Est. 1841 | YORK ST JOHN UNIVERSITY

Bolarinwa, Obasanjo, Olagunju, Olalekan, Babalola, Tesleem and Saeed, Balsam Qubais (2020) Socio-Demographic Predictors of Adherence to 2019 Coronavirus Prescribed Recommendations and Lockdown Psychological Impacts: Perspectives of Nigerian Social Media Users. Journal of Public Health Research, 9 (4). jphr.2020.1864.

Downloaded from: https://ray.yorksj.ac.uk/id/eprint/8493/

The version presented here may differ from the published version or version of record. If you intend to cite from the work you are advised to consult the publisher's version: http://dx.doi.org/10.4081/jphr.2020.1864

Research at York St John (RaY) is an institutional repository. It supports the principles of open access by making the research outputs of the University available in digital form. Copyright of the items stored in RaY reside with the authors and/or other copyright owners. Users may access full text items free of charge, and may download a copy for private study or non-commercial research. For further reuse terms, see licence terms governing individual outputs. Institutional Repositories Policy Statement

RaY

Research at the University of York St John

For more information please contact RaY at ray@yorksj.ac.uk

pagepress

ARTICLE

Socio-demographic predictors of adherence to 2019 coronavirus prescribed recommendations and lockdown psychological impacts: Perspectives of Nigerian social media users

Obasanjo Afolabi Bolarinwa,[1,2] Olalekan Olagunju,[2] Tesleem Babalola,[1] Balsam Qubais Saeed[3,4]

[1]Department of Public Health Medicine, School of Nursing and Public Health, College of Health Sciences, University of KwaZulu-Natal, Durban, South Africa; [2]Department of Demography and Social Statistics, Faculty of Social Sciences, Obafemi Awolowo University, Nigeria; [3]Department of Clinical Sciences, College of Medicine, University of Sharjah, United Arab Emirates; [4]Sharjah Institute for Medical Research, University of Sharjah, United Arab Emirates

Abstract

Background: The coronavirus disease (COVID-19) pandemic is a highly infectious viral disease that has spread to over one hundred and eight countries, including Nigeria. Governments across the globe have been implementing preventive measures towards curbing the spread and impact of the virus. These measures have continued to interfere with the general lifestyle of the people. Hence, this study was aimed at examining the socio-demographic predictors of adherence to prescribed recommendations and the psychological impacts of COVID-19 pandemic lockdown among Nigerian social media users.

Methods: This research implemented a cross-sectional survey using an online Google-based questionnaire to elicit required information from potential respondents via social media channels such as WhatsApp, Twitter, Instagram, Telegram and Facebook. An external link to the questionnaire was shared among Nigerian social media users between 1st and 31st April 2020, and a total of 1,131 respondents participated in the survey. The explanatory and outcome variables were displayed by frequency and percentage distribution while chi-square analysis was used to show the relationship between the explanatory and outcome variables at 5% level of significant.

Results: The study showed that 99% of the respondents reported to have been following some of the prescribed recommendations, however, only 40.4% of the respondents followed all the recommendations. More than three fifths (63.4%) of the respondents also reported having experienced stressed during the lockdown. Only respondents' professional background ($p<0.05$) was a predictor of psychological impact of lockdown, other selected socio-demographic characteristics were not predictors of the outcome variables as $p>0.05$

Conclusion: We concluded that majority of Nigerian social media users were complying to the prescribed recommendations and that younger age group, female respondents and respondents who are more educated had higher proportion of psychological impacts of lockdown, while the medical/scientific background is the only socio-demographic predictor of psychological impacts of COVID-19 lockdown.

