Access to and Impact of Social Media's Maternal Healthcare Information on knowledge and Attitude of Nursing Female Technologists in UNILORIN

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Ghaniyah O. Aderinoye[1], Adesina Lukuman Azeez[1], Tajudeen Olanrewaju Yusuf[1], & Ofem Kebesobase Ibiang[1]

Abstract
This study describes access to and impact of social media's maternal healthcare information on knowledge and attitude of nursing female technologists in University of Ilorin. It investigated the extent to which the female nursing technologists at the University of Ilorin accessed healthcare information from social media and the impact of the accessed information on their knowledge and attitude about childcare and maternal healthcare. The study used survey and in-depth interview to generate data. Through purposive sampling technique, it drew a sample size of fifteen (15) informants from a total population of 55 comprising of nursing female technologists in UNILORIN as sourced from the university Human Resource Unit in 2020. The result indicates that there is a heavy dependence on online healthcare information by nursing female Technologists in UNILORIN. Informants rely more on social media information to broaden their knowledge on childcare. The information they accessed from social media determines the level of their knowledge about maternal healthcare as well as their attitude to childcare and rearing. This study recommends that women should keep seeking for knowledge about basic healthcare. The study also advocates for social media literacy, which will assist social media audience to selectively access and use only information that is beneficial to them.

Keywords: Access, Impact, Knowledge, Attitude, Social Media, Maternal, Healthcare

Introduction

Good health for women and children is a fundamental human right that leads to longer and more fulfilled lives, thus allowing the opportunity to attain meaningful development in life (WHO, 2017). Since the 1990's, Nigeria has made significant progress at reducing maternal and child mortality. According to the Society for Family Health (2019), Nigeria's maternal mortality ratio dropped from 1,200 deaths in 1990 to 540 deaths per 100,000 live births in 2013. Similarly, under 5 mortality ratio trickles down from 191 deaths in 1990 to 94 deaths per 1,000 live births in 2012. Nonetheless, Nigeria still occupies the unenviable position of a leading contributor to the regional and global burden of women and children's death.

Undoubtedly, the past two decades has profiled a tremendous reduction in maternal and child deaths (UNICEF, 2010). Although progress has often been slow among those living in extreme poverty, leading to marginalization of communities in dire need of medical aids, suffice to say that uneven distribution of quality healthcare is a violation of the rights and dignity of the citizenry. This, to a large extent, worsens the health conditions for women and children as well as retarding progress to ending preventable deaths by 2030, as envisioned by the (Every Woman Every Child 2015).

Therefore, to mitigate preventable maternal, newborn deaths and stillbirths, Nigeria is launching a Network for improving quality of care for maternal, newborn and child health (Quality of Care Network, 2019). Good health should be the

[1] Department of Mass Communication, Faculty of Communication and Information Sciences, University of Ilorin,Ilorin, Nigeria
Corresponding Author's email: laideola04@gmail.com

business of all governments, social institutions as well as individuals in every country of the world, whose members' productive, reproductive usefulness and responsibilities are tied to them as they look up to them for social support and wellness (Odesanya, Hassan & Olaluwoye, 2015). The World Health Organisation (2017) defines health to mean a state of complete physical, mental, and social well-being and not merely the absence of illness in humans. It is, therefore, right to state that improving the well-being of mothers, infants, and children is an important public health goal. Mothers' knowledge of child health is associated with their children's well-being, and depends on their educational level and social support networks (Society for Family Health, 2019). Caldwell (2011) opined that there are causal mechanisms, through which maternal education may affect child survival. Caldwell focused on two main mechanisms: (1) education improves child health by promoting the use of modern health services; and (2) education results to a wide range of behaviours that play a role in improving child health. Probably, maternal education can improve child health and reduce infant mortality through various ways like women empowerment, enhanced use of modern healthcare services, small family size, better health knowledge, and increased family income.

