

Perception and practices during COVID-19 pandemic in an urban community in Nigeria

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BACKGROUND

Various perceptions and practices have been associated with the COVID-19 pandemic. In this study, we assessed the perception and practices regarding COVID-19 among residents in selected urban communities of Ibadan, Oyo State, Nigeria.

METHODS

A descriptive cross-sectional study design was used. Data was collected using an interviewer-administered questionnaire. Household members aged 18 years and above were studied using a multi-stage sampling technique. Those who demonstrated washing of the palm, back of the hand, spaces between the fingers, fingernails, wrist, and thumbs had 6 points and were categorized to have had a good practice of handwashing. Descriptive statistics were done. Bivariate analysis was done using Chi-square test. P-value <0.05 was statistically significant.

RESULTS

The mean age of respondents was 33.2 ± 10.6 years. Going to the hospital (95%) and calling the COVID-19 help number (58.3%) were the frequently reported practices among respondents following the development of COVID-19 signs. Also, 89 (26%) knew they could contract COVID-19, while 41 (12%) perceived it as an exaggerated event. The effects most frequently reported by respondents were hunger/low income (48.8%) and academic delay (8.8%). Use of face masks by 64.5% and social distancing 48% were the most frequently reported practices for prevention. Only 71 (20.8%) demonstrated good hand washing practices. More Christians 25.5% compared to 13.4% Muslims demonstrated good hand washing practices ($p = 0.007$).

CONCLUSION

Behaviour modification for the control of COVID-19 is central to risk perception. Enhanced sensitization and health education regarding COVID-19 is needed to correct the wrong perceptions.

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Abstract

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RESULTS

The mean age of respondents was 33.2 ± 10.6 years. Going to the hospital (95%) and calling the COVID-19 help number (58.3%) were the frequently reported practices among respondents following the development of COVID-19 signs. Also, 89 (26%) knew they could contract COVID-19, while 41 (12%) perceived it as an exaggerated event. The effects most frequently reported by respondents were hunger/low income (48.8%) and academic delay (8.8%). Use of face masks by 64.5% and social distancing 48% were the most frequently reported practices for prevention. Only 71(20.8%) demonstrated good hand washing practices. More Christians 25.5% compared to 13.4% Islam demonstrated good hand washing practices ($p= 0.007$).

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Keywords: Coronavirus, COVID-19, risk perception, hand washing practices, Nigeria.

Introduction

The Coronavirus infection (COVID-19) is an emerging infectious illness which broke out during the winter of 2019 (WHO, 2020; Al-Hanawi et al, 2020). Due to its presentations, it has been declared a public health emergency of international concern by the World Health Organization (WHO) (WHO, 2020). An alarming response has been introduced across the globe due to its high infectiousness and case fatality rate (Zhong et al., 2020). The identification of the risks and the prevention of infectivity regarding COVID-19 have been stated to depend on human perception (Zhong et al., 2020). Especially in the submergence of an infectious disease such as COVID-19, different thoughts have shaped individual's views on the illness. The perception and practices of community members is critical in the epidemic chain for the control of COVID-19 (Brug et al., 2009)

Currently, the Coronavirus disease has spread to 213 countries with nearly 9 million confirmed cases and 500,000 recorded deaths (WHO, 2020). In Nigeria, there are almost 20,000 confirmed

cases of COVID-19 with a total of 525 deaths as of 23rd June, 2020 (WHO, 2020; NCDC, 2020). Oyo State presently holds the fourth spot on the NCDC daily COVID-19 updates, and urban areas in Ibadan its capital city frequently present with confirmed cases (NCDC, 2020; The Whistler, 2020). As a part of the emergency response activities across all States in Nigeria, health education campaigns have been directed at members of the public (NCDC, 2020). These campaigns have been aimed at knowledge improvement and the correction of certain misconceptions that have been widely circulated among community members (NCDC, 2020). Education on precautionary measures such as wearing of face masks, regular handwashing with soap and water or with alcohol-based hand sanitizers, and social distancing have been done (NCDC, 2020; The Pace Setter State, 2020). However, it is not known if the perception and practices of community members have improved in the present period of the COVID-19 outbreak in Nigeria.

The management of epidemics or infectious illnesses especially in the absence of any known vaccine has been stated as dependent on the precautionary behavior of any given population (Brug et al., 2009). Such behavior is determined by individual's risk perception of the existing disease. Lessons from the Severe Acute Respiratory Syndrome (SARS) revealed that perceived vulnerability (although often biased) determines a population's reaction (Zwart et al., 2009). Risk of vulnerability to SARS has been perceived differently across the World, with a relatively lower risk obtained in Asian countries and the Netherlands compared to the United States. (Lau et al., 2003; Leung et al., 2003; Blendon et al., 2004).