Introduction

The disease known as coronavirus (COVID-19) caused by SARS-CoV-2, has been designated as a pandemic. This viral infectious disease is an acute respiratory illness,[1] which has now spread across all the countries of the world.[2,3] Governments and medical officials are also trying their best to curb the spread as much as possible.[4] The virus is transmitted by aerosols that could remain suspended in the air for many minutes after coughing or sneezing or via close personal contact, such as by touching or shaking hands with an infected person. These viruses may also spread when people touch contaminated objects or surfaces and then their mouth, nose, or eyes. Moreover, it can remain viable for a few days on multiple surfaces.[5,6] All population has been identified to be at the risk of COVID-19 irrespective of their demographic composition, however, people with comorbidities and males older than 60 years have been reported to be more at risk of the virus.[7]

The virus was declared by the World Health Organization (WHO) as a public health emergency of international concern on 31st January 2020, and on 11th March of the same year, WHO declared the outbreak a pandemic.[4,8] As at 2nd May 2020, over 3.3 million cases and 330,000 deaths have been reported in all the continents,[9] and these cases are still growing. Gilbert and colleagues' modelling study of the risk of COVID-19 importation from China indicates that the ability of African countries to manage the local transmission of the virus after importation hinges on implementing stringent measures of detection, prevention, and control.[10] The country with the second-highest import risk ranking was Nigeria, with moderate capacity but high vulnerability and potentially significantly larger populations that are exposed to

Significance for public health

The COVID-19 is ravaging the world with daily increase in mortality and morbidity rates. The impact of the pandemic on public health is enormous and individual health are at stake, including the psychological effects due to the social restrictions on the general quality of life.

OPEN ACCESS

ineffective healthcare system.[3]

The first reported case of the novel virus was imported into Nigeria in February 2020 by an Italian citizen.[10] The current number at the time of this report stood at 2,170 reported cases and 68 deaths.[9] Since the vaccine is currently not available, it seems that the virus can only be slowed by extreme behavioral change and societal coordination, else the virus will spread within the country very fast.[2] Preventative measures implemented by national, state, and local governments worldwide now affect the daily routines of millions of people worldwide, and the rule includes social distancing and non-movement between and within countries.[11-13] These changes are essential to beat coronavirus and protect health systems.[14] Existing studies have demonstrated that the current most effective and efficient public health interventions are only feasible when the public duly accept them.[15] However, preliminary reports show vast differences in peoples' willingness to practice measures that can reduce pathogen transmission.[2,16] A study in Italy concluded that majority of the respondents adherend to national prescribed health measures.[17] Also, a sentiment study conducted on compliance to lockdown in India showed a positive curve despite, the negativity, fear, disgust, and sadness about the lockdown.[4] Due to the high cost of complete isolation and healthcare, compliance with prescribed recommendations and national lockdown to strategically reduce contact are expected be higher.[15]

During the lockdown people were asked to stay at home and socially and physically isolate themselves to prevent being infected.[18] These measures are necessary to fight the novel coronavirus disease. Although effective in preventing the uncontrolled spreading of COVID-19, these measures can negatively affect mental health,[19] and relaxation will almost certainly trigger a further epidemic wave of deaths.[20] Social separation or quarantine of non-infected persons for an extended period may have adverse effects, such as loneliness, a rise in fear and anxiety and also, mental health consequences.[12-16, 21] The previous outbreaks of another family of coronavirus such as middle east respiratory syndrome coronavirus (MERS-CoV) and severe acute respiratory syndrome coronavirus (SARS-Cov2) had been linked to anxiety, depression, and psychological challenges.[22] Fear of the unknown raises anxiety levels in healthy individuals as well as those with pre-existing mental health conditions.[23]

There has been a global rise recently in the spread of misinformation that has plagued the scientific community and the public. The public health crisis emerging due to COVID-19 is also now beginning to feel the effects of misinformation.[24] In our current digital world, online platforms are perhaps the most accessible source of health-related information for the public.[25] As more social interactions move online, the conversation around COVID-19 has continued to expand, with growing numbers turning to social media for both information sourcing and social interaction globally and in Nigeria.[11] Twitter and other social media platforms are essential sources of breaking news around the globe. It can also be a crucial vehicle in disseminating new public health information.[26,27]

Limited studies have been able to link socio-demographic predictors of compliance to prescribed recommendations and lockdown psychological impacts and if this can either inflate or deflate the propagation of COVID-19. Thus, this study examined the socio-demographic predictors of compliance to COVID-19 prescribed recommendations and psychological impacts of COVID-19 among Nigerian social media users.

