreak of COVID-19

Based on knowledge, majority, 84.9% of the respondent don't experience the ill effects of any ailment, while 15.1% of the all-out populace experienced a couple of ailments. Among the 198(15.1%) of the all-out respondent guaranteed that they have fundamental ailments, for example, 37.4% have undermined the

immune system, 32.8% are hypertensive, 15.2% are Asthmatic and 10% are diabetic. Lion's share, 65.2% of the respondent asserted that they do check social media, TV or, print media everyday for updates regarding COVID-19.

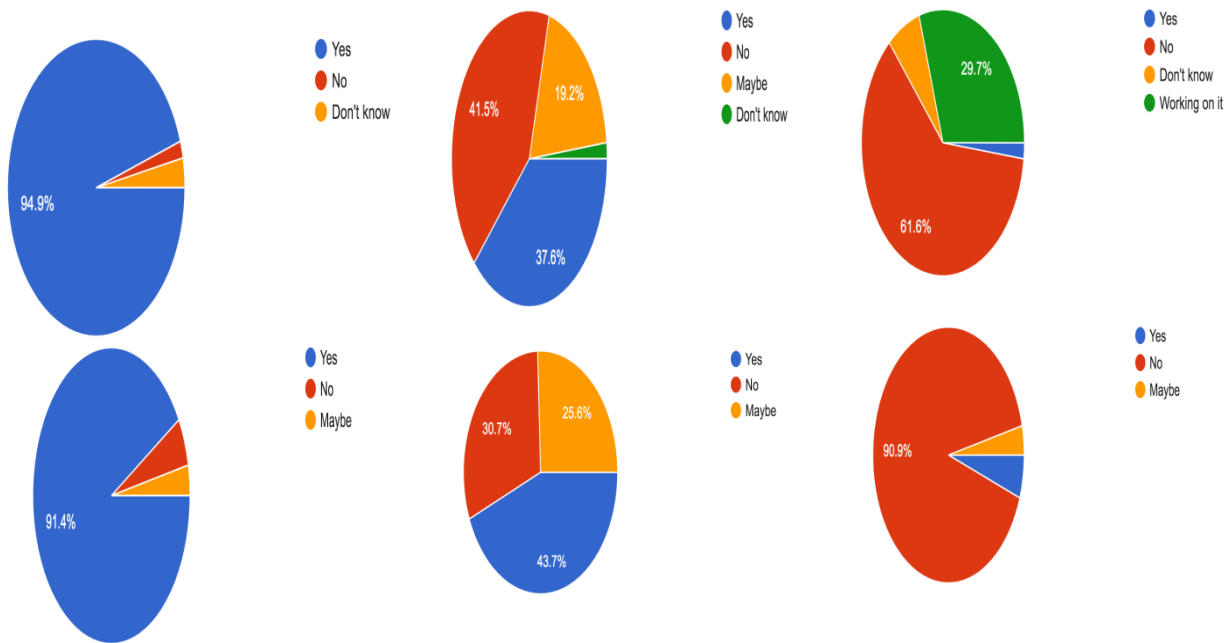


Figure 3: Level of awareness on the outbreak of COVID-19

Based on awareness, the majority of respondents agreed that COVID-19 is contagious (94.9%). The vast majority of the participants do not believe that COVID-19 directly lead to death (41.5%). As regard if there is currently any vaccine for COVID-19, showed a high level of disagreement by the participants

(61.6%) and as such many see it as a problem in their community (91.4%). Themajority claimed that there is treatment available for the patients (43.7%). It was gathered from the participants that the majority claimed not to have seen anyone with symptoms similar to COVID-19 (90.9%).