Explicitly, the advent of social media networks such Facebook, Google, Instagram, WhatsApp, Twitter, Youtube, etc., has united the world to a global village. Technological advancement has made it easy for people of all races, irrespective of geographical locations, to find common grounds of meeting their psychological and other health-related needs. So, there is a proliferation of online health information seeking centers where people can build contacts and get their information they desire at any given time. Boulous (2012) noted that having an efficient online social presence is a primary channel for connections between patients and providers. Boulous observed that it is the major avenue for the newly empowered healthcare consumer to discover and act upon authoritative information. The scholar further opined that social media do not only create patient connections. It also engages a targeted audience and grows relationships while also speaking to individuals with common healthcare interests and issues, by providing awareness and education about specialty and experience (Boulous, 2012). Fayoyin (2016) supported the above assertions that innovations in digital media and communication technology have improved the role of social media in achieving developmental and public health goals in the world over.

In the same token, Technology and Innovation Report (2018) opined that supply of skills to rapidly technological evolvement needs is critical. It further asserts that there are signs that education institutions are not keeping pace with technological advances, giving rise to skills shortages, especially in digital technologies. Curricula need to be adapted to emphasize the skills, also need to change to reorient education towards more practical approaches to entrench skill development for technological competencies (Technology and Innovation Report 2018).

Most importantly, the choice to study nursing female technologists in University of Ilorin was informed by their technological inclination, by virtue of their profession which exposes them to digital technologies unlike non-technologist nursing mothers who are basically theoretically inclined, as supported by (Technology and Innovation Report 2018). As such, it is perceived that their technological know-how would provide them the leeway to frequently use social media in seeking maternal and healthcare information.

In spite of the perceived use of social media by the female technologists, much is not known about the impact of the information they access from social media on their attitude and knowledge about childcare and maternal healthcare. Hence, this study investigated access to and impact of maternal healthcare information through social media on knowledge and attitude of nursing female technologists in Unilorin, with a view to addressing the specific objectives of this study which are to:

(i) Examine social media platforms being frequently used by nursing female technologists in Unilorin;
(ii) Investigate common themes of social media messages on maternal and child health;
(iii) Examine impact of social media information on knowledge, attitude and

practices of nursing female technologists in relation to childcare; and

(iv) Determine the efficacy of social media as a means of acquiring healthcare knowledge.

Maternal Healthcare

Maternal healthcare is the health service provided to mothers and women in their child bearing age (WHO 2017). The targets for maternal health are women in their reproductive age. All over the world, especially in the developing countries, there is an increasing concern in maternal health care. World Health Organisation (2016) has it that a person's health at each stage of life affects health at other stages and also can have cumulative effects for the next generation. Women who remain healthy during pregnancy and after birth are more likely to stay healthy later in life and have better birth outcomes, influencing infancy, childhood and adulthood (WHO, 2017). Therefore, the health and well-being of women is essential to the achievement of Sustainable Development Goals (SDGs).

More importantly, as SDGs begin to guide the global development agenda, maternal health remains an area for urgent policy and attention in Nigeria. Nearly one in every four women in sub-Saharan Africa is a Nigerian and the plight of women in Nigeria will vastly impinge on the achievement of the SDGs in the region (Izugbara, Wekesah, & Adedini, 2016). Investing intentionally and purposefully in safeguarding maternal health in the country is a sure strategy for improving on the current levels of progress and guaranteeing the future potential for growth and advancement in Africa as a whole (Izugbara, & Krassen, 2014).

While the key to ensuring quality of maternal care is an organization's perspective on the provision of care and the conscious and continuous improvement of service delivery. Persistent socio-economic crises have resulted in misplaced priorities, inefficiencies, and a moribund health sector in Nigeria (WHO, 2017). The dismal national maternal health indicators are the clearest expression of the health crisis in Nigeria (Kothari, & Garg, 2019). Currently, Nigeria ranks among the bottom five out of 191 countries with the poorest-performing health service delivery systems globally (Kothari, & Garg, 2019). While sub-Saharan Africa's maternal mortality ratio of 510 per 100,000 births is more than twice the global average, the ratio in Nigeria is 560 (National Population Commission, 2014), which makes the country the second largest contributor to maternal mortality worldwide.