Methods

Participant settings

The current estimated population of Nigerian social network users stood at 28.15 million which accounts for about 14% of the total population and it is projected to reach 44.62 million by the year 2025.[28] Social media users were selected as the study population as a result of the current restrictions on movement and physical interpersonal interaction in the country. This cross-sectional survey used a Google-based, anonymous online questionnaire to gather data from respondents via social media platforms such as Telegram, Instagram, Facebook, WhatsApp, and Twitter. On these platforms, the google based questionnaire link was shared among the participates. A snowball sampling technique was adopted to involve more Nigerians social media users currently residing in Nigeria during the COVID-19 pandemic lockdown by telling those who were first sent the external google based questionnaire link to share with their contacts with the same characteristics. This unidentified online survey was conducted for one month (between 1st April to 31st May 2020), and a total of 1,131 participants were involved.

Procedures

Due to the social distancing rules imposed by the Nigerian Government and the enforcement of curfew/lockdown, physical interaction was not feasible, so the study survey was promoted online *via* social media platforms, and existing study participants were encouraged to share the online google based questionnaire with potential respondents. Participation was completely consensual, voluntary and anonymous. All respondents were asked an informed consent question at the beginning of the questionnaire by asking if they were interested in participating in the online google based questionnaire for this study, those who chose that they are not interested in participating were signed-out from completing the next phase of the online google based questionnaire while those who agreed to participate were allowed to move to the next phase involving the completion of the online google based questionnaire. The online google based questionnaire elicited socio-demographic variables such as gender, age, educational attainment, professional history of the respondents, while outcomes variables such as compliance to prescribed recommendations and psychological impacts of lockdown during the lockdown among Nigerian social media users.

Variables definition

Respondent age, gender or sex, educational level, and professional background variables were used as explanatory variables. The outcome variables were recommendation compliance and feeling regarding COVID-19 pandemic, and respondents' adaptation. Recommendation compliance refers to whether respondents comply with the country's ministry of health recommendations while feeling regarding the COVID-19 pandemic refers to the respondent's feelings concerning their feelings during lockdown. Respondents were asked about their opinions regarding the COVID-19 epidemic; those that reported nervous/anxious, fear, angry, lonely, and bored were coded stressed while those that said just fine, happy, and relaxed/optimistic were coded not stressed. Respondent adaptation refers to coping strategies used by the respondent. Respondents were coded adapting well, if engaged in positive activities like watching television, reading books/magazines, volunteering, working from home, *etc*. Respondent was coded not adapting well if they engaged in harmful activities like

fighting with everyone, talking to themselves, having problem sleeping, *etc*.

Data analysis

The data collected were analysed using Stata 14 statistical tool. Findings were described in table and figure formats, using frequencies and percentages to explain specific variables of the sample population. A bivariate analysis (^{2}-test) was conducted to predict the influence of socio-demographic factors on the outcome variables. Results with a p-value less than 0.05 were significant predictors in the bi-variate analysis.

Ethical consideration

The study was approved by the Ethics Committee of Obafemi Awolowo University, Nigeria. Participants' permission was sought before filling out the online google based questionnaire. All those who agreed to participate in the survey were granted access to the online form.

Results

Table 1 shows the socio-demographic distribution of the respondents. The table revealed that more than 77.6 percent of respondents were between the ages of 18 to 39, while the remainder were between the ages of 40 and above. Sex reveals 42.1% were male, and 57.9% were female. The table shows that respondents were well educated with 5.7% without college education. More than half of respondents were from scientific/medical professional background (61.3%). The respondents' compliance with prescribed recommendations shows that 9 out of every respondent reported that they follow the country ministry of health recommendations (Table 2). When asked about the extent they follow the recommendations, 4 out of every ten reported that they follow all the recommendations. Respondents were asked how frequently they touch their face, only 3.8% reported that they never touch their face, 34.3% rarely touch their face, 34.7% touches their face sometimes, 21.2% touches their face often, and only 6% touch their face always.

