

# The Coronavirus Health Crisis, Social Media, and Online Health Information Seeking Behaviour of Older Adults in Nigeria\*

Koronavirüs Sağlık Krizi, Sosyal Medya ve Nijerya'daki Yaşlı Yetişkinlerin Çevrimiçi Sağlık Bilgisi Arama Davranışı

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## Abstract

Older adults or the elderly are part of the group of people that make up a majority of the health burdens in society, and the outbreak of coronavirus or COVID – 19 has further placed them in a risky position due to their age. Going by the latter statement, the research examines the impact of social media on this population's online health information-seeking behaviour in the face of the global coronavirus health crisis in Nigeria. The study employed Krejcie and Morgan's (1970) technique for ascertaining the sample size for a given population, and arrived at a sample of 384 quantitatively surveyed through a questionnaire. The study concluded that social media positively impacted the health behaviour of the research population, and the information sought on social media is reliable, and it also influenced their behaviour positively. However, the authors warn that online health information seekers, especially older adults, should always exercise caution as not all information obtained on social media on various health issues, including the coronavirus, is accurate. Besides, consumers of online health information should be thorough and active users of social media; they should use their human senses to discern between false and true health information. Further, they should also verify such information with health professionals if the need arises. Given the limitations enumerated in this study, the authors suggest that further studies are essential to validate the results of this research.

**Keywords:** COVID-19, Elderly, Health, Health Crisis, Information-Seeking Behaviour, Social Media.

\* This article has been approved by the Internal Research and Ethics Review Board (IRERB) of the Department of Theatre Arts of the University of Abuja on 24th May 2021, decision number: THA-MD021/177.

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## Öz

Yaşca ileri olan bireyler toplumda genellikle sağlık sorunlarını daha fazla yaşamakta olup, COVID-19 döneminde çeşitli tehditlere maruz kalmışlardır. Bu doğrultuda bu çalışmada sosyal medyanın, bu toplumsal grubun çevrimiçi sağlık bilgisi araştırma davranışları Nijerya bağlamında incelenmektedir. Çalışmada Krejcie ve Morgan (1970) tekniği uygulanarak örneklem belirlenmesi yapılmış ve nicel bir araştırmayla 384 kişiye anket uygulanmıştır. Sonuç olarak çalışmada sosyal medyanın sağlık davranışlarını olumlu etkilediği ortaya çıkmış ve sosyal medyadan elde edilen bilgiler güvenilir bulunmuştur. Diğer yandan çalışmada sosyal medyadan elde edilen verilerin her zaman doğru olmayabileceğinden hareketle yaşı ilerlemiş bireylerin sosyal medyada sağlık bilgilerinin takip ederken dikkat etmesi gerektiğinin altı çizilmektedir. Sosyal medyada doğru ve yanlış bilginin ayırt edilmesinin sağlanması önem taşımakta, bilgilerin mutlaka sağlık profesyonellerine danışılarak kontrol edilmesi gerekmektedir. Bu alanda gerçekleştirilerek gelecek çalışmaların konuya farklı açılardan ışık tutması amaçlanmıştır.

**Anahtar Kelimeler:** COVID-19, Yaşlılar, Sağlık, Sağlık İletişimi, Bilgi-Arama Davranışı, Sosyal Medya.

## Introduction

The outbreak coronavirus health crisis has further tested the readiness of world health sectors to combat sudden health and its citizens safe. There are currently no approved vaccines or drugs for treating the virus (CDCP, 2019); preventive behaviours have become paramount in curtailing the pandemic, and social media has re-engineered its importance in the health sector. Authors (Gesauldo et al., 2010; Xavier, d'Orsi, Wardle, Demakos, Smith & von Wagner, 2013) have cited that on a broader level, mass media have enormous potential to proffer health-related information that can influence audiences' health behavioral attitudes. Notably, in recent times, the Internet and social media platforms have become an essential conduit pipe for finding and transmitting health information, and they also assist in health decision making (Xie, 2009). Due to the positive features of social media such as convenience and affordability (Rice, 2006), users keep up on current information about diseases at their own pace, verify misleading information, and also obtain assistance for health management procedures (Liu, 2020). Increasingly, people are using online platforms for a different range of health-related matters (Weaver, 2003), and Fox & Duggan (2013) of the Pew Research Center for Internet and American Life Project writes that 72% of internet users have used online platforms such as the the World Wide Web to seek for health and related information.

Research (Chou, Hunt, Beckjord, Moser, & Hesse 2009; Hall, Stellefson, & Bernhard, 2011) on the ways individuals seek health information and social media news which have been developing recently. However, scientists suggested a need for an in-depth exploration of older age brackets and information-seeking behaviour on different online media platforms (Westerman, Van Der Heide, Klein, & Walther, 2008). Besides, users of online platforms have developed improved skills (Fox, 2011a), and it is pertinent to explore how users of different demographics seek health information. Existing studies tend to focus on the online health information-seeking behaviours of people of younger age brackets (Eysenbach & Köhler, 2002; Hansen, Derry, Resnick, & Richard, 2003; Peterson, Aslani, & Williams, 2003; Efthimiadis, 2009). There is a lack of research on the health information-seeking behaviour of the elderly who are likely to have different online health information search

patterns due to their age. Hence this research fills his gap in the literature with a quantitative approach. The objectives of this study are:

- i. To explore which social media platform is the most used for seeking health information.
- ii. To ascertain what type of information the elderly are seeking on social media platforms regarding coronavirus.
- iii. To investigate whether the consumption of the information sought engenders behaviour change among the elderly.