Risk perception of avian influenza in a Dutch study which recorded high levels of risk perception reported that about half of its respondents adopted precautionary measures (De Zwart et al., 2007). A comparative study of SARS-related optimism conducted in China and Canada reported that individuals who demonstrated pessimism about the likelihood of being infected were less likely to adhere to protective measures (Ji et al., 2004). Hence, it is evident that perception shapes one's knowledge and the adoption of safety measures concerning the transmission of an infection. Data obtained from the perception of community members regarding COVID could help target interventions needed to improve the knowledge of community members regarding Coronavirus.

To the best of our knowledge, the perception, and practices of community members in urban areas in Ibadan is currently unknown. Risk perception is central to behavior modification for disease control, it becomes pertinent to assess the perception and practices regarding COVID-19. This study is thus aimed at assessing the perception and practices of community members in urban areas in Ibadan regarding COVID-19.

Materials & Methods

Study design and study setting

A descriptive cross-sectional study design was used. Data was collected using an interviewer-administered questionnaire. Data collection took place from the 3rd June to the 6th June 2020. The study was carried out in Ibadan, Oyo State Nigeria. Ibadan is the capital city of Oyo State. Oyo State is one of the states in the south western part of Nigeria. By mid-June, a total of 764 confirmed cases of COVID-19 has been reported in Oyo State and the state ranks fourth in the total number of cases of COVID-19 in Nigeria (NCDC, 2020; The Whistler, 2020). The official language in Nigeria is English, while the major informal language for communication in Ibadan is Yoruba, which has different dialects.

Study population

The study population for the survey was one eligible member of the households in the selected urban communities in Ibadan, Oyo State. All consenting household members were included in the study. Household members that were less than 18 years were excluded.

Sample size determination and sampling technique

The sample size was calculated using sample size formula for descriptive cross-sectional study. A sample of 360 were studied in the urban communities of Ibadan. A multi-stage sampling technique was used to select the respondents for the study

Stage 1:

Simple random sampling was used to select 3 out of the 6 urban local government area in Ibadan.

Stage 2:

In each of the selected LGA, a political ward was chosen for the study.

Stage 3:

A center location was chosen in the selected ward. A bottle was rotated to determine the direction of movement of the interviewers. From the direction of the bottle tip all consenting eligible adults from the households were included in the study until 120 persons were interviewed in each LGA.

Sampling of 120 each in the three urban LGA gives a total sample size of 360.

Study Instrument

The questionnaire has two sections;

Section A: Sociodemographic characteristics

Section B: Perception and practices regarding COVID-19.

Data Collection Methods and instruments

Data was collected using a semi-structured interviewer-administered questionnaire. Data collection was done by trained research assistants with minimum of first degree. The questionnaire was pretested among adult resident of an LGA that was not selected for the study (Ibadan South-West).

Data Management

Data was analyzed with SPSS version 23. Age was summarized using mean and standard deviation, while frequencies, and percentages were used for categorical variables. A total score

of 6 was assigned to good practice of hand washing after the respondents were asked to demonstrate hand washing. One point each was assigned for the following: palm, back of the hand, spaces between the fingers, fingernails, wrist and thumbs. Only those who demonstrated the 6 points were categorized to have had a good practice of hand washing. Chi square test was used for the assessment of associations between sociodemographic characteristics and practice of hand washing. P value of < 0.05 were accepted as significant.

Ethical Approval and Consent to Participate

Ethical approval to carry out the study was obtained from the Oyo State Ministry of Health Ethical Review Committee, with reference number AD/13/479/1779^A. Permission for the study was sought from the respondents and their confidentiality was ensured. The respondents were informed of their right to decline or withdraw from the study at any time without any adverse consequences. No harm came to participants because of participation in this study.

Results

A total of 360 respondents were interviewed among urban residents in Ibadan. The mean age was 33.2 ± 10.6 years, among them 136 (37.8%) were aged between 25 and 34 years, and 225 (62.5%) were females. Those with secondary education and above were 332 (92.2%), 314 (87.2%) were of the Yoruba ethnic group, and 171 (47.5%) engaged in business or trading. (Table 1). Among the 360 respondents 342 (95%) have heard of COVID-19.

Most frequently reported practices among respondents following the development of COVID-19 signs were: Going to the hospital 171(95%) and calling the COVID-19 help number 105 (58.3%). The other reported practices included: Praying and staying at home each with 29 (16.1%) respondents as shown in Figure 1.

Regarding COVID-19, 89 (26%) knew they could contract COVID-19, while 41 (12%) perceived it as an exaggerated event. It was also perceived as an intention for corruption by 23 (6.7%), COVID-19 was an attack by the Western World was reported by 68 (19.9%), and

122(35.7%) called COVID-19 a source of panic. The effects most frequently reported by respondents were hunger/low income 167 (48.8%) and academic delay 30 (8.8%). Regarding suggestions to the government, 108 (31.6%) suggested the provision of medical supplies/palliatives/ seeking of cure, while 68 (19.9%) suggested free testing/free treatment. Other effects of COVID-19 and suggestions to the government are as shown in Table 2.