Between 1990 and 2010, Africa has reduced maternal deaths by 41 per cent. Over the same period, it has also reduced under-five mortality by 33 per cent (UNFPA, 2013). Despite progress made, 57 per cent of all maternal deaths occur on the continent, giving Africa the highest maternal mortality ratio in the world. While the lifetime risk of dying from pregnancy-related complications is 1 in 4,700 in industrialized world, the lifetime risk of an African woman dying from pregnancy related complications is 1 in 16, the largest difference between poor and rich countries of any health indicator (UNICEF, 2015). This disparity is reflected in a number of global resolutions. In September 2001, 147 Heads of State collectively endorsed Millennium Development Goals 4 and 5 to reduce child mortality rate by 2/3 and maternal mortality ratio by 3/4 between 1990 and 2015. Strongly linked to these is Goal 6, which is to halt or begin to reverse the spread of HIV/AIDS, malaria and other diseases. Over the years, studies have shown that the direct causes of maternal deaths are hemorrhage, infection, obstructed labour, hypertensive disorders in pregnancy, and complications of unsafe abortion (WHO, 2016). There are birth-related disabilities that affect many more women and go untreated like injuries to pelvic muscles, organs or the spinal cord. At least 20% of the burden of disease in children below the age of 5 is related to poor maternal health and nutrition, as well as quality of care at delivery and during the newborn period (WHO, 2016). And yearly, 8 million babies die before or during delivery or in the first week of life (UNICEF, 2017). Another risk to expectant women is malaria. It can lead to anemia, which increases the risk for maternal and infant mortality and developmental problems for babies. Nutritional deficiencies contribute to low birth weight and birth defects as well. HIV infection is an increasing threat. According to UNICEF (2017) mother-to-child transmission of HIV in low-resource settings is exponentially growing, or has stabilised at very

high levels, thereby posing a major problem, with up to 45 per cent of HIV-infected mothers transmitting infection to their children. Furthermore, HIV is becoming a major cause of maternal mortality in highly affected countries in Sub-Sahara Africa.

In Nigeria, maternal mortality rate remains high, the North contributing the greatest share (Nigeria Demographic and Health Survey 2013). Specifically, the Survey further revealed that, some Northern States like Kano in 2008 had maternal mortality rate of 576 deaths per 100,000 live births, while 814 deaths per 100,000 live births were reported in Zamfara State. A majority of these deaths and disabilities are preventable, being mainly due to insufficient care during pregnancy and delivery. About 15 per cent of pregnancies and childbirths need emergency obstetric care because of complications that are difficult to predict.

Child Healthcare

This is the medical services that are provided by the health professionals to children having diseases or infections (UNICEF, 2010). Since 1990, the global under-five mortality rate has fallen by one third, yet Africa continues to suffer from the highest rates of child mortality, with one in eight children dying before the age of five — nearly 20 times the average of 1 in 167 for more developed regions (UNICEF 2010). An estimated 30 percent of these under-five deaths occur among newborns, and some 60 percent occur within the first year of life (UNICEF, 2010). In the world over, especially in the developing countries, there is an increasing concern in maternal and child health care. Newborn deaths are often linked to mothers' health conditions. The death of a mother substantially increases the likelihood of newborn death of over 3 million babies each year (WHO, 2012), with 99 per cent in developing countries. In 2011, about 6.9 million children died before reaching their fifth birthday-a significant decline from 12 million in 1990 (UNICEF, 2012). About 40 per cent of all under-five deaths are neonatal, occurring during the first 28 days of life.