### **The Elderly, Social Media and Online Health Information Seeking Pattern**

Healing and being sincere are very important for seniors. Currently, given the prevalence of social media, the elderly are becoming participatory in which affects them as they mitigate health challenges, especially during the coronavirus pandemic. Considering the prevalence of health information-seeking behaviour and the participatory function of individuals in healthcare, social media use behaviour and online health information seeking could facilitate the well-being and healthy life of the Nigerian elders.

Statistics (Eysenbach & Köhler, 2002; Kurniawan, 2008; Fox & Duggan, 2013; Kheokao & Ubolwan, 2019) have revealed that the percentage of older adult social media users is poor. However, there are increasing numbers of old persons tending toward social media (Tennant, Stollefson, Chaney, Chaney, Dodd, 2013; Tayati, Disathaporn, & Onming, 2017), and the use of social media for health purposes among the elders is becoming popular (Kheokao & Ubolwan, 2019). Research (Fox, 2011a; Fox, 2011b) has shown that in 2009, approximately 38% of older people above the age of 65 went online, and the figure increased to 45% a year after. According to Fox (2011a), more than 69% of ageing Internet users searched for health information online. Recently, people between the ages of 40 to 59 make up a larger percentage of online health information seekers (Ybarra & Suman, 2008), and as people become older, they contribute to the proportion of elderly seeking health information in cyberspace. This is interesting because the use of social media for health information has huge benefits predominantly for seniors seeking health information in cyberspace. Social media inform the elderly about common interests and health concerns (Chou et al., 2009; Hall et al., 2011). Kreps and Neuhauser (2010) reiterate that when the elderly effectively use social media as a means of health communication, this action can address health disparities and may have substantial public health impacts because of its affordability and ubiquitous nature (Julius, 2020). Besides, if the elderly are encouraged to use social media to seek and examine health information, they are likely to benefit from social media's social support and sense of empowerment (Tennant et al., 2013). Although, some elderly persons have the capability to seek online health information. However, they do so at a slower rate and the information received is interpreted or understood by employing their past experiences (Huang, Hanse, & Xie, 2012) or with the assistance of relatives or younger persons.

However, despite social media's advantages for disseminating health information, there are still several obstacles to user acceptance and engagement (Antheunis, Tates, & Nieboer, 2013). In

contrast to face-to-face healthcare services in which healthcare professionals primarily create value, the health information provided on online platforms relies heavily on collaboration among users (Miranda, Young, & Yetgin, 2016). For health information on social media to be successful, its users must actively seek health information and collaborate and share such information (Li, Wang, Lin, & Hajli, 2016). The multiple downsides to using social media as a medium for sourcing and sharing health information. The demerits include the existence of anonymous authors, lack of source citation, and sharing unverified information that may be false (Vance, Howe, & Dellavalle, 2009). There are substantial dangers to the rapid diffusion of misleading and potentially inaccurate health information that may cause confusion and lead to misdiagnosis, given that social media frequently provides an open avenue for health information searching and dissemination (Chou et al., 2009; Boulos et al., 2012).

### **Social Media: An Overview**

Boyd and Ellison (as cited in Udenze & Ugoala, 2019) assert that social media are platforms that permit users to create either a public or semi-public profile within a bounded network and allow users to interact with other users with whom they share a connection; view, and roam their networks and those made by persons within the same connection. From this definition, we can argue they are different social media that appeal to diverse users. In recent years, numerous social media sites have emerged, and they have significantly enhanced users' information sharing and networking capabilities in different endeavours (Sugimoto, Work, Lariviere, & Haustein, 2017; Hogan, 2018; Udenze & Oshionebo, 2020; Udenze & Uzochukwu, 2021). Due mainly to the ubiquitous usage of smartphones, social media have infused many aspects of contemporary life in our culture (Owuor & Hochmair, 2020). Despite the proliferation of multiple social media, very few are popular. It is essential to mention that users have successfully appropriated and domesticated some social media applications to suit their personal needs.

In the use of social media, user selection bias based on age, gender, and socioeconomic position is typical. For instance, in some areas of the United States, men, Hispanics, and African Americans frequently use Twitter (Mislove, Lehman, Ahn, Onnela, & Rosenquist, 2011). The various social media platforms have varied user characteristics. For instance, Smith and Anderson (2018) claim that younger generations primarily utilize Snapchat and Instagram, whereas older generations use YouTube and Facebook more frequently. The authors further revealed that LinkedIn is more biased towards higher-income users and professionals than other apps such as WhatsApp or Snapchat. In addition, the popularity of social media is also measured by location or region. WeChat, for example, is well-known and used in China (Hou, Ndasauka, Pan, Chen, Xu, & Zhang, 2018), and Vkontakte is widely used in Russia (Baran & Stock, 2015).

From the preceding assertion, it can be deduced that different social media appeal to different demographics; professionals, young people, older people, different races, and social media tend to be popular within their country of origin. However, during crises such as the COVID – 19 pandemic, the popularity and pattern of use of social media are different, especially among the elderly.

