COVID-19 and its safety measures: Opinions on the level of knowledge and compliance in Anambra state, Nigeria

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Abstract

This study investigated COVID-19 and its safety measures. An in-depth interview involving 36 respondents from selected commercial areas in Anambra state, Nigeria was adopted. Thematic analysis was adopted in analyzing the data collected. Findings revealed that respondents have basic knowledge of COVID-19, and its preventive measures derived mostly on hearsay and radios. The study exposed some misconceptions and compliance behaviours of the respondents. The level of compliance to the prescribed safety measures was found to have dwindled influenced by misinformation/misconceptions, belief system, perceptions, etc. These findings give insight into the need for collaborative intervention among different professionals, governments, organizations and agencies in the fight against COVID-19. The study suggests that public sensitization should be intensified by social workers to remove misconceptions, rekindle compliance behaviour and strengthen surveillance.

Keywords: COVID 19, safety measures, compliance, social work, Anambra state

Introduction

The emergence of coronavirus (COVID-19) poses health and social challenges that affect all global affairs. As of 21st June 2020, more than 8.3 million cases and 449,182 deaths on COVID-19 have been reported globally (World Health Organization [WHO], 2020a). Within this period, the Nigerian government reported more than 20 thousand cases and 518 deaths - 66 cases and 9 deaths in Anambra state (Nigeria Center for Disease Control, [NCDC], 2020a). However, these figures will be exceeded given the spread of the virus.

Nigeria like the rest of the world was confronted with challenges posed by the novel coronavirus disease 2019 (COVID-19) which has continued to spread through the entire world. The first index case in Nigeria was an Italian citizen, confirmed positive on the 27th February 2020 in Lagos state. Consequent to this, the Nigerian government, in compliance with WHO, introduced various preventive strategies to curtail the spread, with strict implementation in Lagos, Abuja, Ogun and Edo state (Olapegba et al., 2020). Given this concern, guidance and public health measures were provided to curtail the spread of the virus (World Bank Group, 2020; WHO, 2020b).

Studies have shown that knowledge of infectious diseases pathways and precautionary measures are required to overcome the spread of the disease (Abati, 2020; Olapegba et al., 2020). In other words, having adequate knowledge of COVID-19 could influence compliance with preventive measures, which in turn will curtail the spread of the virus.

According to WHO, (2020b), the compliance and complacency attitudes observed in Africa and other parts of the world are worrisome. As a matter of concern, the general director of WHO during his media briefing warned that countries without strict adherence to these measures will record more cases and deaths.

In a bid to strengthen surveillance and ensure compliance with the public health measures against COVID 19, several efforts have been made locally and globally (NCDC, 2020b; Onalu, Chukwu, and Okoye, 2020: WHO, 2020b). WHO sent about 70 surge teams to different countries to provide information on the infection, its prevention, and treatment. Through a partnership with telecommunication companies all over the globe, text messages on COVID-19 were sent to people on their mobile phones. Also through a partnership with UNICEF, UNESCO, UNHCR, and IFRC free book was produced for children on COVID 19, in different languages. In the same vein, Nigeria governments at all levels have been making efforts to adhere to the WHO measures of curtailing the virus. Recently, NCDC has issued guidelines for the integration of private laboratories to begin the test on COVID-19; Accunalysis Diagnostic Center Limited Nnewi in Anambra state was accredited to increase testing capacity in the state (Agency, 2020). NCDC also releases public health information on COVID-19 using the media and their websites. In the same vein, some institutions (like banks and churches), and philanthropists have provided financial supports in a bid to alleviate suffering due to the pandemic (Olubivi, 2020). Despite the efforts made to ensure compliance and curtail the spread of the virus, available statistic shows that the country is yet to record significant success in the fight against COVID-19 (NCDC, 2020a). It becomes imperative to investigate the level of knowledge on COVID-19, its preventive measures, and the extent of compliance.

Furthermore, studies have shown that issues of global concern especially on public health require a multidisciplinary approach – various professions collaborating to come up with a solution (Peng et al., 2017; Onalu, et al., 2020). These studies recognized the importance of professional collaboration in ensuring conformity to health-approved measures in society. It is in this regard that social work as a profession is much relevant. In India, Italy, China, and many parts of the world, social workers were charged to owe up to their responsibilities amidst COVID-19 (IFSW, 2020; The Economic Times, 2020; Scarnera, 2020). However, the roles social workers play are highly marred by the lack of recognition of the profession in Nigeria. The issue of lack of recognition of social work in Nigeria has been stressed by many studies (Okoye, 2019; Onalu et al., 2019; Onalu and Okoye, 2021).

