

**WHATSAPP AND HEALTH INFORMATION CONSUMPTION
AMONG RESIDENTS IN OMAGBA COMMUNITY, ONITSHA NORTH
L.G.A. OF ANAMBRA STATE, NIGERIA: USAGE AND
CONSEQUENCES**

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ABSTRACT

This study evaluated the motivation and consequences of shared viral WhatsApp digital messages among health information consumers residents in Omagba Community, Onitsha North L.G.A. Anambra State. Digital experiences in health information consumption of selected WhatsApp users were elicited among a heterogeneous sample. The participants were 13 (7 males and 6 females) whose ages ranged from 23 years to 56 years with a mean age of 34.50yrs and standard deviation of 2.60. The participants were selected through a simple random sampling technique whereby only participants with three or more health-related Whatsapp messages in their mobile phones were selected. Anchored on technological determinism theory which emphasized the dyadic influence of technology and social structures/culture; the study sought among other things the relationship between WhatsApp digital application and health information, the factors associated with health information consumption and behavioural consequences of WhatsApp shared health information. A qualitative design was used in data collection and themes which emerged from the in-depth interview were analyzed. The result indicates that WhatsApp users who receive more online health information are more likely to share the message with their friends and contacts and are willing to practice and experiment with the suggested health tips. The result further indicates that certain health risks and hazards could emanate as a result of this practice including physical injuries, allergies, coma and even death. It is recommended that the Ministry of Health in State and Federal Government should create enabling online media laws to protect the spread of unevaluated viral health messages which can be a weapon of mass destruction if the information which is propagated lacks health merit. There is a need also for future studies to look at other aspects of the problem.

Keywords: Digital media, health information, social media, viral online messages, WhatsApp application.

1.0 INTRODUCTION

Several advancements recorded in Information Communication Technology (ICT) ensured that human communication reached its golden era in the 20th century. ICT is perhaps the greatest human invention with the greatest influence on the remote lives of the people. The various social media platforms have remained the truest ICT invention owing to its power to influence the members of the platform on and offline. The deployment of Web 2.0 popularly called Social Media Networks would have been elusive if not for the availability and affordability of mobile telephone in form of smartphone and other devices which may be interchangeably used as connecting devices to the internet. As much as it has propelled development and easy lifestyle, Lanre-Babalola (2018) contends that smartphone evolution courtesy of the Android open market launch in 2004, has forever opened uncontrollable aspects of human behaviour which may be injurious to life, survival and adaptability. This is because of the (smart phone's) ability to perform certain functions which greatly influences human behaviour such as texting, audio, and video, media sharing and conferencing tools.

In Nigeria, like in most other African countries, mobile telephony comes with a lot of enthusiasm and fantasy especially with the freedom it offers for opening the world at the palm of the user. This endless ability has necessarily enthralled its users to a captivity level. There are various search engines such as Google, 4shared, Ask.com which provide information virtually on anything a person might be searching for whether or not the answers are correct. However, the interest of this current examination is focused on shared messages on the social media hub. Most social media networks such as Facebook, Twitter, WhatsApp, Instagram, Badoo, LinkedIn, Wechat, etc. are free to subscribe and connect to friends and foes all over the world with the pressing of a few buttons. The ease of connection and the population of subscribers is what many advertisers have capitalized on to unleash their online media channels from where they share varying degrees of messages in form of texts, audio admonitions, video persuasions and other media files to the unsuspecting public (Ifeakandu, 2013).

The extent to which the social media features have been deployed have become worrisome as charlatans and unscrupulous elements have hidden under its attractive features to wreak havoc on unsuspecting users by disseminating inappropriate and incorrect information which can negatively impact the lives of users. Most of these messages may be shared in form of health tips, health-line advice, health product advertisement, and admonitions on obnoxious healthy living practices (Olubunmi, Fadeke,&Osore, 2017) and sexual health (Oladeji&Ayangunna, 2017).

It should be considered that in Nigeria like most third world countries, problems of finance, illiteracy and culture prevent most people from seeking real preventive health measures and practices. A greater percentage of the people only attend to their health when they are sick or at least when there is a visible health deterioration. This is considered a harmful practice and one that exposes people to greater health risks and vulnerabilities. The interest of the current study lies in the vulnerabilities which come with social media popularity and Internet's anonymity.