Social Media and Maternal Healthcare

The ability to access and disseminate information through digital communication networks such as Facebook, Instagram, Twitter, WhatsApp Google, and Youtube, is drastically changing societal activities, including national politics and election campaigns (Gruzd & Roy, 2014), local politics and activism (Biondo, 2013), and accountability (Sagar, 2013). Within the health domain, there is a potential for interaction through digital social networks to enable individuals to interact with others who have similar concerns about health risks or where healthcare is wanting. Notably, digital communication is changing how people access and receive information about healthcare (Eysenbach, Powell, Englesakis, Rizo, & Stern, 2004); how they share healthcare data including personal experience (Ziebland & Wyke, 2012), and how they collate and interpret these data (Griffiths et al., 2012). Over time, there have been instances of social media being used as part of media campaigns for specific treatments to be made available (Pullman, Zarzeczny, & Picard, 2013). People living with chronic illness often become expert at managing their own condition, but not always in the way health professionals expect (Greenhalgh, 2009). Engaging with health-related digital social networks is one route for gaining this 'expertise'. Although misinformation about health can spread through such networks (Scanfeld, Scanfeld, & Larson, 2010), there is evidence that this is rapidly corrected by participants in the network (Ancker et al., 2009; Armstrong & Powell, 2009; Esquivel, Meric-Bernstam, & Bernstam, 2006).

Interaction through social media networks can lead to the identification of problems related to maternal health that the professionals have not yet thought about, and to the contestation of prevailing ideas about healthcare. It is argued that although social media networked groups, such as mothers of young children and people with rare diseases, are becoming powerful special interest lobby groups, this phenomenon is not replicated across all health issues, population groups, and contexts (Griffiths et al., 2012). Also, access to social media may improve access and fairness to maternal and healthcare information and services in the remote areas of the world (Ferguson, 2013).

In a bid to keep the global public abreast of the outbreak of diseases and disaster, World Health Organization (WHO) utilizes social media as a source to spread and increase awareness about maternal and healthcare information (McNab

2009). McNab further opined that WHO has its own page on Facebook and Twitter as well as significantly utilizing YouTube in making sure mothers who are technologically inclined access this information. According to CNN News, global report of 2020 on the Covid19 pandemic, WHO used Twitter and Facebook to disseminate health information and other precautionary measures that can help flatten the curve of the spread of the dreaded virus between mother-child and among others, thereby portraying the power of social media and its instantaneous outreach messages

Theoretical focus: Connectivism and Social Learning Theories

The Connectivism is a new theory of learning for the digital ages coined by George Siemens (2005) that integrates principles of different theories such as chaos, network, complexity and self-organization. It is a learning theory that recognizes the evolution of ever-changing learning networks, their complexity, and the role that technology plays in learning networks through facilitation of existing learning networks and creation of new learning networks. The connectivism theory can be linked to the social learning theory or observational learning as theorized by Albert Bandura. The connectivism principles as Siemens (2005) pointed out, are: learning and knowledge rests in diversity of opinions; which is the process of connecting specialized nodes or information sources; learning may reside in non-human appliances; capacity to know more is more critical than what is currently known; nurturing and maintaining connections is needed to facilitate continual learning; ability to see connections between fields, ideas and concepts is a core skill; currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities; and decision making is itself a learning process. Social Learning Theory on the other hand, is concerned with learning process and social behaviour which proposes that new behaviours can be acquired by observing and imitating others (Bandura, 1971). While the connectivism theory sets out to explain how Internet technologies have created new opportunities for people to learn and share information across the web, the social learning theory explains how people learn new behaviours from others. Connectivism is a new learning theory that claims individual's knowledge is distributed and resides not only in their brain, but also in connections with electronic and human components which the learner has developed in the course of his learning. For social learning theory, learning is a cognitive process that takes place in a social context and can occur purely through observation or direct instruction, even in the absence of motor reproduction or direct reinforcement (Bandura, 1971).