Table 3 presents the respondents' psychological impacts and coping strategies & source of information. Six out of every ten respondents reported that they were stressed, and about four reported that they were not stressed. Concerning coping and adaptation during the lockdown, 83.7% reported that they are adapting well by watching TV/movies, spending time with family, reading books/magazines, and working from home. Source of information about the COVID-19 pandemic revealed that 8 out of every ten respondents heard the information from social media (Facebook, Instagram, WhatsApp profile, *etc*.) while the remaining heard from TV (14.1%), friends/family (2.4), newspaper (2.0%) and other sources (1.4%).

The association between recommendations compliance and respondent socio-demographics is illustrated in Table 4. As age increases, the number of respondents' compliance to recommendations decrease but almost all the respondents in both categories adhere to recommendations. There is no statistically significant relationship between the age of respondents, gender, level of education, and respondents' professional background and compliance with the recommendations.

Table 5 describes the association between respondents' socio-demographic variables and feelings of the respondents during the COVID-19 pandemic. More than half of respondents in both age categories reported been stressed during the COVID-19 pandemic. The same trend was observed for level of education. More than

Table 1. Respondents' socio-demographic characteristics.

Variable	n=1,131	%
Sex		
Male	474	42.1
Female	652	57.9
Educational level		
No college (formal education)	64	5.7
College education	1067	94.3
Age range		
Below 40 years	878	77.6
40+	253	22.4
Professional background		
Non-scientific/non-medical	438	38.7
Scientific/medical	693	61.3

Table 2. Prescribed recommendation compliance.

Variable	n=1,131	%
Do you follow the recommendation of your health ministry/government		
No	11	1.0
Yes	1120	99.0
To which extent do you follow them		
Not at all	4	0.3
I follow some but not all	150	13.3
I follow most of them	520	46.0
I follow all the recommendations	457	40.4
How frequently do you touch your face		
Never	43	3.8
Rarely	388	34.3
Sometimes	392	34.7
Often	240	21.2
Always	68	6.0

Table 3. Lockdown psychological impacts and source of information.

Variable	n=1,131	%
Feeling regarding COVID-19 pandemic		
Stressed	717	63.4
Not stressed	414	36.6
How are you adapting		
Adapting well	947	83.7
Not adapting well	184	16.3
Source of information		
Social media	906	80.1
Television	159	14.1
Friends/Family	27	2.4
Newspaper	23	2.0
Other sources	16	1.4

Table 4. Association between socio-demographic and recommendation compliance.

Variables	Recommendation compliance		
	No	Yes	χ^2, p-value
Age group			
Below 40	6 (0.7)	872 (99.3)	
40+	5 (2.0)	248 (98.0)	3.41, 0.065
Gender			
Male	4 (0.8)	470 (99.2)	
Female	7 (1.1)	645 (98.9)	0.14, 0.708
Level of education			
No college education	0 (0.0)	64 (100.0)	
College	11 (1.0)	1056 (99.0)	
Professional background			
Non-scientific/non-medical	5 (1.1)	433 (98.9)	
Scientific/medical	6 (0.9)	687 (99.1)	0.21, 0.645

half of respondents with no college education and college education feel stressed during the COVID-19 pandemic, but this is not statistically significant in this study. Gender and professional background of the respondent are also not statistically significant. Table 6 presents the respondent's socio-demographics and adaptation during the pandemic. Across all socio demographics, it was observed that majority of respondents were adapting well. About 8 out of every 10 respondents in both age group categories were adapting well. Age group of respondents, gender and level of education were not statistically significant. About 8 out of every ten respondents in the level of education categories reported that they were adapting well. The professional background of the respondent shows a statistically significant relationship in that more of the respondents with a scientific/medical background were adapting well.