These enumerated features have forever changed the communication system, channels and speed of information dissemination but not without disadvantages. Furthermore, the speed of dissemination has more than quadrupled making it much easier to share millions of texts, audio, video streams and media to be exchanged in a matter of seconds. This ability is what Eleuteri, Saladino, & Verrastro, (2017) contend as the quality or feature which allows social media to be abused especially among unsuspecting users online and offline. The current situation is the reason for the researcher's concern towards the health implications of social media use especially regarding its anonymity and also how this problem may be understood by stakeholders. Considering that more Nigerians can now afford a Smartphone due to the current affordability of Android version smartphones (Eleuteri, Saladino, & Verrastro, 2017; Mangwere, Wadesango, & Kurebwa, 2017) owing to the high penetration depth of Internet-enabled mobile devices with Nigeria as a leader in Africa, the dangers of unguarded and incorrect health information disseminated on the social media platforms have become more worrisome to stakeholders. Hence, this study originated the need to provide leading empiricism into the patterns and dangers of this social media vulnerable behaviour on health.

2.0 REVIEW OF LITERATURE:

2.1 Internet and Social media Use in Nigeria

Wusu's (2011) and USAID's (2010) statistical data points out that Nigerians are the highest users of mobile technology and mobile social networking on the continent' compared to other countries such as South Africa, Egypt, Kenya, Cameroon, Ethiopia, Namibia, Tanzania, Uganda and Zambia. The comparative data from the Nigerian Communication Commission (2012) equally affirmed this statistic. Bleakley, Hennessy and Fishbein (2008) asserted that young people, especially students acquire technological skills more rapidly than adults, leading to high daily use of information and communication technologies (ICTs); its implication affects the generality of the users. In Nigeria, like most other African countries, mobile telephony comes with many enthusiasms and fantasies, especially with the freedom and anonymity it offers for opening the world to the palm of the user. This endless ability has necessarily enthralled its users to a captivity level with varying levels of risks and vulnerabilities. There are various search engines such as Goggle, 4shared, Ask.com which provide information virtually on anything but the focus is on the social media platforms such as Facebook, Whatsapp, Instagram, Badoo etc.

The general public has a usual reluctance towards preventive health routines which involve general check-up and precautionary health routines usually due to finance-related problems and illiteracy. The circumstance has made cheap and affordable health information most attractive especially one that guarantees anonymity like the internet or social media platforms. Janssen and Davis (2009) and Sorenson and Brown (2007) contended that the current unregulated patterns of online health diagnosis and prescription has made health information seeking most dangerous. This has gained a lot of popularity because; its anonymity is the users' appeal. This anonymity is the bane for associated vulnerability to practising health tips suggested through any of the social media platforms.

2.2 WhatsApp, Social Media Use and Health Information Seeking Behavior

Health information-seeking through WhatsApp, a social media platform like other platforms, has a number of advantages and disadvantages owing to its vulnerabilities such as the unverifiable nature of the information and its commercial interests. For example, Yi (2018) examined sexual health information-seeking behaviour on a social media site as predictors of best answer selection. The paper aimed to identify sexual health information needs and the cognitive and affective factors correlated with the best answer chosen by social Q&A users on social media. The study illuminates the roles of social Q&A as a unique platform to discuss sensitive health topics due to the fact that consumers use such social media sites as critical complementary health information sources. The finding is indicative that if health information providers develop information with the factors that the study suggests, not only will it be more adopted by consumers, but it will also ameliorate the quality concerns about online health information.

Bhaskaran, Kumar, and Janodia (2017) confirmed in their study that the use of social media (SM) for seeking health-related information as an exploratory study through its beneficiaries has to be carefully calibrated when used for sharing health information. Their result is indicative that the majority of users who are at least bachelor's degree qualification holders within the ages of 18-27 years prefer WhatsApp social media followed by Facebook for health information. The information searched on SM includes disease and related information, and information on medicines. Furthermore, 35% of respondents trust that health information while 32% do not trust the information and 33% were undecided regarding the trust of that online health information. However, the respondents stated that health information available through social media should have various controls as they are afraid to use them because of the unknown consequences.

Also, Zhao and Zhang (2017) did a study on consumer health information seeking in social media with the aim of identifying how consumers seek health-related information from social media especially WhatsApp. The findings revealed that between 2011 and 2016, twenty-one studies published explored various topics related to consumer information seeking in social media which confirmed that consumers' information needs vary, depending on the health issues of interest. According to Zhao and Zhang, the benefits of health-seeking on social media, in addition to filling a need for health information, include the social and emotional support health consumers' gain from peer-to-peer interactions. These benefits, however, are tempered by concerns of information quality and authority and lead to decreased consumer engagement in health-seeking.