## **Health Information-Seeking Behaviour and Older Adults**

In 2005, the percentage of people who are 60 years and above in developing countries was estimated at 8%, and 5.2% in Africa (United Nations, 2006) and a UN 2010 report suggests that by 2050, this statistic in African nations might increase. This endangered group, which has limited agency, has a high likelihood of contracting illnesses (Kakwani & Subbarao, 2007). Population ageing in Africa occurs when access to health information is still limited (Ameh, Gómez-Olivé, Kahn, Tollman, & Klipstein-Grobusch, 2014). The United Nations describes “the elderly” as persons within 60 years and above (WHO, 2005). However, due to the shorter life expectancy in third-world nations, the World Health Organization (WHO) defines old age as 50 years and older. (Debpuur, Welaga, Wak, & Hodgson, 2010; Kyobutungi, Egondi, & Ezeh, 2010; WHO, 2005; Xavier Gómez-Olivé, Thorogood, Clark, Kahn, & Tollman, 2010). Besides, ageing-related functional limitations occur earlier among these countries’ populations (Miszkurka, Haddad, Langlois, Freeman, Kouanda, & Zunzunegui, 2012; Onadja, Atchessi, Soura, Rossier, & Zunzunegui, 2013).

Few research have been done on the health of elderly people in Africa, and less is known about their social media health information-seeking behaviour. Studies on older people and health have been conducted in Ghana (Debpuur et al., 2010), South Africa (Xavier Gómez-Olivé et al., 2010), Tanzania (Mwanyangala et al., 2010), Burkina Faso (Onadja et al., 2013), and Nigeria (Balogun & Guntupalli, 2016; Gureje, Kola, Ademola, & Olley, 2009; Gureje, Ogunniyi, Kola, & Afolabi, 2006). These studies have uncovered diverse and challenging health situations facing older adults. However, aside from investigating specific health challenges, none of these studies has assessed older persons’ online health information-seeking behaviour, especially concerning the coronavirus pandemic.

Older people should have greater access to health information, given their health vulnerability. Except for research done in South Africa and Uganda, there are dearth of studies on how older people in Africa seek for health information (Ameh et al., 2014; Wandera, Kwagala, & Ntozi, 2015). Moreover, to the best of our knowledge, this is the only study in Nigeria to have taken into cognisance the importance of exploring the online health information-seeking behaviour of the elderly during the COVID – 19 pandemic. Moreover, studies on healthcare-seeking behaviour in Nigeria have focused mainly on determinants of use, with no particular focus on the elderly (Egunjobi, 1983; Uzochukwu & Onwujekwe, 2004). In this context, and given the poor state of the healthcare system (Atun et al., 2013), the expanding elder population’s higher healthcare needs, and the dearth of data on this population in Africa, precisely in Nigeria, the topic of the elderly health information-seeking behaviour amidst the coronavirus pandemic is timely. Consequently, this study explores how older persons in Nigeria use social media to seek health information amid the coronavirus health crisis.

## **The COVID – 19 and Nigeria**

The World Health Organization (WHO) originally discovered the coronavirus in Wuhan, China, in December 2019. Over 85,000 verified cases and over 2,900 recorded fatalities from the disease were documented as of the end of February 2020. (Janz et al., 2020). In January 2020, the WHO declared COVID – 19 a health pandemic and public health emergency of international concern. Concerns

regarding the spread of misleading information about COVID-19 on social media led the WHO to host a page on their website titled “myth busters” and collaborate with social media companies to tackle the menace of misinformation (Kim, Atkinson, & Kahlor, 2020).

On February 27, 2020, an Italian man became Nigeria’s lead case for COVID-19. In April 2020, there were 288 laboratory-confirmed cases of COVID-19 in Nigeria, with 51 discharges and seven deaths (Nigeria Centre for Disease Control (NCDC), 2020). To reduce the escalation of the virus, the NCDC embarked on a sustained sensitisation against misconceptions and misinformation about the virus (Agbo, 2021). Besides, civil society organisations embarked on enlightenment campaigns for good coronavirus-specific hygiene practices. The NCDC also began tracing possible victims and their contacts in association with state governments. In early March of 2020, the Lagos State government directed that all gatherings with more than fifty individuals be stopped for four weeks. Similarly, lower and middle-level public officers were also directed to work from home (Ewodage, 2020). Additionally, the federal authority implemented several containment measures, including the closure of the country’s borders, airspace, public spaces, schools, places of worship, among others (Agbo, 2021).

Understanding how the public, specifically older adults, seek health information online about the coronavirus and what type of information they seek is essential due to their vulnerable state as one of the most affected by the virus. However, Leppin and Aro (2009) contend that knowledge of practices including routine hand washing, using hand sanitizers, donning face masks, respiratory etiquette, social distancing, and self-isolation are essential to minimizing the escalation of diseases. Besides, Studies (Choi & Yang, 2010; Hussain, Hussain, & Hussain, 2012) revealed that peoples’ awareness and knowledge about an infectious disease could make them set preventive measures and behave in particular manners.

### **Method/Procedures**

The research used a quantitative technique; specifically, we used the survey method to elicit responses from the respondents. Specifically, the researchers deployed Krejcie and Morgan’s (1970) method for ascertaining the sample size for known population.

### **Sample Size**

According to Nigeria’s National Population Commission (NPC) Abuja’s population as of the last census is 1,406,239. Going by this, the Krejcie and Morgan (1970) published table states that for a population of 1,000,000 and above, a sample size of 384 is representative. The Krejcie and Morgan (1970) published table is a ready-made statistics table that points to different population numbers and the sample size appropriate for the population. Hence, 384 was purposively adopted as the sample size for the study. We adopted the convenience sampling method to locate respondents who were between the ages of 50 to 70 years and who are knowledgeable about social media.

