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Social media as sources of information on COVID-19 among students in tertiary institutions in Kenyan

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Abstract

The outbreak of COVID-19 in December of 2019 and its relentless spread across the globe has led to an upsurge of information on the pandemic, as scholars, health experts and other authorities rush to publish information meant to enlighten the public on this novel virus. Thanks to social media and its various platforms, most of this information is shared online. However, this rapid spread of information has also given rise to panic and trepidation brought about by generally unverified information on social media. This study sought to assess the student's level of social media use in tertiary institutions, its influence on them, and whether they consider social media a credible source of information on COVID-19. An online questionnaire was administered to a sample of 250 students. Collected data were verified and analysed using SPSS software. The study has found that social media plays a significant role in sharing information on COVID-19 among students in tertiary institutions, with WhatsApps being the most widely used platform. However, despite being greatly influential, many students do not view social media as an accurate or credible source of information on the pandemic.

Keywords: *COVID-19, Kenya, pandemic, social media, students*

INTRODUCTION

The invention of Web 2.0 on the Internet has allowed the integration of online multimedia tools and enabled users to interact online (Choudhury, 2013; Doung-In, 2018; Palkova, 2015; Shrivastav & John, 2014). Consequently, social media, which incorporates various tools and platforms, has emerged as a major communication channel for disseminating and obtaining all kinds of information in the online environment (Ahmad & Murad, 2020; Bicen & Cavus, 2010; O'Brien, Moore & McNicholas, 2020). The large penetration of the Internet and proliferation of web-enabled devices have resulted in the exponential growth in the use of social media in many countries (Wamuyu, Ireri & Mulwo, 2019). This has changed the field of communication at all levels and more so in the area of health communication. Due to its popularity, social media has become an ideal channel for distributing a myriad of information to millions of users around the globe within a short time and especially to students in tertiary education who need to learn more about the pandemic. This has occasioned immense use of various social media platforms by

students, including Facebook, Twitter, WhatsApp, Instagram and TicToc (Bicen & Cavus, 2010, Bicen & Cavus, 2011; Mese & Aydin, 2019; O'Brien et al., 2020; Wamuyu, 2020) as sources of information. A recent study (see Wamuyu et al., 2019) indicates that Internet users in Kenya rely on social media for various needs such as information acquisition (31%), entertainment (28%) and 24% for online social interactions.

The outbreak of novel coronavirus (COVID-19) in December 2019 in China's city of Wuhan, Hubei province, occurred when online communication had virtually connected the world into one digital village. With this connectivity, bolstered by the efficient worldwide travels, the spread was rapid, affecting almost all nations of the globe and making it the first-ever digital-era pandemic (O'Brien et al., 2020). Coronavirus, commonly referred to as COVID-19, is a severe acute respiratory disease caused by Corona Virus 2 (SARS-CoV-2). The infection has a very high caseload worldwide (Brindha, Jayaseelan & Kadeswara, 2020). By the middle of July 2021, over 190,000 Kenyans had tested positive, with close to 3,700 succumbing to the virus (Worldometer, 2021).

Indeed, the pandemic has caused an unprecedented disruption, affecting all facets of life (Yum, 2020). Due to various restrictions such as lockdown, curfew and the closing down of institutions like schools and universities, students have resorted to social media as a major means of communication and entertainment as they stay holed up in their homes. Thanks to the pandemic, the recent months have experienced an unmatched surge in the use of social media, more so for commercial and learning purposes (Wamuyu, 2020). Social media platforms, such as video and web conferencing, have become the norm for official interaction both in the corporate and education arena, as people struggle to comply with the health protocols to prevent the spread of COVID-19. Moreover, the pandemic has created a demand for information as students attempt to understand the disease and cope with the accompanying regulations and protocols, such as travel restrictions, curtailed social interactions, sanitation measures, curfew and lockdown.