Furthermore, Kim and Jung (2017) correlated the associations between media use and health information-seeking behaviour on vaccinations in South Korea. Their study relied on a national survey of Korean adults (n = 1367). Participants were adult males and females aged 20 and older. Web and face-to-face surveys were conducted. The finding indicated that accessible information such as social media and the internet about emerging infectious diseases, listening to the radio, and reading the newspaper were associated with increased odds of being vaccinated. Active seeking health information as well as being female and of higher socioeconomic status was positively correlated with Korean adults being vaccinated. Although vaccinations are critical for preventing emerging infectious diseases, scant research has been conducted on risk communication.

Also, Shaw and Johnson (2011) also examined health information seeking and social media use on the internet among people with diabetes. The study identified that the majority of participants used the Internet to search for health information. There was no significant correlation between searching health information online and race ($df = 1, r = .2, p > .1$). This indicates that health information seeking online was sought equally among participants regardless of race. Of the participants ($n=8$) who do not seek health information online, half ($n=4$) indicated they are not comfortable seeking health information online. Among the participants that seek health information online, 36 (78.5%) indicated that the health information they found online has changed the way they think about health. A variety of diabetes-related information was sought online. Many participants reported using popular online social networking sites such as MySpace or Facebook, accessing them frequently two or more times per week. There was a non-significant correlation between using a popular online social networking site and race ($df = 1, r = -.13, p > .1$). This indicates that popular online social networking sites were used regardless of race. The majority of participants read online blogs.

2.3 Gap/Originality

The proliferation of mobile devices in all forms, sizes and shapes has increased health information seeking on the internet and social media platforms with potential risks. Many studies x-rayed these risks in view of the advantages and disadvantages of health information seeking on the internet. However, there is a need to find out from the social media users if there are experiences that they have had regarding online health information seeking which potentially put them at health risks or affected them adversely. This is with the view of ascertaining real dangers which may be associated with online health information seeking on social media platforms.

3.0 THEORETICAL FRAMEWORK

3.1 Technological Determinism Theory

Many assumptions have been proven on how technology influences human lives and vice-versa. The case of online health-seeking behaviour is exemplary of the proponents of technological determinism which is based on the assumption that society's technology drives the development of its social structure from its cultural values. With regard to online health information seeking, the behaviour may be understood in a dual direction: the merchants of the health information and the consumers of online health information. The merchants may be driven by the need to take advantage of the large audience provided by social media platforms for product promotions whereas the consumers of online health information may be taking advantages of anonymity provided by the social media platforms to seek health information they may be uncomfortable with seeking through the regular channels (hospitals, clinics and health visitations). These instances are indications of technological influence on human behaviours. This is in line with Veblen (1857–1929) emphasized with the Marxist principles that specifically, productive technology has the primary influence on human social relations and organizational structure, and that social relations and cultural practices ultimately revolve around the technological and economic base of a given society. The instance of merchants and consumers of online health information is amply explained by

technological determinism theory and hence provides an understanding of how the risks associated with online health information seeking emanates. The reality of this is that it has shaped the way we live as proposed by technological determinism theory.

Based on the above theoretical underpinning, the current study is interested in finding answers to the following questions:

- i. Do participants seek or share online health information on WhatsApp social media platform?
- ii. What are the likely uses of WhatsApp health information received by WhatsApp?
- iii. What risks do the experiences of WhatsApp users who seek online health or expose them to?

3.2 Method

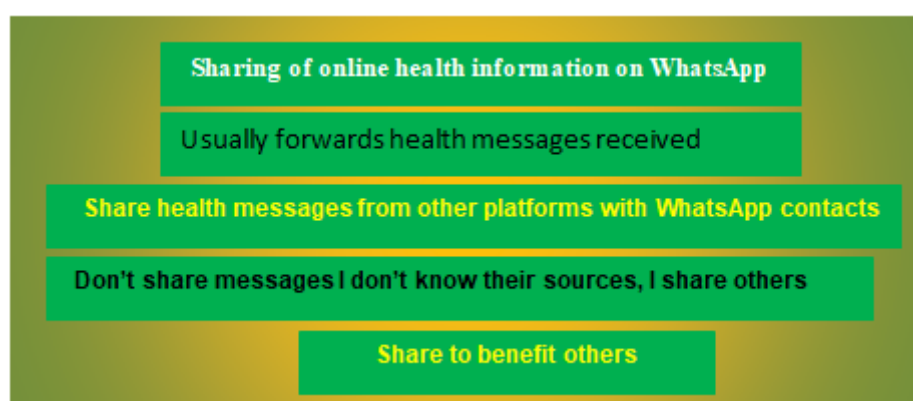
Thirteen (13) adult participants whose ages ranged from 23 to 54 years with a mean age of 34.50 and standard deviation of 2.60 were drawn from the researchers' contact list as a representative sample of the population of users who receive or consume health information on social media using judgmental sample technique. Criteria of selection are having at least three (3) health information messages (text, audio or video) in the participants WhatsApp messenger. The design for the study is qualitative using in-depth interview whereas thematic analysis was utilized as appropriate statistics for analysis. The area of study was the Omagba community in Onitsha North Local Government Area of Anambra State, Nigeria.