Apparently, with the involvement of social workers, it is expected that they should advocate for compliance attitude towards prescribed health measures, facilitate public sensitization, challenge beliefs that can mar efforts, monitor fund, challenge injustice in the health sector that could mar united efforts and strengthen surveillance (Muchacha and Matsika, 2017; The Economic Times, 2020). Studies on COVID-19 have brought in so many perspectives on the disease (Farfancano, 2020; Gilbert et al., 2020; Olapegba et al., 2020). However, this study joins the existing discussions on COVID-19, with particular reference to Anambra state, while bringing into focus the roles of the social work profession in this regard. We achieved this by answering the following research questions: i. What is the level of knowledge on COVID-19? ii.

What are the measures adopted by the government/s to curtail the spread of COVID-19? iii. What is the level of compliance towards the prescribed measures? iv. It is expected that our findings will aid the governments in their intervention strategies.

Materials and methods

Study area

The study area is the Anambra state which is one of the 36 states in Nigeria. The state is located in the southeast geopolitical zone of Nigeria, with an estimated population of 5,527,809 in 2016, [2,708,626 females and 5,527,809 males] (National Population Estimate, 2017). Also, Anambra state ranked the 8th most populated and 2nd most densely populated state in Nigeria (Nnajiuba, 2005; Anambra state government, 2017; Federal Republic of Nigeria [FRN], 1997). On June 21^{st,} 2020, there were about 66 reported cases and 9 deaths on COVID-19 in Anambra state; however, as of June 27th, more than 3,000 new cases were reported in Nigeria, with Anambra recording 5 new cases (NCDC, 2020a). Evidence on the increase in statistics within one week is a serious concern that justifies the focus of the study in Anambra state.

Sampling procedure

Using purposive sampling, the researchers selected three towns in Anambra state. The rationale for selecting the three towns was because they are the biggest commercial and industrial cities in the state, with a high population tendency – a potential risk for COVID-19 to spread. The selected towns were Onitsha, Nnewi and Ekwulobia. Using a convenience sampling method, we collected our samples for an in-depth interview, from two categories of respondents: (a) passers-by (b) market union leaders. With the help of research assistants, 10 passer-by and two market leaders were selected as respondents from each of the towns. On the whole, 36 respondents participated in the study. The respondents were recruited for an in-depth interview based on their willingness to participate.

Data collection

In-depth interviews were used to collect data from 36 respondents within May and June 2020. With permission from the respondents, discussions were recorded with an electronic recorder, while research assistants featured as note-takers. Responsibilities were shared among the researchers to cover the different locations. The researchers were proficient in the Igbo and English languages as both were used to communicate. Time-factor influenced the decision of the researchers to disregard the issue of involving stakeholders during the interview. The research instruments (In-depth interview guides for passersby and market leaders) were collectively developed by the researchers.

Data analysis

The collected data were analyzed individually and later collectively by the researchers after being transcribed into the English language. With the aid of Nvivo9 software, the data were arranged in themes, to classify responses. The researchers made sure the collected data were compared with the notes taken to ensure accurate reporting of responses. After the analysis, the two major themes were (a) knowledge of COVID-19 and its preventive measures and (b) level of compliance towards COVID-19 measures.

Findings

Demographic characteristics of respondents

All respondents used in the study were Anambra state indigenes, except for nine who were from other parts of the country. Out of the 36 respondents, 66.6% were males; the ages of respondents ranged from 21 - 57 years. 83.3% of the respondents were engaged in commercial business; virtually all the respondents had a formal education, ranging from primary school, secondary schools, polytechnics, colleges of education and universities.

Results on the level of knowledge on COVID-19 and its preventive measures

The study explored knowledge on the risks information and preventive measures on COVID-19. The respondents were aware of the coronavirus pandemic. They understood it as a deadly disease that could be contracted through close contact with the infected person through a handshake, hugging etc. However, the respondents acknowledged the existence of the virus in other parts of the country, except in the study area. A 45-year-old woman narrated;

From what we were told, coronavirus is a new disease in the world coming from China. It is a very dangerous disease! It can transfer from one person to another, through a handshake, hugging and staying in close contact and big gathering. I learnt that the disease has killed many people abroad and in Northern and Western Nigeria. For now, I don't believe we have cases here, we only hear a rumour.

Supporting her is another respondent of 39 years who said;

Coronavirus is the reigning disease everywhere, especially on the radio. They said there was one case in Anambra state some time ago, but we later discovered it to be a rumour. For me, the virus is real, but it is not here. That's why our governor relaxed lockdown here unlike in other states. Businesses and other activities except school have resumed properly.