Discussion

This study was carried out to examine the socio-demographic predictors of adherence to prescribed recommendation and psychological impacts of lockdown among Nigerian social media users. As the world faces the coronavirus threat, many commentators and national leaders around the world are beginning to recognize this as a genuine threat to national security.[29] The danger of spreading COVID-19 does not come from an external adversary but from peoples' behaviour,[30] adherence to prescribed recommendations have been studied to have positive effect on the spreading of the virus.[4,17] The same level of compliance was observed across all the selected socio-demographic characteristics in this study as majority of the respondents reported to have been complying to the recommendations prescribed by the Nigerian government. However, none of the selected socio-demographic characteristics was a predictor of adherence to prescribed recommendations. It is crucial to know how people are adapting to their various environments in this unprecedented period, as such this study further examined the socio-demographic predictors of psychological impacts of COVID-19 on Nigerian social media users. The findings show that respondents who are young and active were adjusting well. This may be because they have the energy to engage in different activities. Also, young people are the best with technology, with the internet they can relate with their friends in any part of the world. The educational level category also shows that respondents who were more educated were adapting well. This is because they are more knowledgeable and can easily understand the situation compared to those with no formal education. The respondents' professional background was another variable explores on adaptation in this study. The finding shows that respondents with science/medical background are more likely to adapt well and this maybe because of their awareness of preventive measures.

The study also assesses the psychological impacts of lockdown on respondents concerning whether they are stressed or not. The finding shows that younger age groups, female respondents, those educated respondents and respondents with scientific professional background in this study reported been stressed during coronavirus lockdown in Nigeria, it is paradoxical because these same categories of socio-demographic characteristics reported to have been adapting well based on the activities they are engaging with during lockdown, however, only among the selected socio-demographic characteristics of the respondents only professional background shows to be a predictor of psychological impacts of COVID-19 lockdown among Nigerian social media users. It is pertinent to know that this same level of variation was reported previously in another study with same focus on other coronavirus family outbreaks such as MERS-CoV and SARS-CoV.[22,31]

Table 5. Association between socio-demographic and Feeling regarding COVID-19 pandemic.

Variables	Feeling regarding COVID-19 pandemic		
	Stressed	Not stressed	χ^2, p-value
Age group			
Below 40	565 (64.4)	313 (35.4)	
40+	152 (60.1)	101 (39.9)	1.54, 0.214
Gender			
Male	307 (64.8)	167 (35.2)	
Female	410 (62.7)	247 (37.3)	0.66, 0.416
Level of education			
No college education	36 (56.3)	28 (43.7)	
College education	681 (63.8)	386 (36.2)	150, 0.222
Professional background			
Non-scientific/non-medical	290 (66.2)	148 (33.8)	
Scientific/medical	427 (61.6)	266 (38.4)	2.44, 0.118

Table 6. Association between socio-demographic and respondents' adaptation.

Variables	Respondents' adaptation		
	Adapting well	Not adapting well	χ^2, p-value
Age group			
Below 40	739 (84.2)	139 (15.8)	
40+	208 (82.2)	45 (17.8)	0.55, 0.458
Gender			
Male	405 (85.4)	69 (14.6)	
Female	542 (82.5)	115 (17.5)	1.75, 0.185
Level of education			
No college education	54 (84.4)	10 (15.6)	
College education	893 (83.7)	174 (16.3)	0.02, 0.886
Professional background			
Non-scientific/non-medical	346 (79.0)	92 (21.0)	
Scientific/medical	601 (86.7)	92 (13.3)	11.77, 0.001**

Strengths and limitations

The main strength of this study ability to capture accurate data during pandemic without any physical contact with any of the respondents and this is also linked to the fact that answering of the questions were done at the convenient of the respondents without any interference. However, this study is also susceptible to certain limitations. The study data collection was done *via* social media platforms, younger population were more than the older population, and this is because larger number of younger population is more acquitted to the use of technology than the older population as such the study findings does not depict the true picture of Nigeria populations as a whole.