Explicitly, social learning theory talks about the reciprocal relationship between social characteristics of the environment, how they are perceived by individuals, and how motivated and able a person is to reproduce behaviours they see happening around them (Edinyang, 2016). The scholar further opined that this theory is based on the idea that we learn from our interactions with others in a social context. According to connectivism perspective, meaningful learning is a process that requires a network environment that is open to interactions at varying levels of intensity. The theory provides ways to understand and explore learning in the networked digital age (Siemens, 2005). Learning happens in many different ways: courses, email, communities, conversations, web search, email lists, reading blogs, etc., (Kaplan, & Haenlein 2010). Connectivism theory employs a network with nodes and connections as a central metaphor for learning. In this metaphor, a node may be any entity, whether tangible or intangible, that is able to be connected to other nodes, including but not limited to information, data, feelings, and images. Learning is seen as the process of creating connections between nodes to form a network (Kotenko, 2013). Connectivism states that knowledge is: **a**. Fluid; **b**. does not exist in isolation; **c**. exists not with an individual, but with groups; **d**. consists of connections among people and things; **e**. must have “real world” applications; **f**. affected by cultural bias, personal experiences, and prior knowledge; **g**. can, in conjunction with truth, only exist with agreement by the participants in a group (Siemens, 2005). New information is continually being acquired; the ability to draw distinctions between important and unimportant information is vital; the ability to recognize when new information alters the learning landscape based on decisions made before is also critical

(Oyman, & Nazife, 2012). These theories are relevant to this study because social media is an online learning environment, where women go to seek health information, for themselves and for their children. As connectivism is to learning which takes place via building online connections between people, so do social media act as a bridge between health practitioners and women who go online seeking health information.

More so, social learning theory on the other hand, profiles the reciprocal relationship between social characteristics of the environment and allow for persons to adopt new behaviours practiced by others, as far as they observe and reproduce those behaviours and individually practice them, especially if their observational experiences are positive ones, or include rewards related to the observed behaviour. Relatively, the nursing female technologists in Unilorin in a bid to access maternal and healthcare information on social media, could benefit from experiences and other interactions from experts and peers to learn new ways of improving on their health and that of their children.

From the foregoing, it can be deduced that the choice of nursing female technologists in respect of what to learn on social media regarding health information, could be viewed from the lens of shifting grounds. This implies that, while there is a right answer today regarding information on health, it does not mean it will be right answer tomorrow, due to the constant paradigm shift on health information climate.

Methodology

The study adopted qualitative design to investigate access to and impact of social media's maternal healthcare information on knowledge and attitude of nursing female technologists in Unilorin. Qualitative research method used here is distinct for its extensive and comprehensive interviews to exhaustively address all aspects of the study (Ruby, 2017). The sampling design was based on purposive sampling to select samples based on specific characteristics and excludes those that are outside this objective (Adebayo, Ataguba, Uthman, Okwundu, Lamont, & Wiysonge, 2015). The reason for the choice of nursing female technologists of Unilorin was because they are technologically inclined. As such, the study intends to find out whether their technological savviness influences their maternal healthcare information seeking behaviour on social media. Interviews on 15 Female Technologists selected purposively from 55 of them that constituted the total number of female technologists at the University of Ilorin (Unilorin Human Resources Unit, 2020), were conducted. Data were analyzed thematically based on research objectives. Arising from the interviews which addressed: (i) social media platforms used by nursing female technologists in Unilorin; (ii) social media messages on maternal and child health; (iii) social media information on the attitude and practices of nursing female technologists about childcare; (iv) social media as means of acquiring healthcare knowledge, was the formation of categories which constituted the demographic characteristics of the informants as well as the perspectives and experiences of the nursing female technologists on access and impact of maternal healthcare information through social media. A sample size of 15 informants were selected out of a total population of 55. The reason for the selection of 15 informants out of 55 was because the researcher reached a saturation point at the 15th participants due to the richness of the data collected. According to Guest et al., (2006), data saturation may be attained by as little as six interviews depending on the sample size of the population. However, a large sample size does not guarantee data saturation, nor does a small sample size—rather, it is what constitutes the sample size (Burmeister & Aitken, 2012). The study adopted the real names of the informants in the analysis because they consented to it. To ensure reliable findings, the data analysis was guided by the objective of the study, using informants' word-of-mouth. This approach is in line with Silverman's (2009) comprehensive data use approach of determining reliability of findings in qualitative study, which states that researchers must verify their accuracy in terms of form and context with constant comparison, either alone or with peers.