The most frequently reported practice for prevention of COVID-19 among respondents were the use of face masks by 224 (64.5%) and social distancing by 164 (48%). Others included: Staying at home/following COVID-19 updates 8 (2.2%), taking Vitamin C/fruits/warm water 4 (1.1%), and doing nothing 5 (1.4%) as shown in Figure 2.

Figure 3 shows that only 71(20.8%) demonstrated good hand washing practices. Among respondents aged less than 25 years, 16 (23.5%) had good handwashing practice compared to 14(29.8%) aged above 45 years. Among females, 49 (22.8%) had good handwashing practices compared to 22(17.3%) males although these differences are not statistically significant. Good handwashing practices was demonstrated by 53(25.5%) Christians religion compared to 18(13.4%) Islam ($p= 0.007$). (Table 3)

Discussion

This study found that many individuals lived in denial of the existence of COVID-19. The perception of the illness as a motive for corruption altogether indicate that there still exists poor knowledge of the Coronavirus among community members in Ibadan. Concerning perceived risk, COVID-19 was rated as a source of threat and panic among 37% of respondents, while 27.5% perceived it as a cause of numerous deaths. The perceived risk for COVID-19 obtained in this study is similar to a range of 9-30% obtained on the personal risk for SARS illness in the Netherlands (Lau et al., 2003; Leung et al., 2003; De Zwart et al., 2007) This is however contrary to the perceived risk regarding Ebola virus and Lassa fever in Nigeria (Ilesanmi and Alele, 2015; Asuke et al., 2020). From the present study, a high rating of the perceived likelihood of contracting COVID-19 was observed among 26% of respondents, while it was

minimally perceived as an attack by the Western World among nearly 20%. The existence of wrong perception in this study highlights the possession of wrong information among community members.

Findings obtained from this study revealed that the practices most often adopted following the development of COVID-19 symptoms were either to go to the hospital or call the COVID-19 help number. This indicates that the source of help for COVID-19 treatment is well known among community members in urban areas of Ibadan. Similarly, an Indian study reported that hospital visitation was frequently opted for as a step to be taken following the development of COVID-19 in individuals in a close relationship (Dkar et al., 2020).

Despite the myriads of notions associated with the perception of COVID-19, we found out that about 90% of respondents practiced the use of facemasks, while 65% practiced social distancing to prevent the Coronavirus infection though, the extent of full adherence is low. Similarly, the likelihood of positive practices concerning COVID-19 was associated with a positive perception of the risk of infection (Zhong et al., 2020). The finding from the present study contradicts the assumption of the Health Belief Model (HBM) that protective actions are more likely to succeed a high level of perceived susceptibility (Tarkang et al., 2015) The results obtained herein is higher than the knowledge concerning the practice of face masks in Saudi Arabia (Al-Hanawi et al., 2020). Due to its deadly nature, COVID-19 has introduced fear which has compelled protective actions from individuals regarding the illness (Zhong et al., 2020)

Previous studies have shown that fear could motivate healthy behavior among individuals especially during epidemics, but such behavior may not be sustainable (Witte, 1998; Nabi, 1999; Ufuwa et al., 2020). The adoption of these healthy behaviors in the present study is in tandem with the recommendations of the World Health Organization (WHO) on safety measures for COVID-19 (WHO, 2020). These findings imply that individual perception of infectious illnesses such as COVID-19 may not influence the adoption of protective practices. This explains the need for a regular sensitization of community members on COVID-19 safety measures regardless of their perception concerning the illness.

In this study, we found out that religion is a determinant to the practice of handwashing. From our study, Christians demonstrated good practice of handwashing compared to those who practice Islam. This finding is unexpected since Moslems practice handwashing more frequently while observing their prayers. This indicates that the practice of handwashing does not necessarily infer detailed understanding of the handwashing process. A study conducted in Ibadan on hand hygiene practices post Ebola virus disease outbreak revealed a high proportion of poor self-reported hand hygiene practice (Martins and Osiyemi, 2017). Lassa fever studies conducted in Edo State reported poor handwashing practices, while a similar study in Kaduna State, Nigeria reported good handwashing practices among respondents (Tobin et al., 2019; Asuke et al., 2020). The similarities of this findings with ours imply the wide acceptance of the practice of handwashing in the management of infectious diseases.

Our findings also revealed that age, gender, educational qualification, ethnicity, or occupation have no association with the practice of handwashing. Contrary to this finding, a south-Ethiopian study revealed that persons in the youngest age groups displayed good handwashing practices more frequently than older persons (Kebede et al., 2020). The same study also reported occupation and higher educational qualification as predictors of good handwashing practice (Kebede et al., 2020). Findings from this present study imply that interventions need to be targeted on handwashing education since poor handwashing practice could increasingly place individuals at risk of COVID-19.