### **Data Collection Instrument/Procedure**

A questionnaire was employed to collect primary data for the study. The questionnaires were conveniently administered to respondents who voluntarily indicated interest to participate in the

research. Besides, we adopted the snowballing method to recruit more participants. Because of the restrictions inflicted by the coronavirus, especially those related to face-to-face interaction, a soft copy of the questionnaire was also administered through emails; Google form. The Google forms were further shared on WhatsApp. Two persons were recruited and trained to assist in the dissemination and retrieval of the questionnaire. The primary data was collected from the period of the third week of March to June 2020.

### **Ethical Concern**

This research concurred with the ethical guidelines for carrying out study of this kind. Furthermore, informed consent was obtained from the research participants of the study. The researchers did not coerce any of the participants to be a part of the research; they willingly participated. The study was cleared by the Internal Research and Ethics Review Board (IRERB) of the Department of Theatre Arts of the University of Abuja on the 24<sup>th</sup> May 2021 with the approval reference THA-MD021/177.

### **Data Analysis**

Three hundred seventy-seven respondents (377) responded to the questionnaire, while seven respondents did not respond. Thus, the data analysis is based on the number of returned questionnaires – 377. Data collected from primary sources was inputted and analysed through the Simple Percentage Table (SPT) method. Hence, tables were used to display the results in the three sections of demographic data; social media use patterns and health information-seeking behaviour of the respondents.

### **Results**

Primarily, the current study explores the online health information-seeking of the elderly in Nigeria during the COVID – 19 pandemic. The analysis of data revealed that the majority (39 %) of the respondents are between the ages of 50 to 59 years old, that is, quinquagenarian. The results also discovered that the sample population is made up of 49% of females and 51% of males. Further, 15% have PhDs; 31% have master's degree; 13% possess postgraduate diploma; 26% has first degrees; 11% have secondary school certificates, and 4% have primary school certificates as their highest qualification. This higher rate of education in this finding may be attributed to the residency of samples. A significant portion of the sample is 135; 39% reside in Abuja Municipal Area Council (AMAC) while 24%, 91 of the respondents, reside in Bwari Area Council; the closest to AMAC.

### **The Respondents' Social Media Use Patterns**

Smartphones are the predominant device the respondents use for browsing social media platforms. Two hundred fifty-six respondents, representing 68%, use smartphones to surf social media platforms. 24% (92) use tablets or pads, 5% (20) use laptops or notebooks, and the least of the respondents use desktops: 2% (9).



## Respondents' Online Health Information-Seeking Behaviours

We enquired from the respondents whether they seek health information on coronavirus on social media, and 261 respondents, that is, 69% affirmed that they do while 31% of them averred that they do not. Further, our results indicate that WhatsApp is the most used platform for seeking coronavirus health information during the period. This finding may be because of the broadcast feature of the app, which permits users to disseminate to a wider audience. Besides, studies have argued that WhatsApp has become popular due to its affordability and ease of use. The next platform next to WhatsApp is Facebook, as portrayed in the figure underneath.

**Table 1.** The Types of Information Sought on Social Media during the Pandemic

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Most affected area/state	88	23%
Mortality/Discharged cases	92	25%
Safety measures	74	20%
Modes of transmission	69	18%
All of the above	54	14%
Total	377	100%

From table 1 above, on the type of health information, the respondents seek on social media, a considerable number of them always check the mortality rate and discharged cases (25%). While 23% followed the spread of the virus in the most affected areas or states. 14% of the respondents signified that they seek all the health information in the options provided.

**Table 2.** The Reliability of Information Sought on Social Media

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Reliable	246	65%
Not reliable	131	35%
Total	377	100%

The research participant attested that the health information they sought from social media is reliable. Two hundred forty-six respondents, representing 65%, affirmed the latter statement. Furthermore, 35% of the respondents averred that information from social media platforms is not reliable. Going by this finding, this study argues that health information sought by the elderly on social media is trustworthy and well-founded.



**Table 3.** The Behaviours Impacted by the Health Information Exposed to on Social Media

<b>Responses</b>	<b>Frequency</b>	<b>Percentage</b>
Using sanitizers	68	18%
Wearing facemasks	77	20%
Washing hands	33	9%
Physical distancing	58	15%
Avoiding crowded areas	57	15%
Staying at home	84	22%
Total	377	100%

From the table 3, a look at the behaviour impacted by the health information the respondents sought on social media revealed that a majority of them were influenced to stay at home – 88 participants, representing 22%. This is followed by wearing facemasks – 20%; using hand sanitisers – 18%; physical distancing, avoiding crowded locations – 15% respectively, and lastly, washing of hands – 9%. At the earliest stage of the virus, there were assertions that people from the age of 50 and above are most vulnerable to contracting the virus. This latter statement may be why the current study found that most of the respondents were influenced to stay at home due to their age. In addition to this, the study uncovered that the influence of health information sought on social media has a positive behaviour change on the research participant. 61% of the research participants confirmed the just concluded statement, while 39% stated the contrary.

### **Discussion of Findings**

As stated earlier, existing research is predominantly on the online health information-seeking behaviours of people of younger age brackets. There is limited research on the health information-seeking behaviour of the elderly, who, due to their age, are likely to be the most affected with health issues, especially in this period of the coronavirus pandemic. Thus, we have attempted to explore the impact of social media on the elderly with respect to the coronavirus health crisis.