Previous studies (Abbasi & Liu, 2013; Grabner-Kräuter & Sofie, 2015) show that when users visit a social media site, their first perceptions of the information credibility are highly influenced by the source's trustworthiness. Moreover, a recent study by Limaye, Sauer, Ali, Bernstein, Wahl, Barnhill and Labrique (2020) indicates that expert knowledge on those propagating a particular health message enhances the credibility of the message. Another study by Goodyear, Armour and Wood (2018) focused on the effects of social media on young people's perceptions of health and wellbeing. It concluded that online health-related information is perceived positively by young people. However, while several people depend on social media for information and facts about COVID-19 (Bicen & Cavus, 2010; Brindha et al., 2020; Mourad, Srour, Harmanani, Jenainatiy & Arafeh, 2020), some of this information may not be factual. It might have been filtered, distorted, adulterated or fabricated, thus affecting its credibility. The unbridled use of social media has, to a considerable extent, had a negative effect on its various platforms, with some users branding it a veritable avenue for spreading rumours and unverified information (O'Brien et al., 2020; Pennycook, McPhetres, Zhang, Lu & Rand, 2020), what is being referred as infodemic (Brindha et al., 2020).

This study is anchored on the Elaboration Likelihood Model (ELM), whose seminal authors are Petty and Cacioppo (1986). ELM, a persuasion theory, is used to evaluate social media users' perceptions of information credibility based on the source expertise (Petty & Cacioppo, 1986; Li & Suh, 2015). The theory explains that users requiring high cognitive ability on certain information are likely to evaluate social media content more cautiously (central route). On the other hand, users with a low level of thinking of certain information would make simple interpretations when considering social media's credibility (peripheral route).

While studies have documented the impact of social media on the management of COVID-19 in some regions (Ahmad & Murad, 2020), little has been written on the Kenyan scenario, creating a dearth of knowledge. So far, there is little scholarly evaluation in Kenya of social media users' perception of it as a credible source of information, particularly with respect to the COID-19 pandemic. In view of the above, little evidence exists on the users' perceptions of social media credibility during this pandemic, particularly within the students' communities in tertiary institutions in Kenya. This study has attempted to understand students' use and perceptions of social media as a credible source of information on COVID-19 from the Kenyan perspective by addressing the following research questions:

- Which social media platforms are commonly used by students in tertiary institutions in Kenya to obtain information on COVID 19?
- What perceptions do students in tertiary institutions in Kenya hold about social media as a source of credible information on COVID-19?

Hence, this study sought to establish the use and perceptions of social media among students in tertiary institutions as a credible source of information on COVID-19.

METHOD

Non-probability (purposive and snowball sampling) methods were used in this study. A sample of 250 individuals, comprising students between the ages of 18 and 35 years, was used as the accessible population of students in tertiary institutions in Kenya. It proved difficult to get a larger sample since the tertiary institutions in Kenya were closed down due to the COVID- 19 restriction measures. Getting the students to participate in the study under the COVID-19 restriction was challenging. The study was carried out in Nakuru County, one of the five counties considered as Disease Infected Zone (DIZ) and placed under strict partial lockdown regulations. Firstly, eight individuals from eight different tertiary institutions in Nakuru County were purposively selected. They were then briefed on the intended study. Snowball sampling was also used, where each of the selected students was requested to identify and recommend potential respondents from their institutions that they considered suitable as participants of the study. These individuals formed the study's unit of analysis. However, despite its use, snowball sampling had some drawbacks. This method gave the researcher little control over the

process and would have presented some bias if individuals nominated their friends. Thus, they were instructed to guard against this.

The researcher contacted those referred to ascertain whether they met the above age criteria and were students of the eight selected tertiary institutions. Those selected were asked to give their informed consent to take part in the study and further requested to provide their email address, WhatsApp or Telegram contacts. An online self-administered questionnaire with a 5-point Likert scale created on the Google forms platform was sent through a link to the prospective respondents via email address, WhatsApp or Telegram accounts. However, before the study commenced, a pre-test of the questionnaire was carried out, and necessary amendments were made. Statistical Package for the Social Science (SPSS version 25.0) computer software was used to verify, analyse and generate descriptive statistics from the collected quantitative data.

RESULTS AND DISCUSSIONS

Results

Data analysis and presentation of findings on the use and credibility of information on COVID-19 were guided by the research questions as detailed below.

Quantitative data

The study had a response rate of 75%, as 188 online self-administered questionnaires were completed and returned out of a total of 250, which were electronically dispatched. The key findings of the online self-administered questionnaire are presented and discussed below.

Demographic factors

The findings of the demographic survey show that 56.9% of the respondents were male and 43.1% were female. On the respondents' ages, the findings show that 18.1% were 20 years and below, 67.7% were between 21 and 25 years, 8.5 % were between 26 and 30 years and 3.7% between 31 and 35 years. With regard to education levels, 3.5 % of the respondents had secondary school education waiting to join tertiary institutions, 11.1% were in middle level colleges while 77.7% were undergraduate students, and 5.5 % were undertaking post graduate courses. Overall, the variable gender had a total of 2 unique values, females being more, with a mode of 107. The age category with the highest number was 21-25 with a frequency of 131. The level of education with the highest representation was university undergraduate, with a frequency of 146 as shown in Table 1 below.