We found that COVID-19 poses significant threat to local economy, resulting in low income and resultant hunger. This is likely due to the increased cost of purchasing goods or a result of the lockdown which has denied many individuals the opportunity to earn their income. Thus, a shortage in the cash flow in circulation has resulted and accompanied by hunger as a major effect. This explains the need for the provision of palliatives as a means to fight hunger and reduce susceptibility to other infections during the COVID-19 outbreak. Similarly, decreased productivity and job losses and an unprecedented economic disaster have been reported (Atalan, 2020). Contrary to the finding in this study, other studies have reported stress and anxiety as psychological reactions due to the Coronavirus pandemic (Atalan, 2020) Interestingly, a

recognition of the significance of essential staff has also resulted from the COVID-19 outbreak (The National, 2020).

Pertaining to suggestions to the government concerning COVID-19 containment, the provision of medical supplies and palliatives received highest recommendation among respondents. Also, health education, the enforcement of preventive measures, and free testing and treatment received much recognition. These imply two things. Firstly, health education concerning COVID-19 should be done by public health officials in simple, unambiguous languages which will facilitate the understanding of community members. Secondly, the availability of medical supplies and palliatives would enhance the adherence to safety measures for COVID-19, such as the use of face masks among community members. Similar suggestions have been made in previous studies (Kebede et al., 2020)

Strengths of the Study

Up-to-date, the majority of studies on perception and practices regarding COVID-19 have used electronic sources for data collection, and such results may have been biased. Our study is a community-based physical study that used a semi-structured interviewer-administered questionnaire. To the best of our knowledge, it is the first to study the perception and practices of adult population in urban communities in Nigeria. The study also made use of a large sample size (360 adults).

Limitation of the Study

As this study was limited to the perception and practices regarding COVID-19, the knowledge of community members on the illness was not addressed. The assessment of factors influencing COVID-19 practices among community members was obscure in this study.

Conclusions

Behavior modification for the control of COVID-19 is central to risk perception. Risk identification and adoption of preventive measures depend on an individual's perception of the illness. We hereby recommend enhanced sensitization and health education sessions for all community members regarding COVID-19 in Ibadan metropolis regardless of their educational qualification. Also, health campaigns should be more focused on practices which protect against transmission of COVID-19.

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References

- Al-Hanawi MK, Angawi K, Alshareef N, et al. Knowledge, Attitude, and Practice Toward COVID-19 among the Public in the Kingdom of Saudi Arabia: A Cross-Sectional Study. *Front. Public Health* 2020;8(217): 1-9.
- Atalan A. Is the lockdown important to prevent the COVID-9 pandemic? Effects on psychology, environment and economy-perspective. *Annals of Medicine and Surgery* 2020; 56: 38-42
- Asuke S, Agbuamah E, Ibrahim MS, et al. Knowledge, attitude, and practice toward Lassa fever prevention and control among health care providers in Sabon Gari Local Government Area, Kaduna State. *Journal of Medicine in the Tropics* 2020;22(1):1-7.
- Blendon RJ, Benson JM, DesRoches CM, et al. The public's response to severe acute respiratory syndrome in Toronto and the United States. *Clin Infect Dis* 2004;38: 925–931. Doi: 10.1086/382355.

Brug J, Aro AR, Richardus JH. Risk Perceptions and Behaviour: Towards Pandemic Control of Emerging Infectious Diseases: International Research on Risk Perception in the Control of Emerging Infectious Diseases. *Int.J. Behav. Med* 2009; 16:3–6. Doi: 10.1007/s12529-008-9000-x

De Zwart O, Veldhuijzen I, Richardus JH, et al. Risicoperceptie van infecties van mensen door het vogelgriepvirus in Nederland. *TSG*. 2007;85(2): 30–35. Dutch.

Dkhar SA, Quansar R, Saleem SM, et al. Knowledge, Attitude, and Practices Related to COVID-19 Pandemic among Social Media Users in J&K, India. *Indian J Public Health* 2020;64: S205-S210. Doi: 10.4103/ijph.IJPH_469_20

Enwongo A. Covid-19: Oyo Confirms 56 New Cases In 13 LGAs. *The Whistler*. <https://thewhistler.ng/covid-19-oyo-confirms-56-new-cases-in-13-lgas/>. (2020 accessed 25 June 2020).

Gbadamosi, B. War On COVID-19: Oyo Threatens To Shut Markets For Flouting Precautionary Measures. Oyo State: The Pace Setter State. Available on: <https://oyostate.gov.ng/war-on-covid-19-oyo-threatens-to-shut-markets-for-flouting-precautionary-measures/>. (2020 accessed 26 June 2020).

Ilesanmi OS, Alele FO. The effect of Ebola Virus Disease outbreak on handwashing among secondary school students in Ondo State, Nigeria, October 2014. *Pan Afr Med J* 2015; 22(Suppl 1):24. Doi: 10.11694/pamj.supp.2015.22.1.6614

Ji L, Zhang Z, Usborne E, et al. Optimism across cultures: in response to the severe acute respiratory syndrome outbreak. *Asian J Soc Psychol* 2004;7: 25–34. Doi: 10.1111/j.1467-839X.2004.00132.x

Kebede Y, Yitayih Y, Birhanu Z, et al. Knowledge, perceptions and preventive practices towards COVID-19 early in the outbreak among Jimma university medical center visitors, Southwest Ethiopia. PLoS ONE 2020; 15(5): e0233744. Doi: 10.1371/journal.pone.0233744

Lau J, Yang X, Tsui H, et al. Monitoring community responses to the SARS epidemic in Hong Kong: from day 10 to day 62. J Epidemiol Community Health 2003;57: 864–70. Doi: 10.1136/jech.57.11.864.