The level of knowledge on COVID-19 in the area is basic. However, the respondents do not have detailed information on COVID-19, i.e. the early signs and symptoms of COVID-19, length of the incubation period, number of reported cases and deaths, the closest COVID-19 testing centres, the need for self-isolation when sick etc. Ignorance of such information can contribute to misconceptions, as the study has shown. A 52-year-old respondent said;

... yes, I hear about coronavirus on radio, but I don't believe in it! I have not seen anybody I know, who is suffering from the virus. Also, I have not seen or heard that someone died of the virus. Coronavirus is not for us here. This is because we are blessed by God! Our weather here is hot coupled with our strong immune system. So there is no way the virus will attack us!

Another 28-year-old respondent added,

I'm not doubting the existence of the virus, but I doubt if the virus is in this part of the world because nobody has died of it here, we only hear rumours.

Data from the study shows the level of knowledge on the preventive measures against COVID-19. The respondents know the preventive measures against COVID-19. They acknowledged that these measures were approved by the governments, however,

findings show that individuals' level of knowledge is being influenced by their belief system. In this direction, one of the respondents narrated;

We were told by the government to wear face masks, use sanitizer on our hands, stay 6 feet away from others, and avoid any large gatherings like burials and weddings for now. For me, all these things are good, no doubt, but I believe that prayer and total repentance is the only solution against COVID-19!

Similarly, a market Union leader commenting further said;

The government directed us to ensure there are buckets of water, soaps and sanitizers everywhere in the market, for people to wash their hands. Also, we were told to always wear face masks, avoid handshake, ensure personal hygiene, and take vitamins in order not to contract the disease. Also, some other persons said that COVID-19 can be cured with our God-given local herbs here. Without the mercy of God, all these things cannot prevent the virus from coming to us.

Evidence on the level of compliance among respondents

Heedless of the positive responses we received from respondents on their knowledge of COVID-19 and its preventive measures, compliance was found to be dwindling. Some respondents attested to the fact that they have been keeping to the prescribed measures, but got tired since they have not seen anybody suffering from COVID-19 since the announcement. Others agreed that they are no longer strict in adhering to these measures since the state government has relaxed lockdown. A 32-year-old participant narrated her experience;

When the coronavirus was announced newly, I and my husband were so scared, that we strictly obeyed all directives, thinking that it will not take long. Our neighbours did not obey any of the directives; they were all laughing at us because we stayed indoors for months. Eventually, we stopped, when we found out that our neighbours who are not obeying the directives were all still alive. We resumed our normal businesses since the state government has also relaxed lockdowns.

However, the majority stressed that they all have their face masks but only wear them when they see police or vigilante groups in order to avoid extortion by them. Police and vigilante groups were collecting money from those who don't wear face masks along the roads and in various markets places. The implication is that respondents only comply with the presence of these authorities. This compliancy behaviour will no doubt contribute to the spread of the virus. A bus driver narrated below,

I permanently keep two facemasks on my bus. I wear it when I see the police on the road. Once; I saw policemen on the road and gave one facemask to my passenger, who forgot his own and the police allowed us to pass. If not, the police would have delayed us and I may lose my money. This is because the police will seize the passenger and he will not agree to pay me when he has not reached the agreed destination.

Another 26-year-old respondent narrated;

I was in a tricycle going to Awka one day when we came close to a police checkpoint, a couple who were in the same tricycle with us were not putting on their face mask, the driver has to give one of his face masks to the wife, while the wife pulled off her underwear and gave to the husband to serve as a face mask. So, in this part of the world, people are using face masks not because they don't want to contract COVID-19, but because of the fine policemen will charge us if they cut anyone disobeying the order.

A 32-year-old respondent said;

... I wear the facemasks on my jaw every day and draw it to my nose when I see security men, to avoid paying an unnecessary fine.

Another respondent narrated;

I could remember the day I was in a bus travelling to Enugu, all the passengers in the bus including the driver had their facemask on their jaws and only draws it up to our nose whenever we got close to a police checkpoint and immediately we cross the police checkpoint, everybody will draw the facemask back to their jaws. This continued like that until we got to the final bus stop.

Also, respondents complained of being tired of the whole situation and difficulty in breathing when they wear face masks. One of the market leaders stated thus;

We obeyed the government by making sure there are buckets of water, with soap and sanitizer in every part of the market, for people to wash their hands. But I noticed that our people only remember to wash their hands after eating. On the issue of face masks, everybody in this market has facemasks, just to fulfil all righteousness. They only wear the facemask when they see the task force team. I don't blame them; a facemask obstructs breathing and speech too. For example, you wouldn't have heard me well, if I'm wearing my facemasks now. As for sitting at home order, how can you sit at home when your children are crying with hunger? As you can see, businesses have resumed as usual, because everybody is tired!