The research participants in this study were older adults who are social media savvy, to some extent. A significant percentage of the respondents – 68% – use smartphones to surf social media platforms. Besides, In terms of communication, smartphones are integral parts of today's society, and it is convenient for the elderly (Kurniawan, 2008), as revealed in this study. Smartphones are convenient, easy to use, user-friendly, and inexpensive; as a result, smartphones are not too sophisticated for older adults. The time spent using social media is short, 1 – 2 hours per day. This may be due to their age brackets; compared to young people that spend above 5 hours using social media in a day (Yeboah & Ewur, 2014). In another study (Rattanawarang, 2015), it was found that the elderly use the internet for health information between 1-2 hours per day and a couple of times a week.

Further, results from the demographic characteristics reveal that the majority (39 %) of the respondents are between the ages of 50 to 59, quinquagenarian. Presumably, their cognitive ability is still at a reasonable level. Likewise, 31% of the respondents have master's degrees, and 26% have first degrees; we can say that a considerable percentage of the research population is literate, making them capable of surfing social media.

Looking into the social media platforms the elderly use for seeking health information about the coronavirus health crisis, we found that the top three social media used by respondents were WhatsApp (40%), Facebook (26%), and Twitter (13%). This finding aligns with studies like the Reuters Institute Digital News Report (2019), which discovered that most social media users are tilting towards WhatsApp.

Lagoë and Atkin (2015) think that health information seeking is usually initiated in response to a health crisis or health-related anxiety. People seek health information from cyberspace due to the convenience, anonymous, large chunk of online information. (Powell, Darvell, & Gray, 2003). In our study, we ascertained that the top three kinds of information regularly sought from social media in respect of the coronavirus health crisis were mortality/discharged cases (25%), most affected locations/states (23%), and safety measures (20%). The following statistics indicate that the respondents were interested more in health information about the spread of the virus and how to defend themselves from contracting it. The findings were consistent with Weaver (2018), who found that most individuals go online to seek information about a particular ailment, medical condition, or specific medical treatment or procedure.

Aside from the discussion mentioned above, this study's significant finding is that the respondents affirmed that the information they sought on social media is reliable. A considerable percentage of the sample attested that the information impacted their health behaviour. For instance, 22% of the respondents averred that they were made to stay at home more often, 20% confirmed they were pushed to wear their facemasks, and 18% used hand sanitisers more often.

In research, no particular study can boast that its methods, procedure, sample and other modalities for conducting research are exhaustive. Though this study deployed a quantitative approach known to attract a large sample size, there are inherent shortcomings in this approach. Due to the quantitative nature of this study, we could not probe deeper into the feelings and experiences of the population. We hope to see similar studies that would adopt qualitative approaches, like interviewing, focus group discussion or observational methods. The latter approach would further narrate the experiences of the elderlies in their thought, besides, despite the sample size of the current study that is 384. We believe that a larger sample size would strengthen the literature in this study domain.

The literature of this study has established that the elderlies are a massive burden to the health sector due to their deteriorating immune systems. Besides, we carried out this study by taking into cognisance the coronavirus and how it affects older adults. We suggest that future studies explore how online media platforms impact different ailments like dementia, diabetes, depression, etc., associated with older adults.

The COVID – 19 pandemic is a global health crisis that has challenged humanity. We conducted this study to ascertain how the elderly in Nigeria have used social media to manage the effects of the virus. Thus, we advise that scholars in other locations or countries should explore how the elderlies are faring during this period as they are at a higher risk of being affected by the virus due to their age. Further studies of this nature may create more awareness on the use and deployment of social media by older adults to manoeuvre the negative effect of the virus.

Since studies have revealed that the percentage of older adults who use social media is increasing, we believe that the technicalities of using online media may gradually be a lesser challenge among a majority of the elderlies. However, we would advise that subsequent studies may investigate the two-step flow of using social media for healthcare by the elderlies, that is, how intermediaries like relatives or guardians assist older adults in using social media for healthcare. Besides, the deployment of online media platforms in groups that share similar interests cannot be underestimated; thus, we advise that future studies may examine the use of social media in older peoples' groups or homes.

We did not aim to investigate the elderlies' social media use or specific variables. Thus, we advise that further research may assess the elderlies' use of online platforms for healthcare along specific variables such as level of computer literacy, knowledge of health literacy and cognitive ability, etc. These elements may significantly influence their search behaviour for online health information. Also, comparative studies on health information-seeking behaviour on different social media platforms could throw more light on these platforms' efficacies and their effectiveness in healthcare. Given the above limitations, we affirm that further studies are essential to validate this study's results.

## **Conclusion**

Conclusively, this research provides an understanding of older adults' online health-seeking behaviour in the face of the coronavirus health crisis. The findings of this investigation have demonstrated that social media positively impacted the health behaviour of the research population. There are enormous opportunities to harness the potential of social media in healthcare in Nigeria. The reason for this is the phenomenal growth in the country's ICT sector. This growth need not be restricted to other sectors only but rather to a wide range of health interventions. As the country strives to fulfil its obligations as enshrined in the Sustainable Development Goals (SDGs) in health, harnessing the powers of social media in terms of healthcare will certainly offer endless opportunities. However, online health information seekers should always exercise caution as not all information obtained on social media on a variety of health issues, including the coronavirus, is true. Consumers of online health information should be thorough and active social media users; they should use their human senses to discern between false and accurate information. Besides, governments may put up regulatory roles to ensure that potentially harmful information is disseminated on social media, especially on treatment issues. Nevertheless, social media offers an ample opportunity for accessing vital information during health emergencies.