Leung G, Lam TH, Ho LM, et al. The impact of community psychological responses on outbreak control for severe acute respiratory syndrome in Hong Kong. J Epidemiol Community Health 2003;57: 857–863. Doi: 10.1136/jech.57.11.857.

Martins SO, Osiyemi AA. Hand hygiene practices post Ebola virus disease outbreak in a Nigerian Teaching Hospital. Ann Ibd Pg Med 2017;15(1):16-22.

Nabi R. A cognitive-functional model for the effects of discrete negative emotions on information processing, attitude change, and recall. Commun. Theory; 1999. 9: p. 292–320. Doi: 10.1111/j.1468-2885.1999.tb00172.x

Nigeria Centre for Disease Control. COVID-19 Outbreak in Nigeria Situation Report. Abuja: Nigeria Centre for Disease Control. <https://ncdc.gov.ng/themes/common/files/sitreps/0daa083aeed110eddba8937c1f90a6d9.pdf>. (2020 accessed on 25 June 2020).

Spowart N. Covid-19: How lockdown could affect our relationships. The National. <https://www.thenational.scot/news/18405753.covid-19-lockdown-affect-relationships/> (2020 accessed 15 June 2020).

Tarkang EE, Zotor FB. Application of the Health Belief Model (HBM) in HIV Prevention: A Literature Review. Central African Journal of Public Health 2015;1(1): 1-8

- 399 Tobin EA, Asogun DA, Odia I, et al. Knowledge and practice of infection control among
400 primary care providers in an endemic suburban community of Edo State: implications for
401 control. *International Journal of Prevention and Treatment* 2019, 8(1): 21-27. Doi:
402 10.5923/j.ijpt.20190801.03
- 403
- 404 Ufuwa IS, Akpa CO, Umeokonkwo CD, et al. Knowledge and risk perception towards Lassa
405 fever infection among residents of affected communities in Ebonyi State, Nigeria: implications
406 for risk communication. *BMC Public Health* 2020;20(217):1-10.
407 Doi: /10.1186/s12889-020-8299-3
- 408
- 409 Witte K. Fear as motivator, fear as inhibitor: Using the extended parallel process model to
410 explain fear appeal successes and failures. In: Andersen PA, Guerrero LK (eds) **The handbook**
411 **of communication and emotion: research, theory, applications, and contexts**. San Diego,
412 CA: Academic; 1998, pp. 423–450.
- 413
- 414 World Health Organization. Coronavirus disease 2019 (COVID-19) Situation Report –51
415 Geneva: World Health Organization. Available from: [https://www.who.int/docs/default-](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_10)
416 [source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_10](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf?sfvrsn=1ba62e57_10).
417 (2020 accessed 30 May 2020).
- 418
- 419 World Health Organization. Coronavirus disease (COVID-19) Situation Report–149 Geneva:
420 World Health Organization. [https://www.who.int/docs/default-source/coronaviruse/situation-](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200623-covid-19-sitrep-155.pdf?sfvrsn=ca01ebe_2)
421 [reports/20200623-covid-19-sitrep-155.pdf?sfvrsn=ca01ebe_2](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200623-covid-19-sitrep-155.pdf?sfvrsn=ca01ebe_2) (2020 accessed 18 June 2020).
- 422
- 423 World Health Organization. Coronavirus disease (COVID-19) advice for the public: World
424 Health Organization. [https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public)
425 [for-public](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public). (2020 accessed 25 June 2020).
- 426
- 427 Zhong B-L, Luo W, Li H-M, et al. Knowledge, attitudes and practices towards COVID19 among
428 Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-
429 sectional survey. *Int J Biol Sci* 2020; 16:1745–1752. Doi: 10.7150/ijbs.45221