Aside from wearing a face mask, the respondents said that observing physical distancing is also another measure against COVID-19, respondents attested to have stopped attending large gatherings like burials, weddings etc. some respondents were aggrieved that they are getting tired already. A 40-year-old respondent said this,

We were told to stop burials since March, and up till now, people corps are still in the mortuary waiting to be buried and at the same time accumulating charges. Before they ordered us to stop going to markets and churches, but it's not possible! We have started going to church and markets, even some schools have started defiling the orders, my children's school have resumed, but they were instructed not to wear their uniform.

Discussions

Findings came from 30 passer-by and 6 market leaders which unveiled the level of knowledge on COVID-19; and compliance to government safety measures in Anambra state. From our discoveries, the level of knowledge on COVID-19 and its preventive measures can be scaled as basic, however, compliance with these measures was found to have dwindled in the area of study. Lack of compliance with the disease preventive measures is no doubt one of the leading causes of the rapid increase in the spread of COVID-19. Our findings are similar to other studies on COVID-19 from different parts of the world (Olapegba et al, 2020; Widyastari, 2020). Respondents attested to have been strict in adhering with the government measures before some experiences and events of the time that made them behave otherwise. Like many parts of the world, the Nigerian police enforce compliance in the study area (Kickbusch et al., 2020). However, the study found that despite police intervention compliance is relatively low.

Respondents confessed that they carry their facemasks in their pockets and only wear them when they see the police to avoid paying fines. Respondents complained that wearing the facemasks gives them discomfort especially in breathing. Also, low compliance behaviours in Anambra state have a connection with misinformation/misconceptions, perceptions, religious views and perceived rumours as found in the study.

Part of the findings revealed some level of misinformation and misconceptions by respondents about COVID-19. Given that most information available to the respondents is based on hearsay, coupled with illiteracy, this, without doubt, contributes to misconceptions and misinformation. One of the respondents claimed that COVID-19 could be prevented by hot water therapy. Other respondents boldly claimed that cases of COVID-19 do not exist in the study area, this was attributed to hot weather conditions, the strong immune system of Africans and their use of herbal medicines. The study has shown that Africans extensively resort to traditional medicines for the treatment of all kinds of diseases (Mahomoodally, 2013). This may not be unconnected to the use of herbal medicine by Madagascar as COVID-19 therapy (Mugabi, 2020). However, the World Health Organization has cautioned Africans to use medicines that passed through rigorous clinical trials.

Consequently, the study found that these misconceptions motivate the respondent's opinion that COVID-19 is not effective in the area of study. However, it intensifies noncompliance behaviour towards the government prescribed measures. Meanwhile, the available statistics show that cases of COVID-19 are increasing daily in Nigeria. More than 8.3 million cases and 10 million cases were reported on 21st and 29th June in the globe respectively (WHO, 2020a). Between 29th June and 13th July, Nigeria recorded more than 11, 000 new cases in addition to the previous figures. The study area has also been consistent in recording an increase in the number of confirmed cases (NCDC, 2020a).

From the findings, respondents' perceptions of COVID-19 were found to have been influenced by the belief system. There are diverse religious beliefs among Africans that influence their behaviours and practices (Agadjanian and Yabiku, 2014). This is to say that the way people perceive COVID-19 in the area of study is largely influenced by their religious and spiritual beliefs. Evidence from reviewed literature confirms that Africans resort to religion as a means of finding solace, understanding, hope, healing, freedom, orderliness and achieving peace in almost all facets of life (Ntetmen, 2013; Mkandawire-Valhmu, Kako and Kibicho, 2012, Agadjanian and Yabiku, 2014; Arrey et al., 2016; Sovran, 2013,). Despite its religious plurality, the region maintains a strong common belief in God as the ultimate healer and protector, thus there is a widespread belief in praying to God as a solution to life-threatening diseases especially in Sub Sahara Africa (Arrey et al., 2016; Sovran, 2013; Namageyo-Funa, 2015).

Generally, Nigerians like most Africans solely trust in supernatural power and divine protection in times of epidemics and pandemics. However, respondents felt that adhering to the prescribed measure is adamant to fruition, except with 'divine intervention', thus their hopes were hanged on the mercy of God. It is a fact in Nigeria that, worship centres have been staging spiritual war against COVID-19 through prayer

ministrations and prophecies. Based on perceptions, COVID-19 is seen as a spiritual force rather than a biomedical disease (Kirby, Taru, and Chimdizikai, 2020). This was the case in Zimbabwe, Tanzania, Liberia and many African countries. This same perception prompted the president of Tanzania, amidst the physical distancing measure, to give instructions that churches and mosques should continue entertaining large gatherings of worshippers because prayer is the only access to divine cure of coronavirus. Consequently, this present study found that compliance toward the prescribed measures was neglected.