Result

In view of the major research objective which is to underscore the impact of social media messages on child and maternal healthcare among nursing female technologists in University of Ilorin, the responses of the female nursing technologists are

categorized, presented and discussed in themes below:

Table 4.1: Basic Data of Nursing Female Technologists Interviewed

S/No.	Name	Faculty/Unit	Position	Years in Service	No of Children
1.	Bunmi	CIS	S. Tech	11	3
2.	Biola	CIS	S. Tech	11	4
3.	Halima	CIS	Tech II	4	2
4.	Adeoye	CIS	Tech I	3	3
5.	Kehinde	P. Sciences	Tech I	4	1
6.	Mubo	CIS	S. Tech	11	2
7.	Aishat	CRL	Tech II	2	2
8.	Ayo	P. Sciences	P. Tech	10	3
9.	Khadijah	P. Sciences	Tech I	4	2
10.	Joke	P. Sciences	Tech II	2	1
11.	Teijidini	L. Sciences	Tech I	6	1
12.	Victoria	P. Sciences	S. Tech	11	2
13.	Esther	Cent. Workshop	Tech I	3+	1
14.	Eunice	Engineering	Tech I	3	1
15	Adeola	L. Sciences	Tech I	4	2

KEY: *CIS=Communication and Information Science, P. Sciences=Physical Sciences, L. Sciences=Life Sciences, CRL=Central Research Laboratory, Cent. Workshop=Central Workshop, Tech 1=Technologist 1, Tech II= Technologist II, S. Tech=Senior Technologist, P Tech=Principal Technologist.*

Table 4.1 represents the basic working details of the technologists interviewed. The Table shows the different faculties and units sampled. Five (5) of the technologists were from the Faculty of Communication and Information Sciences with a maximum and minimum working experience of 1 year and 11 years, with each informant having 3, 4, 2, 3 and 2 children respectively. Five (5) from Physical Sciences, with a maximum and minimum working experience of 1 year and 11 years, with each having 1 3, 2, 1 and 2 children respectively. One (1) from the Central Research Laboratory with a minimum working experience of 2 years and 2 children. One (1) from Engineering with 3 years working experience and 1 child. One (1) from Central Workshop with 3+ working experience and 1 child. However, two (2) were from Life Sciences with 6, 4 years working experience and one having a child and the other having 2 children

Theme One: Social Media for Health Purposes

Table 4.2 Social Media Platforms Used by Nursing Female Technologists in Unilorin

S/No	Name	Type of Social Media Use
1	Bunmi	Google, WhatsApp, Facebook
2	Biola	Google, Telegram, WhatsApp
3	Halima	WhatsApp, Google, Facebook
4	Adeoye	WhatsApp, Google, Facebook
5	Kehinde	Google, WhatsApp, Facebook
6	Mubo	Google, WhatsApp, Facebook, Instagram, Blogs
7	Aishat	WhatsApp
8	Ayo	Facebook, WhatsApp, Google, Blogs
9	Khadijah	Google, Instagram, Facebook, Blogs
10	Joke	WhatsApp, Facebook, Google
11	Teijidini	WhatsApp
12	Victoria	WhatsApp, Facebook, Google
13	Esther	Google, WhatsApp, Facebook
14	Eunice	Google, Facebook, WhatsApp, Blogs
15	Adeola	Instagram, WhatsApp, Google, Facebook

The informants in response to their use of the social media indicated their copious use of the social media particularly for health benefits; Eunice described herself as a chronic health information seeker, as her quest for more children following her secondary infertility, draws her constantly to social media site's health groups such as "Ask the Gynecologists" on Facebook. "My consultant gynecologist is not always available to see me and so I supplemented his services by educating myself on health challenges and then confirmed them with the expert". Kehinde, who experienced primary infertility, said her Doctor has resorted to calling her his "own Doctor" as she always seems to self-diagnose and bring new information to him. "I am ardent at going to the social media for health information and also, check out other health information regarding men and pass same to my husband, such that I don't benefit alone".

