

RECOMMENDATION

It will be imperative for government and non-governmental organizations to strengthen the capacities of health workers to educate and supply information on COVID 19 to the populace because in this research respondents who are health workers tend to have better knowledge of COVID 19 than respondent who are not.

DECLARATIONS**Ethics approval**

Ethical approval was obtained from the Health Research Ethics Committee of Federal Medical Center, Gusau, Zamfara State, Nigeria

Consent for publication

Not applicable.

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

COMPETING INTERESTS

The authors declare that they have no competing interests.

FUNDING

No funding was received for this research.

AUTHORS' CONTRIBUTIONS

Conception/design of the study-COO, VKS, OBF, AOO; data collection-UOA, CMI, JCO, OFA, KWO; data analysis and interpretation-EEA, GOP, AOA, OEA; article drafting-BFU, YBA, OFA, AOO; Critical revision of the article-COO, BFU, VKS; final approval of the version to be published-all authors.

ACKNOWLEDGMENT

Oluwafunmike Ruth Olomofe is appreciated for proof-reading the final manuscript.

REFERENCES

- World Health Organization (WHO) (2020) Coronavirus Disease (COVID-19) Dashboard 2020. Accessed on: December 15, 2020. Available online at: https://covid19.who.int/?gclid=EAIaIQobChMIpmCgKqU7gIVumDmCh3R2QH6EAAYASAAEgLWQfD_BwE
- NCDC (2021) Coronavirus COVID-19 Microsite. Accessed on: August 10, 2021. Available online at: <https://covid19.ncdc.gov.ng/>
- COVID-19 Map - Johns Hopkins Coronavirus Resource Center (2021) COVID-19 Dashboard by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University (JHU). Accessed on: August 10, 2021. Available online at: <https://coronavirus.jhu.edu/map.html>
- Galveston BS (1996) Structure and classification of viruses. Medical Microbiology 4th edn.
- Chen N, Zhou M, Dong X, Qu J, Gong F, et al. (2020) Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: A descriptive study. Lancet 395(10223): 507-513.
- Huang C, Wang Y, Li X, Ren L, Zhao J, et al. (2020) Clinical features of patients infected with 2019 novel coronavirus in Wuhan China. Lancet 395(10223): 497-506.
- Ilesanmi O, Afolabi A (2020) Perception and practices during the COVID-19 pandemic in an urban community in Nigeria: A cross-sectional study. PeerJ 8: e10038.
- Africa Centre for Disease Control and Prevention (2020) Another new coronavirus variant found in Nigeria. Accessed on: January 5, 2021. Available online at: <https://www.reuters.com/article/us-health-coronavirus-africa/another-new-coronavirus-variant-found-in-nigeria-says-africa-cdc-idUSKBN28Y1B7>
- Nigerian Centre for Disease Control and Prevention (NCDC) (2020) Public Health Advisory Following Increase in Number of COVID-19 Cases in Nigeria. Accessed on: January 10, 2021. Available online at: <https://ncdc.gov.ng/news/280/public-health-advisory-following-increase-in-number-of-covid-19-cases-in-nigeria>
- John Hopkins Medicine (2020) Coronavirus and COVID-19: Who is at higher risk? Accessed on: January 10, 2021. Available online at: <https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-and-covid19-who-is-at-higher-risk>
- Ning L, Niu J, Bi X, Yang C, Liu Z, et al. (2020) The impacts of knowledge, risk perception, emotion and information on citizens' protective behaviors during the outbreak of COVID-19: A cross-sectional study in China. BMC Public Health 20: 1751.
- GIV.IN (2020) COVID-19: Infection prevention and control guidance (2020). Available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/886668/COVID-19_Infection_prevention_and_control_guidance_complete.pdf
- Olapegba P, Ayandele O (2020) Survey data of COVID-19-related Knowledge, Risk Perceptions and Precautionary Behavior among Nigerians. Data Brief 30: 105685.