Conclusion

The study concluded that majority of Nigerian social media users were adhering to the prescribed recommendations outlined by the government or health minister. As much as some selected socio-demographic characteristics of Nigerian social media users were not predictors of adherence to prescribed compliance, feelings and adapting well during COVID-19 lockdown, some sub-cat-

egories of the socio-demographic characteristics such as younger age group, female respondents, educated respondents and respondents with scientific professional backgrounds showed that higher proportion of the respondents reported feeling stressed during COVID-19 lockdown in Nigeria. Psychological programmes that will put into consideration the mental health and encourage these sub-categories of respondents should be promoted in Nigeria.

The study further concluded that among the selected socio-demographic characteristics only professional background of the respondents was the major predictor of psychological impact of COVID-19 lockdown among Nigerian social media users, as such an intervention that will address mental health and wellbeing of Nigerians during COVID-19 pandemic or future pandemic should be targeted at Nigerian social media users with scientific background

Correspondence: Obasanjo Afolabi Bolarinwa, Department of Demography and Social Statistics, Faculty of Social Sciences, Obafemi Awolowo University, Nigeria.
Tel. +27.838467184.
E-mail: bolarinwaibasanjo@gmail.com

Key words: Coronavirus; COVID-19; recommendations; psychological impacts; lockdown; Nigeria.

Contributions: OAB, conceptualized the study, drafted the introduction and methodology, will also be accountable for all aspects of the work; OO, designed the questionnaire and analysed the collected data; TB, was involved with writing of the discussion, conclusion, strengths and limitations as well as the; BQS, reviewed the manuscript for submission and also worked on the final approval version to be published. Guarantor: OAB.

Conflict of interest: The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding: None

Ethical approval: Ethical approval for the study was granted from the Obafemi Awolowo University, Nigeria. Participants' consents were sought before filling out the online google based questionnaire. Those who refused were not permitted to participate. All those who agreed to participate in the survey were granted access.

Received for publication: 17 July 2020.
Accepted for publication: 11 November 2020.

©Copyright: the Author(s), 2020
Licensee PAGEPress, Italy
Journal of Public Health Research 2020;9:1864
doi:10.4081/jphr.2020.1864
This work is licensed under a Creative Commons Attribution NonCommercial 4.0 License (CC BY-NC 4.0).