## References

- Agbo, C.C. (2021). Social impact of myths and misconception about coronavirus pandemic in Nigeria. *SANGKĒP: Jurnal Kajian Sosial Keagamaan*, (4) 1, 1-19.
- Ameh, S., Gómez-Olivé, F. X., Kahn, K., Tollman, S. M., & Klipstein-Grobusch, K. (2014). Predictors of health care use by adults 50 years and over in a rural South African setting. *Global Health Action*, 7, 1-11.
- Antheunis, M. L., Tates, K., & Nieboer, T. E. (2013). Patients' and health professionals' use of social media in health care: Motives, barriers and expectations. *Patient Education and Counseling*, 92(3), 426-431.
- Atun, R., Jaffar, S., Nishtar, S., Knaul, F. M., Barreto, M. L., Nyirenda, M., & Piot, P. (2013). Improving the responsiveness of health systems to non-communicable diseases. *Lancet*, 381(9867), 690-697.
- Balogun, S. A., & Guntupalli, A. M. (2016). Gender difference in the prevalence and sociodemographic correlates of mobility disability among older adults in Nigeria. *European Journal of Ageing*, 13(3), 231-239.
- Baran, K. S., & Stock, W. G. (2015). *Facebook has been smacked down. The Russian special way of SNSs: Vkontakte as a case study*. Paper presented at the 2nd European Conference on Social Media (ECSM 2015). Porto, Portugal, 9-10 July 2015.
- Boulos, M. N. K. (2012). On social media in health literacy. *Webmed Central Health Informatics*, 3(1), WMC002936.
- Boyd, D. M., & Ellison, N. B. (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.
- CDCP. (2019). *Coronavirus disease: COVID-19 situation summary*. Retrieved July 23, 2020 from <https://www.cdc.gov/coronavirus/2019-nCoV/summary.html>.
- Choi, J. S., & Yang, N. Y. (2010). Perceived knowledge, attitude, and compliance with preventive behavior on influenza a (H1N1) by university students. *Journal of Korean Academy of Adult Nursing*, 22(3), 250-259.
- Chou, W.S., Hunt, Y.M., Beckjord, E.B., Moser, R.P., & Hesse, B.W. (2009). Social media use in the United States: Implications for health communication. *Journal of Medical Internet Research*, 11(4), e48.
- Debpuur, C., Welaga, P., Wak, G., & Hodgson, A. (2010). Self-reported health and functional limitations among older people in the Kassena-Nankana District, Ghana. *Global Health Action*, 3, 54-63.
- Efthimiadis, E. N. (2009). *How students search for consumer health information on the web*. Paper presented at the 42nd Hawaii International Conference on System Sciences. Big Island, HI, USA, 5-8 January 2009.
- Egunjobi, L. (1983). Factors influencing choice of hospitals: A case study of the northern part of Oyo State, Nigeria. *Social Science & Medicine*, 17(9), 585-589.
- Ewodage, R. (March 22, 2020). *COVID-19: How we plan to implement social distancing in lagos markets, transport system – sanwo-olu*. Retrieved from June 4, 2020 <https://www.channelstv.com/2020/03/22/covid-19-how-we-plan-to-implement-socialdistancing-in-lagos-markets-transport-system-sanwo-olu/>
- Eysenbach, G., & Köhler, C. (2002). How do consumers search for and appraise health information on the World Wide Web? Qualitative study using focus groups, usability tests, and in-depth interviews. *BMJ (Clinical Research Ed.)*, 324(7337), 573-577.
- Fox, S., & Duggan, M., (2013). *Health online 2013*. Retrieved April 10, 2021 from <https://www.pewresearch.org/internet/2013/01/15/health-online-2013/>.
- Fox, S. (2011a). *Health topics*. Retrieved April 10, 2021 from <http://pewinternet.org/Reports/2011/HealthTopics.aspx>.
- Fox, S. (2011b). *Four in ten seniors go online*. Retrieved March 18, 2021 from <http://www.pewinternet.org/Commentary/2010/January/38-of-adults-age-65-go-online.aspx>.