3.3 Result

After analysis of the qualitative data, the salient themes emerged which will aid the qualitative analysis of the findings.

Q1: Do participants seek or share online health information on WhatsApp social media platform?

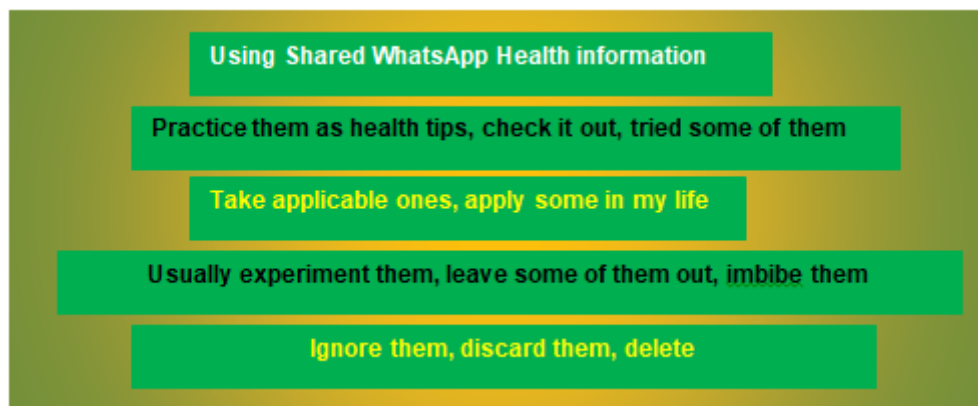
Figure 1: Themes extracted from the 13 interviewees on research Q1



From the developed themes as could be seen in Figure 1, a greater percentage of the participants opined during the IDI that usually they forward and share health messages they receive on their WhatsApp social media with their friends and contacts for their consumption. However, there were a few who opined that sometimes they delete information which they do not know and trust the source and share only ones they have confidence in.

Q2: What are the likely uses of WhatsApp health information received by WhatsApp?

Figure 2: Themes extracted from the 13 interviewees on research Q2



The responses as highlighted in the themes in Figure 2 confirm that WhatsApp users make use of health information they receive by practising the health tips suggested in the information, by checking them out, trying the workability of some of them, applying some of them to their lives, experiment with the information and imbibing the teachings or admonitions of the information. A few users, however, opined that they would ignore, discard and delete such messages.

Q3: What risks do the experiences of WhatsApp users who seek online health or exposed them to?

Figure 3: Themes extracted from the 13 interviewees on research Q3



Furthermore, the response of the participant during IDI indicated that WhatsApp users are aware that there are dangers that may be associated with WhatsApp shared health information. Some of the highlighted dangers they opined are: health complications, illness aggravation due to the practice of WhatsApp shared health information, poor recovery to an existing illness, serious internal injuries such as internal bleeding, poisoning, developing allergies, and system inhibition. Other participants also contended that using some health information shared on the WhatsApp platform could lead to physical injuries, various forms of unconsciousness such as fainting and coma and can even cause the death of the user. It could also lead to drug abuse, drug dependence and various types of pain and harm.

4.0 DISCUSSION

The proliferation of mobile phones and devices has increased online activities including health information seeking to the advantage and disadvantage of the users. The current unregulated patterns of online health information have made health information seeking particularly dangerous (Janssen and Davis, 2009). This has become worrisome especially with WhatsApp users considering the social media app is free, friendly to use and has a large population of users which enable it to share messages almost at viral speed.

For the first research question, the interviewees were asked whether they seek or share online health information on WhatsApp social media platform and responses analyzed from their depositions during the interview indicated that a greater percentage of the users usually forward and share health messages they receive on their WhatsApp social media with their friends and contacts for their consumption although a few of the interviewees opined that sometimes they delete information which they do not know and trust the source. Their responses buttress the dangers which necessitated the current study and further confirmed the fears expressed in Yi's (2018) study which stated that health information providers develop health information with the factors that the study suggests, that make it be more adopted by consumers which raise health quality concerns about online health information. The quality concern can be very injurious to health and has raised several questions regarding the authenticity of such shared online health information on WhatsApp. Bhaskaran, Kumar, and Janodia (2017) also confirmed that the fear is real in their study which found that a greater percentage of users do not trust the wholesomeness of the online shared health information with a greater number being undecided on the genuineness of the online shared health information. The behaviors of the users could be seen to be patterned and influenced by the availability of technology which influences human behavior as postulated by technology determinism theory.