Khadijah, on her part, said she monitors her children's developmental milestones on "BabyCenter;" a social media resource for new and expectant parents which features parenting, pregnancy and baby care information. "With my BabyCenter app, I doesn't have to worry about getting information as it provides me with monthly updates on what I should expect from my children".

Mubo, posit that she is a social media addict, especially in terms of seeking health information concerning her children. "I also subscribed to BabyCentre from when I conceived and I get updates till today". She admitted to always seeking health information online before consulting her Doctor and in many cases, she ends up not visiting the hospital when she finds out that there is no cause for alarm as regards her or her children's ailment. "I despise hospital runs. I go as far as pray against having to visit hospitals, and once I have data, I immediately ask "Prof Google", who seems to know it all." "Health information on social media is on the increase, but I use them in a positive manner and sift irrelevant information from them".

Abiola on her part said, "Most times I seek health information through the social media" especially those on WhatsApp or Telegram platforms". "But I particularly verify this information as malicious and fake information abound". Ayo admitted she uses the social media minimally, but whenever she finds the need for it, she uses it to seek health information. She claims she has learnt a lot from these health information sites and she uses the information she gets from

them maximally. Aishat, asserted she benefits immensely from her use of health sites, especially WhatsApp. “I usually seek health information almost every day and I trust in those messages because once I apply the teachings, I see differences in our health.” Victoria opines: “as often as sickness comes, I seek health information online.” Adeola avers: “I gain a lot from social media, especially when it has to do with health information concerning my children”. “But I am careful about information I believe in as anybody can write anything online”.

Theme Two: Social Media Messages on Maternal and Child Health

With regards to how social media information impact on maternal and child healthcare among the informants, the following responses were generated:

Khadijah gave a 70% mark to the level of impact social media messages has on her self-care as well as child health care. “We are all social media users and the messages we get really help us.” Esther posits: “the impact is deeply felt as I tend to abide by the messages, I receive from social media, and that way, I am able to take good care of our health.” Eunice corroborated that social media messages have a tremendous impact on her life as well as that of her child. “I try to follow everything I read in as much as they are not against my beliefs, as such information are life-changing and timely". Kehinde opined that social media messages are impactful as she is an ardent follower who goes online at the slightest chance she gets and abides by the messages she receives.

Bunmi said social media has helped her care for her children better as she can easily go online and search for side effects of drugs given to her children. “It has made me aware of so many things which were not seen as common knowledge in the past”. Biola averred that she resorts to gaining beneficial knowledge and enlightenment from social media messages. Joke also rated social media messages high, as much as 80% because it is a source she relies on for maternal and child health care issues. Victoria asserts that social media has impacted her greatly. Halima and Adeoye also attested to the fact that the message services they subscribe to and those they receive has never let them down and has made meaningful impact in their health. From the analysis above, social media seems to have a large influence on the lives of female technologists as they all agreed that it impacts positively on their health, as nursing mothers.

Theme Three: Impact of Social Media Information on the Attitude and Practices of Nursing Female Technologists and Childcare

Mubo opined that she uses social media information to practice better childcare because social media have a lot to offer and that it has become a habit for her. “It is from social media I got to know that the art of turning a child upside down while bathing them is absolutely unnecessary, and science has linked it to brain injury in infants. Esther argued that some messages posted online are not always accurate or relevant to her most of the time, and she usually pick out the relevant ones. Eunice averred that since she started seeking childcare information on social media, she has stopped giving concoctions to her child as well as local herbs to bathe her child. “I have learnt from online sources that exclusive breast-feeding practice is the best in terms of making the baby healthy and articulate when they grow up.” Kehinde opined that the information she gets on social media has made her forego self-medication of her kids. Aishat averred that seeking childcare information on social media has afforded her the opportunity of controlling the way she feeds her kids for healthy living. She added that she has learnt a lot of things in terms of childcare from one social media platform she belongs to, where some of this sensitization about childcare is discussed.