- Gesualdo, F., Romano, M., Pandolfi, E., Rizzo, C., Rava, L., Lucente, D., & Tozzi, A. E. (2010). Surfing the web during pandemic flu: Availability of World Health Organization recommendations on prevention. *BMC Public Health*, 10(561), 1-8.
- Gureje, O., Ogunniyi, A., Kola, L., & Afolabi, E. (2006). Functional disability in elderly Nigerians: Results from the Ibadan study of aging. *Journal of the American Geriatrics Society*, 54(11), 1784–1789.
- Gureje, O., Kola, L., Ademola, A., & Olley, B. O. (2009). Profile, comorbidity and impact of insomnia in the Ibadan study of ageing. *International Journal of Geriatric Psychiatry*, 24(7), 686–693.
- Hall, A. K., Stollefson, M., & Bernhardt, J. M. (2011). Healthy ageing 2.0: The potential of new media and technology. *Preventing Chronic Disease*, 9, 1-4.
- Hansen, D. L., Derry, H. A., Resnick, P. J., & Richardson, C. R. (2003). Adolescents searching for health information on the internet: An observational study. *Journal of Medical Internet Research*, 5(4), e25.
- Hogan, B. (2018). Social media giveth, social media taketh away: Facebook, friendships, and APIs. *International Journal of Communication*, 12, 592–611.
- Hou, J., Ndasauka, Y., Pan, X., Chen, S., Xu, F., & Zhang, X. (2018). Weibo or WeChat? Assessing preference for social networking sites and role of personality traits and psychological factors. *Frontiers in Psychology*, 9, 1-9.
- Huang, M., Hansen, D., & Xie, B. (2012). *Older adults' online health information seeking behavior*. Paper presented at the 2012 iConference. Toronto, Ontario, Canada. February 2012.
- Hussain, Z. A., Hussain, S. A., & Hussain, F. A. (2012). Medical students' knowledge, perceptions, and behavioral intentions towards the H1N1 influenza, swine flu, in Pakistan: A brief report. *American Journal of Infection Control*, 40(3), e11–e13.
- Janz, D. R., Mackey, S., Patel, N., Saccoccia, B. P., St Romain, M., Busack, B., Lee, H., Phan, L., Vaughn, J., Feinswog, D., Chan, R., Auerbach, L., Sausen, N., Grace, J., Sackey, M., Das, A., Gordon, A. O., Schwehm, J., McGoey, R., Happel, K. I., ... Kantrow, S. P. (2021). Critically ill adults with coronavirus disease 2019 in New Orleans and care with an evidence-based Protocol. *Chest*, 159(1), 196–204.
- Julius, K., K. (2020). Social media consumption in Kenya: Trends and influence on behaviour change in the wake of the Coronavirus pandemic outbreak. *Journal of Studies in Social Sciences and Humanities*, 6(2), 66-75.
- Kakwani, N., & Subbarao, K. (2007). Poverty among the elderly in Sub-Saharan Africa and the role of social pensions. *Journal of Development Studies*, 43(6), 987-1008.
- Kheokao, J., & Ubolwan, K. (2019). Online health information seeking behaviours among the Thai elderly social media users. *TLA Research Journal*, 12(1), 60-76.
- Kim, H. K., Atkinson, L., & Kahlor, L. A. (2020). Effects of COVID-19 misinformation on information seeking, avoidance, and processing: A multicountry comparative study. *Science Communication*, 42(5), 1-30.
- Krejcie, R. V. & Morgan, V. D. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Kreps, G. L., & Neuhauser, L. (2010). New directions in eHealth communication: Opportunities and challenges. *Patient Education and Counseling*, 78(3), 329-336.
- Kurniawan, S. (2008). Older people and mobile phones: A multi-method investigation. *International Journal of Human-Computer Studies*, 66(12), 889–901.
- Kyobutungi, C., Egondi, T., & Ezech, A. (2010). The health and well-being of olderpeople in Nairobi's slums. *Global Health Action Supplement*, 2, 45-52.
- Lagoe, C. & Atkin, D. (2015). Health anxiety in the digital age. *Computers in Human Behavior Archive*, 52, 484-491.

- Leppin, A. & Aro, A. R. (2009). Risk perception related to SARS and avian influenza: Theoretical foundations of current behavioral research. *International Journal of Behavioral Medicine*, 16(1), 7–29.
- Li, Y., Wang, X., Lin, X. & Hajli, M. (2016). Seeking and sharing health information on social media: A net valence model and cross-cultural comparison. *Technology Forecasting Social Change*, 126, 28–40.
- Liu, L. P. (2020). COVID-19 information seeking on digital media and preventive behaviours: The mediation role of worry. *Cyberpsychology, Behavior, and Social Networking*, 23(10), 1–6.
- Miranda, S. M., Young, A., & Yetgin, E. (2016). Are social media emancipatory or hegemonic? Societal effects of mass media digitization. *MIS Quarterly*, 40(2), 303–329.
- Mislove, A., Lehmann, S., Ahn, Y. Y., Onnela, J. P., & Rosenquist, J. N. (2011). *Understanding the demographics of Twitter users*. Paper presented at the Fifth International AAAI Conference on Weblogs and Social Media. Barcelona, Catalonia, Spain, 17–21 July 2011.
- Miszkurka, M., Haddad, S., Langlois, É. V., Freeman, E. E., Kouanda, S., & Zunzunegui, M. V. (2012). Heavy burden of non-communicable diseases at early age and gender disparities in an adult population of Burkina Faso: World health survey. *BMC Public Health*, 12(1), 1–10.
- Mwanyangala, M. A., Mayombana, C., Urassa, H., Charles, J., Mahutanga, C., Abdullah, S., & Nathan, R. (2010). Health status and quality of life among older adults in rural Tanzania. *Global Health Action*, 3(1), 36–44.
- NCDC. (February 12, 2022). *COVID – 19 in Nigeria*. Retrieved February 12, 2020 from <https://covid19.ncdc.gov.ng/>
- NCDC. (April 27, 2020). *COVID – 19 in Nigeria*. Retrieved April 27, 2020 from <https://covid19.ncdc.gov.ng/>
- Onadja, Y., Atchessi, N., Soura, B. A., Rossier, C., & Zunzunegui, M. V. (2013). Gender differences in cognitive impairment and mobility disability in old age: A cross-sectional study in Ouagadougou, Burkina Faso. *Archives of Gerontology and Geriatrics*, 57(3), 311–318.
- Owuor, I. & Hochmair, H. H. (2020). An overview of social media apps and their potential role in geospatial research. *International Journal of Geo-Information*, 9(9), 526.
- Peterson, G., Aslani, P., & Williams, K. A. (2003). How do consumers search for and appraise information on medicines on the internet? A qualitative study using focus groups. *Journal of Medical Internet Research*, 5(4), e33.
- Powell, J. A., Darvell, M., & Gray, J. A. (2003). The doctor, the patient and the World Wide Web: How the internet is changing healthcare. *Journal of the Royal Society of Medicine*, 96(2), 74–76.
- Rattanawarang, W. (2015). Elderly's internet usage for health information in Bangkok region. *Journal of Behavioral Science for Development*, 7(1), 169–185.
- Reuters Institute Digital News Report (2019). Retrieved May 6, 2020 from [https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2019-06/DNR\\_2019\\_FINAL\\_0.pdf](https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2019-06/DNR_2019_FINAL_0.pdf).
- Rice, R. (2006). Influences, usage and outcomes of internet health information searching: Multivariate results from the Pew surveys. *International Journal of Medical Informatics*, 75(1), 8–28.
- Smith, A & Anderson, M. (2018). *Social media use in 2018*. Retrieved July 28, 2020 from <https://www.pewresearch.org/internet/2018/03/01/social-media-use-in-2018/>
- Sugimoto, C.R., Work, S., Larivière, V., & Haustein, S. (2017). Scholarly use of social media and altmetrics: A review of the literature. *Journal of the Association for Information Science and Technology*, 68, 2037–2062.
- Tayati, P., Disathaporn, C., & Onming, R. (2017). The model of Thai elderly learning management for information and communication technology literacy. *Veridian E-Journal, Silpakorn University*, 10(3), 1456–1471.