Table 1: Descriptive statistics output on demographic information

	Gender	Age	Level of Education
Count	188	188	188
Unique	2	4	4
Top	Female	21-25	University undergraduate
Frequency	107	131	146

Source: Research Data, 2021

Use of social media as a source of information

Out of the 188 respondents, 72.3% (n=136) had experience of five years and above in the use of social media, where they were registered in various social media platforms (see Table 2). Most of the respondents indicated that they were registered in Facebook, Twitter, WhatsApp, Instagram and Telegram. It emerged from the findings that, out of the five platforms for obtaining information, WhatsApp was the most preferred. It is evident that WhatsApp was the most frequently used social media platform with 38.8% (n=73) respondents saying they always used it and 21.8% (n=41) saying they used it very often to obtain information.

The views that most information on COVID-19 is obtained from social media and that the platforms contribute significantly to creating awareness on COVID-19 were strongly supported by most of the respondents (78.2%, n=147 and 90.9%, n=171 respectively). Majority, (72.4%, n=136) were also of the views that social media platforms were widely used for sharing information on COVID-19. Based on the findings, it is justified to deduce that students' frequent online presences affected their perceptions on the need to use social media for obtaining information on COVID-19 as outlined by ELM. As indicated by O'Brien et al. (2020) and Pennycook et al. (2020), unrestricted use of social media to a larger extent, negatively affect users' perceptions due to mass dissemination of information, some of which is not verified.

**Table 2: Descriptive statistics output on social media use**

	Experience in the use of social media	Social media platforms registered in	Preferred social media platform
Count	188	188	188
Unique	3	40	7
Top	5 years and above	Facebook, Twitter, WhatsApp, Instagram, Telegram	WhatsApp
Frequency	136	56	70

Source: Research Data, 2021

Credibility of information on social media

On the question of whether social media had influence on the users, 72.9 % (n=137) of the respondents strongly agreed, as shown in Fig. 1. This indicates that social media is a powerful tool that many students use to disseminate and share COVID-19 information. However, the nature of information being shared is likely to influence users' perceptions on the credibility of this information. On the contrary, a sizable number of the respondents, at 31.4 % (n=59), revealed that they did not consider information on social media regarding COVID-19 accurate, while another 48.4% (n= 91) indicated being neutral on the issue. Thus, non-factual and unverified information posted on social media platforms is likely to affect the users' perception on credibility and erode trust in information on COVID-19. This finding is supported by earlier views (Ahmad & Murad, 2020; O'Brien et al., 2020), that social media platforms play a key role in the dissemination and acquiring of information, hence the need to ensure their integrity.

Fig. 1: Students' perceptions on the influence and accuracy of COVID-19 information on social media
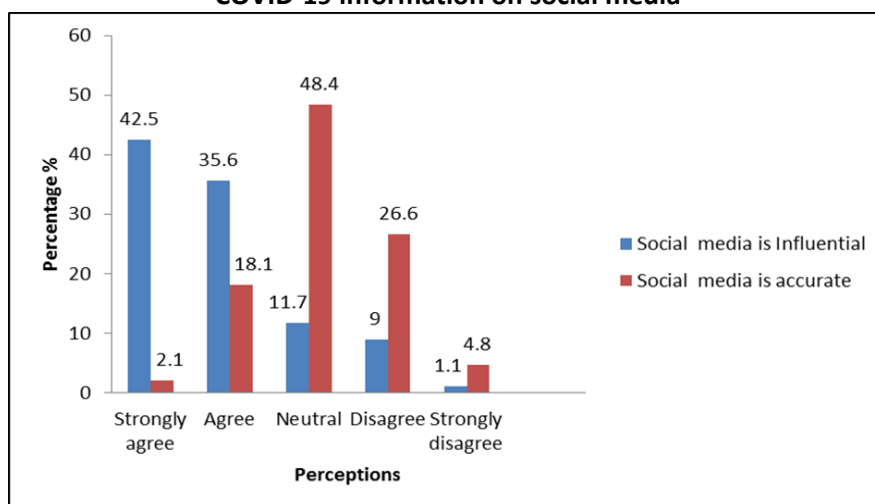
Source: Research Data, 2021

Discussion

This study set out to assess the use of social media among students in tertiary institutions, and their perception of it as a source of information on the COVID-19 pandemic. It revolved around two research questions, namely what social media platforms they use, and whether they consider them as credible sources of information on the COVID-19 pandemic.