Moreover, part of the findings revealed that the recent announcement by the state government on the relaxation of lockdown was perceived by the respondents as proof that the state is free of COVID-19. The state government gave directives for markets, and churches to reopen while ceremonies like burials and weddings should resume. This reality amplifies the tendency of noncompliance to preventive measures.

To guide against this, the social work profession has an enormous role to play in the fight against COVID-19 (Rasool, 2020). Given the relevance of social work in this regard, different countries of the world have mandated social workers to spray their professional tentacles in a bid to curtail the spread of the virus (The Economic Times, 2020; IFSW, 2020). Intervention still boiled down to public sensitization – a role so natural to social workers (Okoye, 2019; Onalu et al, 2020). Part of the measures put in place to curtail COVID-19 was the launched Global Outbreak Alert and Response Network (GOARN) COVID-19 Knowledge hub, where people all over the world can access and share their experience on COVID-19 (WHO, 2020c). Rolison and Hanoch (2015) attested to the fact that the internet has always been the most used source of information during the outbreak. This particular measure does not put into consideration people who are not educated, children, elderly, visually impaired – those who may not likely have access to these internet services. It becomes imperative that the aforementioned category of persons require first-hand information. This is a gap only the social workers could fill.

Also part of the findings shows that taking precautions against COVID-19 is seen as a permitted responsibility for most of the respondents, however, protection against any disease or virus was perceived as a divine grace from God. Some respondents believe that the existence of herbs in the region is God's way of using them to protect or heal them from diseases. Therefore, they are likely to resort to taking on all kinds of herbal mixtures while praying to God. Other beliefs revealed that the emergence of the virus is a punishment of sins from God which will require absolute repentance as the only solution. Where such belief prevails, adherence to the prescribed health measures will be adversely compromised. With the above in mind, Social workers should be able to understand the type of belief their client is operating on. This is because the understanding of such could help to improve efforts on the awareness creation, control, and prevention strategy. Several studies have established the relevance of social work professional intervention in the fight against COVID-19 (Dominelli, 2020; Hysop, 2020; IFSW, 2020; Scarnera, 2020; Zhang et al., 2020).

In conclusion, the study explored knowledge on the risk's information and preventive measures on COVID-19. The study answered three research questions. In summary,

respondents have basic knowledge of COVID-19, however, the emergence of infectious diseases like COVID-19 require that the masses be well informed with all the relevant information, hence the need for the involvement of social workers in public sensitization. It is worth knowing that, WHO sent about 150 staff teams to different countries of the world intending to strengthen surveillance, yet many gaps still exist in the world defences against COVID 19 (WHO, 2020b). This is because the team could only cover a small scope. This emphasized the need to involve professionals – Social workers, who can reach out to every community. The respondents perceived the prescribed preventive measures as an acceptable responsibility, rather than a precaution against the virus. This stems from the general belief system influenced by religion in the area of study. The dominant belief portrays COVID 19 as a spiritual war against humanity and thus requires prayer, repentance and faith in God to eliminate it. However, such belief compromises the compliance behaviour towards the COVID -19 preventive measures. Social workers should work with religious leaders and traditional leaders to ensure that adequate and accurate information regarding COVID-19 is passed to the people. It is also the role of social workers to counter all misinformation, misconceptions and superstition, communicate risk information, notify testing and isolation centers for easy referral, in case of emergency. It is expected that social workers will also help in ensuring effective quarantine services. These could be achieved through public enlightenment campaigns, early identification and follow-up of the contacts of the infected persons. The involvement of humanitarian professionals like social workers will fill many gaps and help to achieve a "new normal" - a world that is healthier, safer, well informed, and better prepared, as proposed by the General Director of WHO (WHO, 2020b).

Finally, the study is not without limitations. First, the study was limited to just Anambra state in Nigeria. Thus, the researchers suggest the need for subsequent studies in other parts of Africa and beyond. Second, the study did not capture opinions from health professionals. Hence further studies would do well to include social workers, laboratory scientists, nurses and doctors in the sampling frame. Such studies will further provide insights on various professional interventions in preventing disease. Despite these limitations, findings from this study remain relevant to WHO, professionals, ministries of health, policymakers and agencies in the fight against COVID-19 all over the world.

Disclosure statement

No potential conflict of interest was reported by the authors

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