References

1. Lippi G, Henry BM, Bovo C, et al. Health risks and potential remedies during prolonged lockdowns for coronavirus disease 2019 (COVID-19). Diagnosis (Berl) 2020;7:85-90.
2. Heffner J, Vives ML, FeldmanHall O. Emotional responses to prosocial messages increase willingness to self-isolate during the COVID-19 pandemic. Pers Individ Dif 2021;170:110420.
3. Gilbert M, Pullano G, Pinotti F, et al. Preparedness and vulnerability of African countries against importations of COVID-19: a modelling study. Lancet 2020;395:871-7.
4. Barkur G, Vibha GBK. Sentiment analysis of nationwide lockdown due to COVID 19 outbreak: Evidence from India. Asian J Psychiatr 2020;51:102089.
5. Hoda J. Identification of information types and sources by the public for promoting awareness of Middle East respiratory syndrome coronavirus in Saudi Arabia. Health Educ Res 2016;31:12-23.
6. Diaz-Quijano FA, Rodriguez-Morales AJ, Waldman EA. Translating transmissibility measures into recommendations for coronavirus prevention. Rev Saude Publ 2020;54:43.
7. Xie J, Tong Z, Guan X, et al. Critical care crisis and some recommendations during the COVID-19 epidemic in China. Intensive Care Med 2020;46:837-40.
8. Chang SL, Harding N, Zachreson C, et al. Modelling transmission and control of the COVID-19 pandemic in Australia. arXiv 2003.10218v4.
9. John Hopkins University [Internet]. An update of COVID-19 Map showing global outbreak. Available from: https://coronavirus.jhu.edu/map.html
10. Ebenso B, Otu A. Can Nigeria contain the COVID-19 outbreak using lessons from recent epidemics? Lancet Glob Health 2020;8:e770.
11. Chen E, Lerman K, Ferrara E. Covid-19: The first public coronavirus twitter dataset. arXiv arXiv:200307372 2020.
12. Hao F, Tan W, Jiang L, et al. Do psychiatric patients experience more psychiatric symptoms during COVID-19 pandemic and lockdown? A case-control study with service and research implications for immunopsychiatry. Brain Behav Immun 2020;87-100-6.
13. Briscese G, Lacetera N, Macis M, et al. Compliance with COVID-19 social-distancing measures in Italy: The role of expectations and duration. CESifo Working Paper, No. 8182. Center for Economic Studies and ifo Institute (CESifo), Munich.
14. Bradbury−Jones C, Isham L. The pandemic paradox: the consequences of COVID−19 on domestic violence. J Clin Nurs 2020;29:2047-9.
15. Block P, Hoffman M, Raabe IJ, et al. Social network-based distancing strategies to flatten the COVID 19 curve in a post-lockdown world. arXiv arXiv:2004.07052v2.
16. Hiremath P, Kowshik CS, Manjunath M, et al. COVID 19: Impact of lock-down on mental health and tips to overcome. Asian J Psychiatr 2020;51:102088.
17. Barari S, Caria S, Davola A, et al. Evaluating COVID-19 public health messaging in Italy: Self-reported compliance and growing mental health concerns. medRxiv 2020. doi: 10.1101/2020.03.27.20042820
18. Rossi R, Socci V, Talevi D, et al. COVID-19 pandemic and lockdown measures impact on mental health among the general population in Italy. An N= 18147 web-based survey. medRxiv 2020. doi: 10.1101/2020.04.09.20057802
19. Probst T, Kuska M, Stippl P, et al. Psychotherapists register impacts of the COVID-19 lockdown on their patients. SSRN 2020. doi: 10.2139/ssrn.3581015
20. Peto J, Alwan NA, Godfrey KM, et al. Universal weekly testing as the UK COVID-19 lockdown exit strategy. Lancet 2020;395:1420-1.
21. Mucci F, Mucci N, Diolaiuti F. Lockdown and isolation: psychological aspects of COVID-19 pandemic in the general population. Clin Neuropsychiatry 2020. doi: 10.36131/CN20200205

22. Chatterjee SS, Malathesh BC, Mukherjee A. Impact of COVID-19 pandemic on pre-existing mental health problems. Asian J Psychiatr 2020;51:102071.
23. Shigemura J, Ursano RJ, Morganstein JC, et al. Public responses to the novel 2019 coronavirus (2019−nCoV) in Japan: mental health consequences and target populations. Psychiatr Clin Neurosci 2020;74:281-2.
24. Mian A, Khan S. Coronavirus: the spread of misinformation. BMC Med 2020;18:89.
25. Khatri P, Singh S, Belani NK, et al. YouTube as source of information on 2019 novel coronavirus outbreak: a cross sectional study of English and Mandarin content. Travel Med Infect Dis 2020;35:101636.
26. Thelwall M, Thelwall S. Retweeting for COVID-19: Consensus building, information sharing, dissent, and lockdown life. arXiv 2020 arXiv: 2004.02793v3.
27. McFadden SM, Malik AA, Aguolu OG, et al. Perceptions of the adult US population regarding the novel coronavirus outbreak. PloS One 2020;15:e0231808.
28. Statista [Internet]. Nigeria number of social network users from 2017 to 2025. Accessed on: 28 September 2020. Available from: https://www.statista.com/statistics/972907/number-of-social-network-users-in-nigeria/
29. Gössling S, Scott D, Hall CM. Pandemics, tourism and global change: a rapid assessment of COVID-19. J Sustain Tour 2020;29:1-20.
30. Lauer SA, Grantz KH, Bi Q, et al. The incubation period of coronavirus disease 2019 (COVID-19) from publicly reported confirmed cases: estimation and application. Ann Intern Med 2020;172:577-82.
31. Jeong H, Yim HW, Song Y-J, et al. Mental health status of people isolated due to Middle East Respiratory Syndrome. Epidemiol Health 2016;38:e2016048.