- Tennant, B., Stellafson, M., Chaney, B., Chaney, D. J., & Dodd, V. (2013). *Social media for health information among adults in the state of Florida*. Retrieved February 20, 2021 from <https://www.bebr.ufl.edu/survey/website-article/social-media-health-information-among-older-adults-state-florida>.
- Udenze, S., & Ugoala, B. (2019). Building and constructing identity on WhatsApp: A netnographic approach. *World of Media: Journal of Russian Media and Journalism Studies*, 4, 49-69.
- Udenze, S., & Oshionebo, B. (2020). Investigating WhatsApp for collaborative learning among undergraduates. *Etkileşim*, 5, 24-50.
- Udenze, S., & Uzochukwu, C. E. (2021). Promoting mental wellbeing: Young adults' experience on TikTok during the COVID-19 pandemic lockdown in Nigeria. *Interações: Sociedade e as Novas Modernidades*, 40, 9-29.
- United Nations. (2006). *World population prospects: The 2006 revision, highlights*. New York: The United Nations.
- Uzochukwu, B. S. C., & Onwujekwe, O. E. (2004). Socio-economic differences and health-seeking behaviour for the diagnosis and treatment of Malaria: A case study of four local government areas operating the Bamako initiative programme in south-east Nigeria. *International Journal for Equity in Health*, 3(6), 1-10.
- Vance, K., Howe, W., & Dellavalle, R. P. (2009). Social internet sites as a source of public health information. *Dermatologic Clinics*, 27(2), 133-136.
- Wandera, S. O., Kwagala, B., & Ntozi, J. (2015). Determinants of access to healthcare by older persons in Uganda: A cross-sectional study. *International Journal for Equity in Health*, 14(26), 1-10.
- Weaver, J. (2003). More people search for health online. *NBCNews*. Retrieved November 12, 2019 from <http://www.nbcnews.com/id/3077086/t/more-people-search-health-online/#.W-TRgNizbIU>.
- Westerman, D., Van Der Heide, B., Klein, K. A., & Walther, J. B. (2008). How do people really seek information about others? Information seeking across the internet and traditional communication channels. *Journal of Computer-Mediated Communication*, 13(3), 751-767.
- WHO. (2005). *Definition of an older or elderly person: A proposed working definition of an older person in Africa for the MDS project*. Retrieved June 21, 2020 from <http://www.who.int/healthinfo/survey/ageingdefnolder/en/>.
- Xavier Gómez-Olivé, F., Thorogood, M., Clark, B. D., Kahn, K., & Tollman, S. M. (2010). Assessing health and well-being among older people in rural South Africa. *Global Health Action*, 3(1), 23-35.
- Xavier, A. J., d'Orsi, E., Wardle, J., Demakakos, P., Smith, S. G., & von Wagner, C. (2013). Internet use and cancer-preventive behaviours in older adults: Findings from a longitudinal cohort study. *Cancer Epidemiology, Biomarkers & Prevention: A Publication of The American Association for Cancer Research, Cosponsored by The American Society of Preventive Oncology*, 22(11), 2066-2074.
- Xie, B. (2009). Older adults' health information wants in the internet age: Implications for patient-provider relationships. *Journal of Health Communication*, 14, 510-524.
- Ybarra, M., & Suman, M. (2008). Reasons, assessments and actions taken: Sex and age differences in uses of internet health information. *Health Education Research*, 23(3), e512.
- Yeboah, J. & Ewur, G. D. (2014). The impact of Whatsapp messenger usage on students' performance in tertiary institutions in Ghana. *Journal of Education and Practice*, 5(6), 157-164.