Also, when the interviewees were asked about their likely uses of WhatsApp health information received by WhatsApp in the second research question; they opined that they are more likely to practice; checking out, apply experiment and imbibing the teachings or admonitions of the shared health tips suggested in the information although a few number of users, however, opined that they would ignore, discard and deleted such messages. Their willingness to use the shared information in any capacity without authenticating their sources and genuineness is the biggest threat to health and life and significantly impacts the users most negatively. The current study has assumed that with a greater number of WhatsApp users being tempted to use the usually tailored health information messages shared on the

WhatsApp platform, the dangers of self-medication and treatment will increase with lots of health challenges and implications. The finding is also considered potent in the view of the empirical support evident in the study conducted by Zhao and Zhang (2017) on consumer health information seeking in social media which found that between 2011 and 2016, twenty-one studies published explored various topics related to consumer health information seeking in social media with the benefits of health-seeking on social media, although, these studies equally buttressed that these benefits are tempered by concerns of information quality and authority and lead to decreased consumer engagement in health-seeking.

Furthermore, the opinion of the interviewees on the third research question revealed the critical consequences which may emanate from the uses of WhatsApp health information messages. Some of the dangers as highlighted by the interviewees include health complications, illness aggravation to reactions, poor recovery to an existing illness, serious internal injuries such as internal bleeding, poisoning, developing allergies, and system inhibition. It could also lead to drug abuse, drug dependence and various types of pain and harm. There could also be the dangers of physical injuries, varying forms of unconsciousness such as fainting and coma and can even cause the death of the user. Their opinion was supported in the studies of Yi (2018) which found that health information providers develop information with the factors that will be more adopted by consumers which do not put into consideration the health history of the users and thus raised safety and quality concerns about online health information. These concerns may result in critically severe health problems and challenges such as the one enumerated above.

4.1 Implications of the Study

The findings of this study implicated a number of things but critically self-medication by the users was implicated. The possibility of receiving shared online health information on WhatsApp messenger with unknown authors and authority increases the temptation of self-medication especially if the shared message is indicative of health tips. Again, the possibility that these shared health information messages will be experimented with and practised further puts the users at extreme risk considering that if the health information lacks merit, adverse health complications could arise to the detriment of the users. The finding of the current study also implicates the theoretical framework as a significant way because there is a noticeable relationship between the use of technology and human behavior in which the availability of technology tends to influence the society health information seeking with associated vulnerabilities, risks, and health hazards.

4.2 Limitations of the Study

There is a lack of psychometric measurement to actually determine the prevalence and usage of WhatsApp for health information seeking and sharing. Consequently, the study relied on qualitative data to ascertain this behavior on the social media platform. There is the fear that the interviewees may have been inhibited in providing honest answers to the questions asked due to social pressures. However, the study relied on the understanding that the participants understood that their answers won't be analyzed for any other thing other than scientific inquiry and thus, the opinions they provided were deemed correct to the experiences they have had.

4.3 Recommendation

In view of the findings of the study stated above, the following recommendations seem appropriate:

- There is a need for the government to regulate social media and prosecute offenders who share proven harmful information. This will deter others from merchandising tailored messages which users may become vulnerable to practicing.
- Owners of most social media networking sites such WhatsApp ought to devise a means to bar people who abuse the platform and also create means of authenticating messages online.

4.4 Future Study

Future studies should look at which type of health information do social media users usually seek and the motives of seeking such information online. Also, a comparative study is also required between social media users and non-social media users on self-medication and self-diagnosis and administration of treatment among the groups.

5.0 CONCLUSION

This study examined the WhatsApp and health information consumption among residents in Omagba Community: usage and consequences in view of growing availability of smartphones and devices and increased health information seeking among the adult populace. Anchored on Technology determinism theory, the study assumed that the presence of technology informing mobile smartphones and devices may be changing the health information-seeking behavior and critically represent a concern to health practitioners in view of the dangers posed by the behavior. Consequently, using a qualitative design, the study evaluated the opinion of 13 adult WhatsApp users during an in-depth interview on critical issues regarding health information sharing and behavior regarding the antecedents. Qualitative data analyzed indicated that most WhatsApp users are likely to share the message with their friends and contacts and will be willing to practice and experiment with the suggested health tips. The interviewees also identified certain health challenges which could emerge as a result of the practice including physical injuries, allergies, coma and even death. Recommendations were given as well as the need for future studies to look at other aspects of the problem.

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