14. Cori L, Bianchi F, Cadum E, Anthonj C (2020) Risk perception and COVID-19. *Int J Environ Res Public Health* 17: 3114
15. Bhagavathula AS, Aldhaleei WA, Rahmani J, Mahabadi MA, Bandari DK (2020) Novel Coronavirus (COVID-19) Knowledge and Perceptions: A Survey on Healthcare workers. *Med Rxiv*.
16. Relief Web (2020) Maiduguri's keke are spreading COVID-19 prevention message. Available online at: <https://reliefweb.int/report/nigeria/maiduguri-s-keke-are-spreading-covid-19-prevention-messages>
17. Water Aid (2020) Tackling COVID-19 in Nigeria. Available online at: <https://www.wateraid.org/ng/covid-19>
18. Abdelhafiz A, Mohammed Z, Ibrahim M (2020) Knowledge, Perceptions, and Attitude of Egyptians Towards the Novel Coronavirus Disease (COVID-19). *J Community Health* 1(10): 881-890.
19. Nairaetrics (2020) Lagos state threatens to revert to full lock-down. Available online at: <https://nairametrics.com/2020/05/10/lagos-state-threatens-to-revert-to-full-lock-down/>
20. GGA (2020) When a governor believes it's a hoax and ordinary flu. Available online at: <https://gga.org/covid-19-when-a-governor-believes-its-a-hoax-and-ordinary-flu/>
21. TheGuardian (2020) COVID-19: Why Nigerians fear another lockdown yet defy safety protocols. Accessed on: January 14, 2021. Available online at: <https://guardian.ng/saturday-magazine/cover/covid-19-why-nigerians-fear-another-lockdown-yet-defy-safety-protocols/>
22. Jekel J, Katz D, Elmore J (2001) Sample size, randomization, and probability theory. *Epidemiology, Biostatistics and Preventive Medicine*. 2nd Ed. Philadelphia: Saunders.
23. National Demographic Health Survey (NDHS) (2013) Household population and Housing characteristics National Population Commission (NPC) Federal Republic of Nigeria, Abuja, Nigeria. 2013: 11-29.
24. Geldsetzer P (2020) Knowledge and Perceptions of COVID-19 Among the General Public in the United States and the United Kingdom: A Cross-sectional Online Survey. *Ann Intern Med* 20: M20-0912.
25. Zhong B, Luo W, Li H, Zhang Q, Liu X, et al. (2020) Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: A quick online cross-sectional survey. *Int J Biol Sci* 16(10): 1745-52.
26. Reuben RC, Danladi MMA, Saleh DA, Ejembi PE (2020) Knowledge, Attitudes and Practices towards COVID-19: An Epidemiological Survey in North-Central Nigeria. *J Community Health* 7: 1-14.
27. Oleribe O, Ezechi O, Osita-Oleribe P, Olawepo O, Musa AZ, et al. (2020) Public perception of COVID-19 management and response in Nigeria: a cross-sectional survey *BMJ Open* 10: e041936.
28. Nigeria (2021) The world fact book. Accessed on: February, 26 2021. Available online at <https://www.cia.gov/the-world-factbook/countries/nigeria/>
29. Ibrahim HJ (2018) Gender Disparity in Internet Access and Usage in Nigeria: Implication for Development. *Int J Law Govern Comm* 3(12): 41-50.
30. Ejeh FE, Saidu AS, Owoicho S, Maurice NA, Jauro S, et al. (2020) Knowledge, attitude, and practice among healthcare workers towards COVID-19 outbreak in Nigeria. *Heliyon* 6(11): e05557.
31. Habib MA, Dayyab FM, Iliyasu G, Habib AG (2021) Knowledge, attitude and practice survey of COVID-19 pandemic in Northern Nigeria. *PLoS One* 16(1): e0245176.
32. Obasola OI, Agunbiade OM (2016) Online Health Information Seeking Pattern among Undergraduates in a Nigerian University. *SAGE Open*.
33. Adesegun OA, Binuyo T, Adeyemi O, Ehioghae O, Rabor DF, et al. (2020) The COVID-19 Crisis in Sub-Saharan Africa: Knowledge, Attitudes, and Practices of the Nigerian Public. *Am J Trop Med Hyg* 103(5): 1997-2004.
34. Hager E, Odetokun IA, Bolarinwa O, Zainab A, Okechukwu O, et al. (2020) Knowledge, attitude, and perceptions towards the 2019 Coronavirus Pandemic: A bi-national survey in Africa. *PLoS One* 15(7): e0236918.
35. Erfani A, Shahriarirad R, Ranjbar K, Mirahmadizadeh A, Moghadami M (2020) Knowledge, Attitude and Practice toward the Novel Coronavirus (COVID-19) Outbreak: A Population-Based Survey in Iran. Available online at: https://www.who.int/bulletin/online_first/20-256651.pdf
36. Ali SH, Foreman J, Tozan Y, Capasso A, Jones AM, et al. (2020) Trends and Predictors of COVID-19 Information Sources and Their Relationship with Knowledge and Beliefs Related to the Pandemic: Nationwide Cross-Sectional Study. *JMIR Public Health Surveillance* 6(4): e21071.

37. Dryhurst S, Schneider CR, Kerr J, Freeman ALJ, Recchia G, et al. (2020) Risk perceptions of COVID-19 around the world. *J Risk Res* 23: 994-1006.
38. Rohde R (2020) Novel Coronavirus (2019-nCoV) update: Uncoating the Virus. *America Society of Microbiologist*.
39. Olomofe C, Shoyemi K, Omoworare B, Adeyinka O, Ajumuka E, et al. (2021) Predictors of Uptake of a Potential Covid 19 Vaccine among Nigeria Adults. *J Vaccine Vaccin* 12(1): 1000442.
40. Phillip X (2021) Covid 19 vaccines in Africa: MO Ibrahim and others Lament sorry state of access; *The Africa repot*; Jan.
41. Baker HA, Safavynia SA, Evered LA (2020) The 'third wave': Impending cognitive and functional decline in COVID-19 survivors. *Br J Anaesth* S0007-0912(20): 30849.