The study shows that the majority of the respondents have used social media as a source of information for up to five years, meaning that they started using it before they commenced their tertiary education. This finding is congruent with those of another study (Bicen & Cavus, 2010) on the use of social media by undergraduate students in Nicosia, Cypress, which found that up to 92% of them had used various platforms for over five years, with the remaining years, "less than one year", "one year", "two years" and "three years" equally sharing the remaining eight percent.

Regarding specific platforms, the findings show that most students are registered on Facebook, Twitter, WhatsApp, Instagram. On preferences and use, a large majority of the respondents are using WhatsApp followed by Instagram. This finding is consistent with the study by Mese and Aydin (2019), which ranked WhatsApp as the leading social media platform among university students in terms of preference. Conversely, some studies (Bicen & Cavus, 2010; Mese & Aydin, 2019; Wamuyu, 2020; Wamuyu et al. 2019) posit that Facebook and Google+ are the most widely used social networking sites among students, but this may differ, depending on their interest, purpose, environment and time.

The views that most information on COVID-19 is obtained from social media and that it contributes significantly to creating awareness on COVID-19 were strongly supported by most of the respondents (90.9%). Majority also agreed with the view that social media platforms are usually used for sharing information on COVID-19 (72.4%). This shows that the individuals' actual beliefs on COVID-19 are influenced by the source of information as suggested by ELM. The findings concur with those of an early study (Mourad et al., 2020), that most people depend on social media for information on COVID-19 and that any distortion is likely to seriously affect their perceptions on it credibility as a source of information.

Another salient finding was that social media has a significant influence on users, with a large majority of the respondents (72.9%) strongly agreeing that they are influenced by the different platforms they are subscribed to. This reveals that the use of social media as a useful resource for disseminating and sharing of important information on COVID-19 is influenced by users' preference for its various platforms. The finding support the study by Goodyear, et al. (2018) on the effects of social media on young people's perceptions on health and wellbeing, which concluded that online health-related information, is perceived positively by young people

However, when the study sought to determine whether the use of social media affect the credibility of information, it was found that despite the high use of social media platforms as a source of information, a large majority of the respondents did not consider it trustworthy. A number of them pointed out that they did not consider information regarding COVID-19 on social media accurate and reputable due to source credibility. The fact that many respondents did not consider social media credible as a source of information on COVID-19 can be attributed to their awareness that the bulk of those posting the information lack expert knowledge on the pandemic. This can easily persuade them to disregard factual information and instead propagate the spreading of rumours or giving unrealistic views on covid-19 through the same media. It can be presumed that students' actual beliefs about COVID-19 (accurate or inaccurate) are influenced by the source of information. This finding concurs with a study by Limaye, et al. (2020), that expert knowledge plays a big role in enhancing the credibility of the message when disseminating particular information.

CONCLUSION

Based on its findings, this study concludes that social media plays an important role in the sharing of information on COVID-19 and on other topical issues. Moreover, it is clear that social media is mostly used by the younger generation to seek information on COVID-19; 69.6% (n=131) of the respondents were between the age of 21-25 years. Hence, it can be concluded that students in tertiary institutions in Kenya are likely to search or share information on COVID-19 through social media platforms. However, despite its popularity among them, the students consider information from social media on COVID-19 largely inaccurate and, thus, not credible. Some even believe that information from social media on COVID-19 causes more panic than they quell their anxiety. This panic among receivers of information emanating from social media is likely to cause negative effects in the fight against COVID-19.

In view of its popularity among the students, who form a significant part of Kenya's population, it would be greatly useful if health experts and authorities intensified their use of social media with accurate information on COVID-19. To enhance credibility, such information should bear the mark and brand of known health experts whose opinions are authoritative and authentic.

However, the study had its limitations. A small non-probability sample, which was not representative of the study population, was used making the findings not entirely appropriate for generalisation. It is, therefore, suggested that a larger sample be used in subsequent research to support final conclusions on this important issue. Besides, a comparative study is recommended to evaluate the use of social media versus other traditional media on obtaining information on COVID-19 by different segments of the society.

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