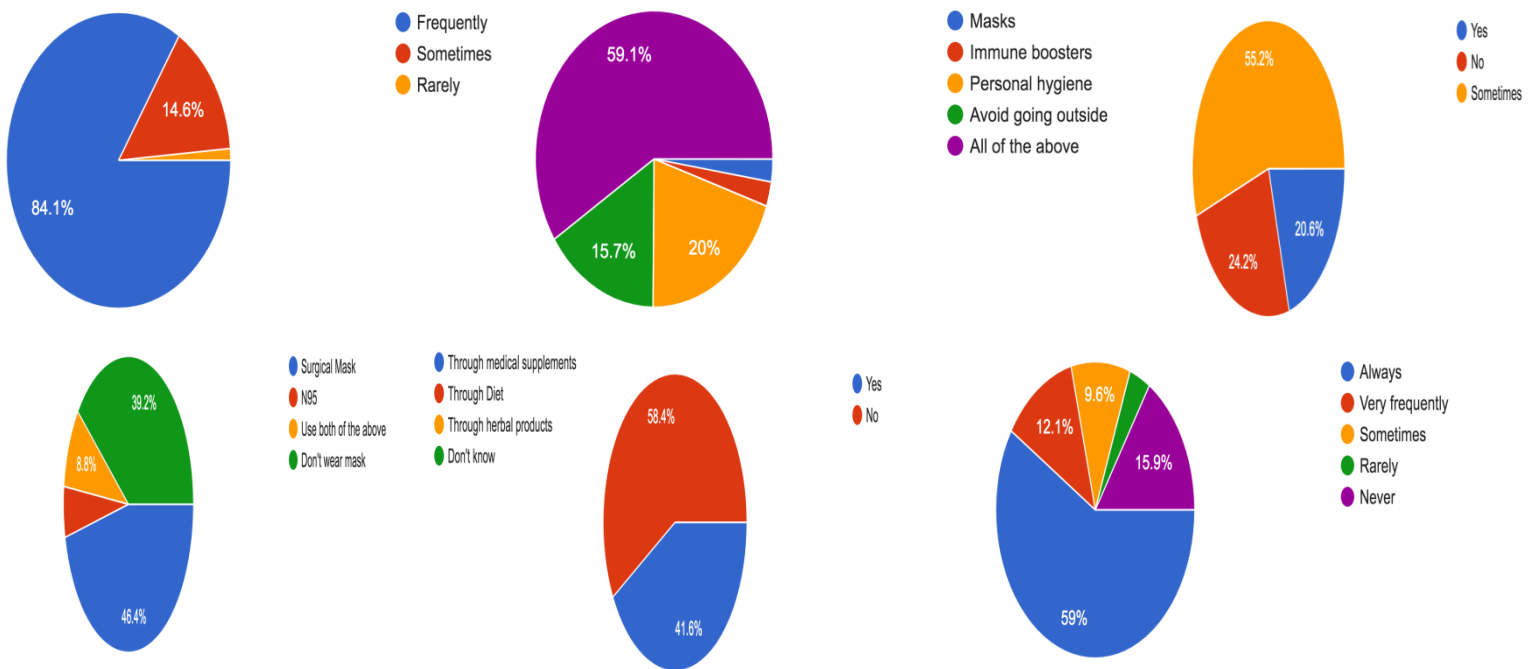


Figure 4: Level of practice on the outbreak of COVID-19

Based on practice, the majority of the participants claimed that they frequently wash their hands (84.1%) and agreed that they usually employ the use of face masks (59.1%). The majority claimed that they boost their immunity through diet (59.3%). The majority of the participants prefers the use of a surgical mask (46.4%). Many of the respondents claimed not to have taken any supplements to boost their immunity (58.4%). It was also gathered that the majority of the participants claimed that they sometimes touch their faces (Eyes, nose and, mouth) (55.2%). The majority of health care professionals that were gathered from the study claimed that they always use universal precautions of infection prevented during patients contact (59%).

## DISCUSSION

In this study, predominantly male were well-educated among the population. This finding disagrees with a study by Bao-Liang *et al.*, (6) in China who found females to be well educated as regard the study on COVID-19. The reason for dissimilarity in finding may be due to the sample size adopted by the authors. We found an overall correct rate of 95% on the knowledge questionnaire, indicating that most respondents are knowledgeable about COVID-19. This study is in agreement with the study by Bao-Liang *et al.*, (6) who found an overall correct rate of 90% on the knowledge questionnaire indicating that most respondents are knowledgeable about COVID-19.

We also analyzed the characteristics of knowledge, awareness and practice towards COVID-19 and identified some demographic factors associated with it; these findings are useful for public health policy makers and health workers to recognize target populations for COVID-19 prevention and health education. The finding of a high correct rate of COVID-19 knowledge in Nigerian residents was unexpected, because this epidemiological survey was conducted during the very early stage of the epidemic. We consider that this is primarily due to the sample characteristics: 52.4% of the study sample held a Bachelor degree. Because of the serious situation of the epidemic and the overwhelming news reports on this public health emergency, this population would actively learn knowledge of this infectious disease from various channels of information such as internet, official websites of the NCDC and television. Majority of the respondents agreed that sneezing or coughing by infected persons are the major mode of transmission and that fever, sore throat and dry cough were the major signs and symptoms of COVID-19 and COVID-19 virus was seen more in elderly individuals and also those with underlying health issues.

The vast majority of the participants also showed an optimistic awareness towards the COVID-19: as they believed that COVID-19 is contagious but do not directly lead to death. As at preparation of this study there is currently no vaccine in Nigeria for COVID-19. The optimistic practice of the Nigerians could be related to the unprecedented COVID-19 control measures such as social distance, use of sanitizers, frequent washing of hands with soap and running water and face masks all throughout Nigeria and the lockdown of the 36 states, which enhance people's confidence in winning the battle against the virus. Second, the concerted efforts from across the country also increase Nigerian people's confidence to overcome the epidemic, for example, to aid the COVID-19 virus control efforts, many well-to-do individuals in the society and country like China had dispatched large number of medical materials to Nigeria, after the outbreak.

## CONCLUSION

This survey will fill in as reference for government at all levels, associations and people working in the wellbeing space for powerful arranging and execution of exercises to effectively keep Nigerians from COVID-19. It will give chance to organize activities and informing to fabricate and support trust among government and residents, just as completely take measures to additionally confine the spread of COVID-19. Social distancing, great clean practices like hand washing remain the best routes in shielding oneself from the virus. Location, control and contact following ought to be a high need of the methodology received and should be supported with high responsibility by the diverse wellbeing offices of the government and the overall population.

## Conflict of interest

No conflict of interest was declared by the authors.

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