430 PMID: 32226294

431

432 Zwart O, Veldhuijzen IK, Elam G, et al. Perceived Threat, Risk Perception, and Efficacy Beliefs

433 Related to SARS and Other (Emerging) Infectious Diseases: Results of an International Survey.

434 Int J Behav Med. 2009; 16(1): 30–40. Doi: 10.1007/s12529-008-9008-2

Figure 1

Perceived practices of Ibadan residents to COVID-19 symptoms

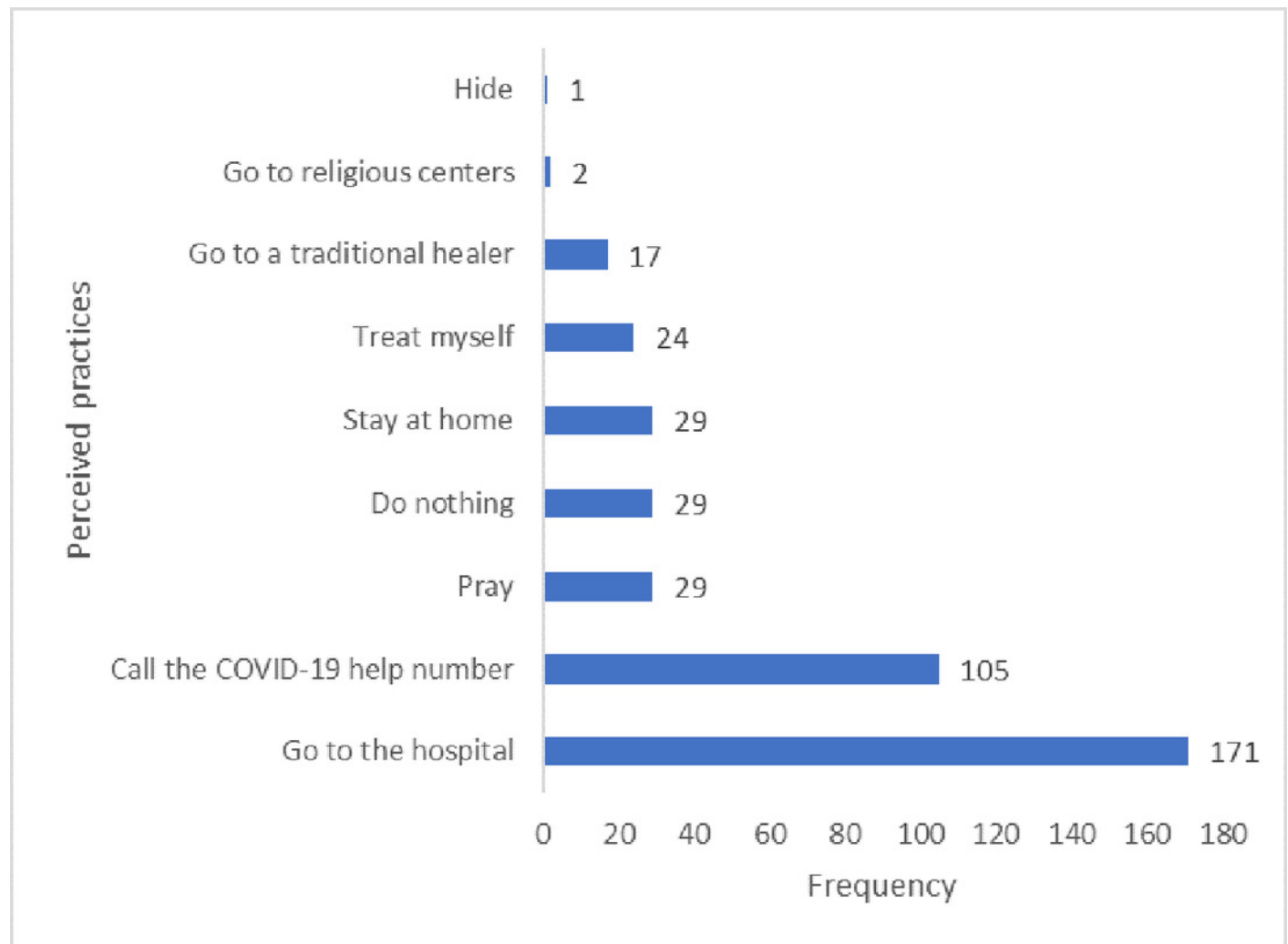


Figure 2

Reported practices of COVID-19 prevention among respondents

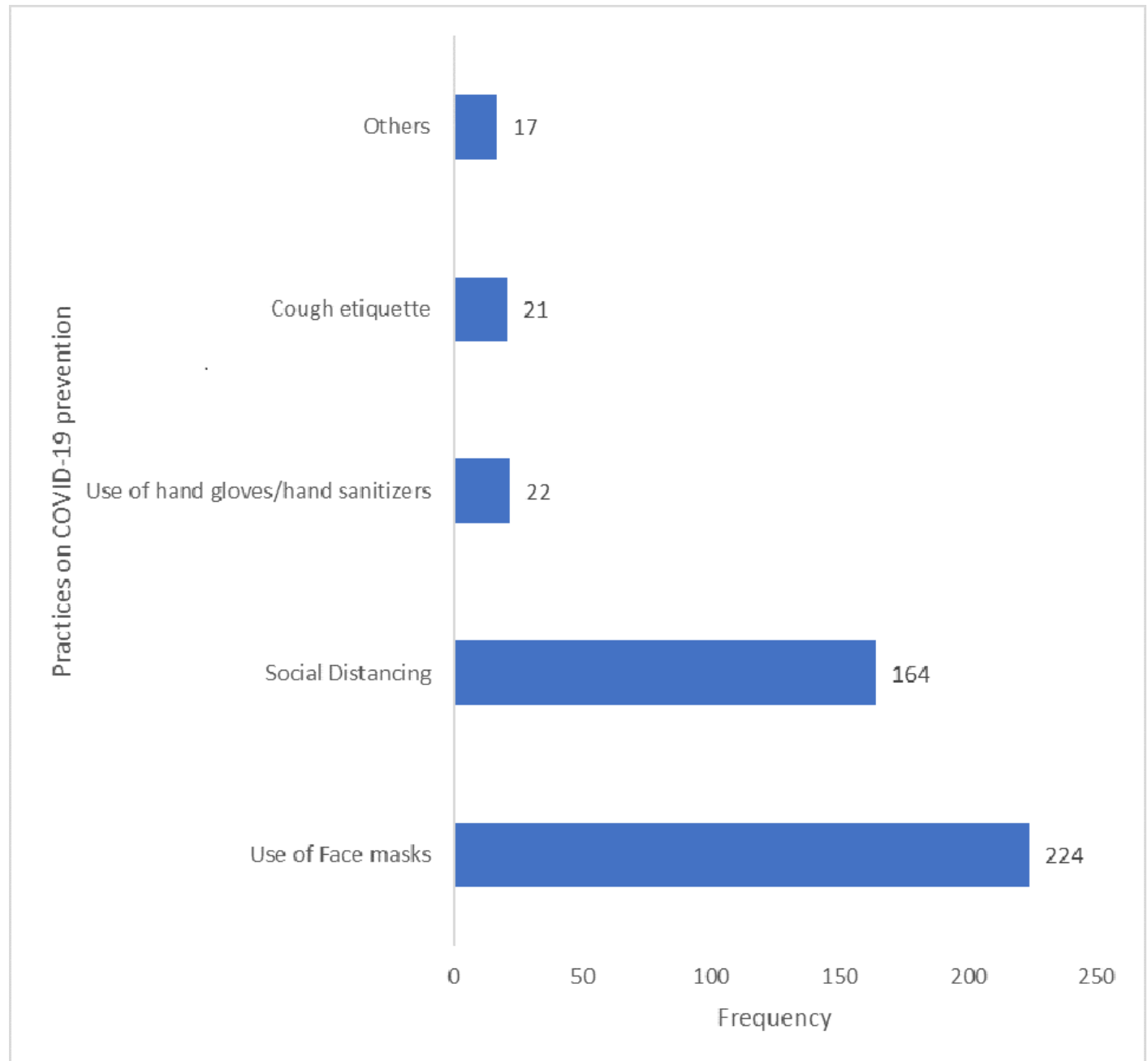


Figure 3

Number of points scored while demonstrating hand washing practices among community members who have heard of COVID-19 in Ibadan 2020

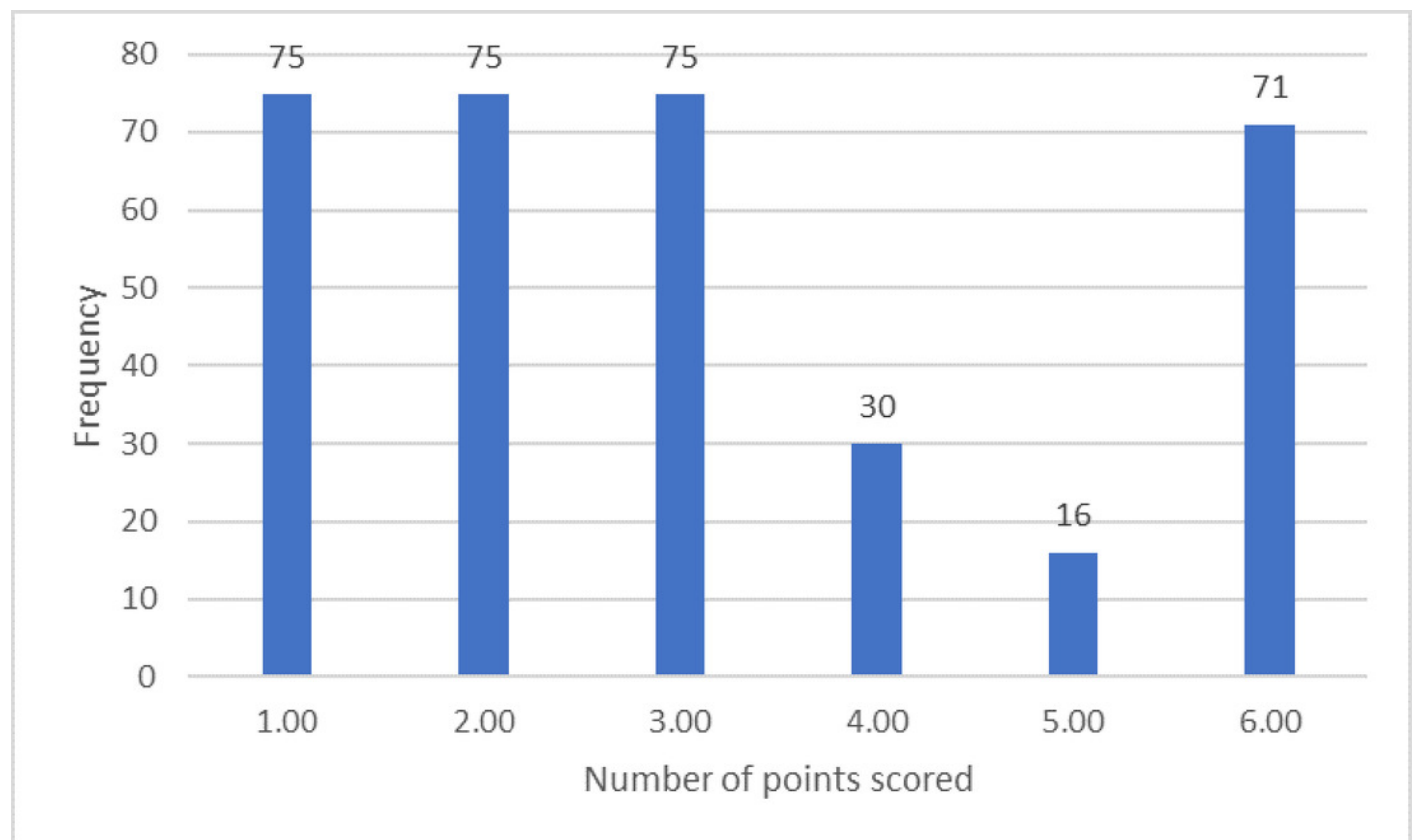


Table 1 (on next page)

Sociodemographic characteristics of respondents among Ibadan residents, 2020

1

Socio-demographic Characteristics	Frequency	%
Age group (Years)		
<25	70	19.4
25-34	136	37.8
35-44	106	29.4
≥45	48	13.3
Sex		
Male	135	37.5
Female	225	62.5
Religion		
Christianity	217	60.3
Islam	143	39.7
Highest level of Education		
Primary and below	28	7.8
Secondary and above	332	92.2
Ethnicity		
Yoruba	314	87.2
Ibo	31	8.6
Hausa	8	2.2
Others	7	1.9
Occupation		
Business/Trader	171	47.5
Artisans	110	30.6
Professional/Civil Servant	30	8.3
Unemployed/housewife/student	49	13.6

2

Table 2(on next page)

Perceptions and effects of COVID-19 and suggestions to government by community members in Ibadan, 2020

1

Variables	n (%)
Perception on COVID-19	
It creates a lot of panic	122 (35.7)
It is a deadly disease	94 (27.5)
I am at risk of COVID-19 infection	89 (26)
It is highly infectious	72 (21.1)
It is an attack by the Western World	68 (19.9)
It is just being exaggerated	41 (12)
It has no cure	33 (9.6)
Don't believe it exists	28 (8.2)
An intention for corruption	23 (6.7)
Effects of COVID-19	
Hunger/Low income	167 (48.8)
Academic delay	30 (8.8)
Restricted movement/No going to work	25 (7.3)
No gatherings	20 (5.8)
Suggestions to Government	
Provide medical supplies/Palliatives/Seek cure	108 (31.6)
Health Education/Enforce preventive measures	70 (20.5)
Free testing/Free treatment	68 (19.9)
Stop reporting false figures/Lift lockdown and bans	44 (12.9)
Pray/No idea/Do anything	27 (7.9)

2

3

4

Table 3(on next page)

Association between sociodemographic variables and practice of handwashing among community members who have heard of COVID-19 in Ibadan 2020

1

Sociodemographic Variable	Practice of hand washing		Chi-square	p-value
	Good	Poor		
Age	n (%)	n (%)		
<25	16 (23.5)	52 (76.5)	3.890	0.274
25-34	22 (16.9)	108 (83.1)		
35-44	19 (19.6)	78 (80.4)		
>44	14 (29.8)	33 (70.2)		
Sex				
Male	22 (17.3)	105 (82.7)	1.451	0.228
Female	49 (22.8)	166 (77.2)		
Religion				
Christianity	53 (25.5)	155 (74.5)	7.191	0.007
Islam	18 (13.4)	116 (86.6)		
Highest level of Education				
Primary and below	7 (26.9)	19 (73.1)	1.109	0.775
Secondary and above	64 (20.3)	252 (79.7)		
Ethnicity				
Yoruba	62 (20.8)	236 (79.2)	0.592	0.898
Ibo	6 (20.7)	23 (79.3)		
Hausa	1 (12.5)	7 (87.5)		
Others	2 (28.6)	5 (71.4)		
Occupation				
Business/Trader	31 (19.3)	130 (80.7)	0.915	0.822
Artisans	24 (23.1)	80 (76.9)		
Professional/Civil Servant	5 (17.2)	24 (82.8)		
Unemployed/housewife/student	11 (32.9)	37 (77.1)		

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