Victoria argued that social media has caused her to drop some old methods of medicating her kids with the use of local herbs and mixing concoctions, and also believes social media has better things to offer in terms of maternal and child health care. Tejidini opined that social media has changed her attitude towards the old methods, as she now has better and modern healthcare options for her children.

Khadijah admitted that she has gained immensely from social media in terms of getting information which has helped her answer most of the questions about proper childcare. And that her attitude has changed and greatly influenced by social media. Biola opined that being a

technologist has made her engage more in seeking childcare information on social media which has given her some relief on certain health issues. She also argued that the knowledge she gains on social media has made her abandon habits such as using a hot lantern to massage a baby's umbilical cord, or use of teething powder to relieve sore gums during teething.

Theme Four: Social Media as a Means of Acquiring Healthcare Knowledge

Informants unanimously agreed that social media is a great means through which they acquire knowledge. While some say they use social media mainly as a means of communication, majority affirmed they use the social media to gather healthcare information.

Kehinde said she never stopped getting enlightened each day through her use of the social media, and this has increased her store of knowledge in many ways as she used the information she got online in her academic pursuit as well. Mubo argued that "Prof" Google, never ceases to give her answers to her numerous searches and she is better off for it. "People ask me how I have certain information and I tell them it's all there online. Adeola holds that she gained a lot and keeps learning something new each day through her use of the social media as she is a dedicated fan.

Discussion of Findings

The findings of this study were categorized and analysed in four themes: theme one examined social media platforms used by Nursing Female Technologists in Unilorin for health purpose. It was found that social media sites such as WhatsApp, Instagram, Facebook, Youtube, etc., has become an avenue to access a plethora of virtual doctors by Nursing Female Technologists in Unilorin, and has been complementing the roles of physical doctors on so many fronts in respect to seeking maternal and healthcare information. This corroborated Fox and Raine (2010) assertion that the internet is second only to healthcare providers as an information source, and that it provides an alternative for patients to improve upon their health knowledge. Also, Kirschener, Blake, Hahn, Timimi, and Huang (2013) affirmed that social media can serve as an aid to patients as it fosters their autonomy by complementing the information provided by healthcare professionals.

Theme two examined social media messages on maternal and child health. The findings revealed that social media has a high level of impact on Nursing Female Technologists in Unilorin as it generally helps them access information that enables them take necessary steps about their health before seeing a conventional doctor. Theme three profiled impact of social media information on the attitude and practices of Nursing Female Technologists and childcare. The findings established that the information Nursing Female Technologists get on social media has made most of them forego the practice of self-medicating their kids.

The study also found that social media has encouraged Nursing Female Technologists in Unilorin to opt for better and modern healthcare options for themselves and their children. Theme four examined social media as a means of acquiring healthcare knowledge. It was found that Nursing Female Technologists in Unilorin are continually getting enlightened each day through the use of social media, and this has increased their knowledge in many ways in respect to knowing which healthcare practice is suitable for them. It was also found that the "Prof" Google, enabled by the search engines of these social media platforms has never ceased to provide instantaneous answers to their numerous questions regarding their health and that of their children. This finding supports Balch's (2010) assertion that people are selective in how they use the media, the topics they expose themselves to and the way they interpret information.

Conclusion and Recommendations

The study was designed to determine the impact of social media messages on maternal and child healthcare knowledge among nursing female technologists in Unilorin. The broad objective of this study was to investigate the access and impact of maternal and child healthcare information through social media on knowledge and attitude of nursing female technologists in the University of Ilorin. The study has shown that social media has become part and parcel of the nursing female technologists of Unilorin, and playing a major role in terms of maternal and healthcare information.

Society has learnt to trust the social media and it has become the initial port of call as a first aid measure, thus contributing to better and wholesome healthcare. More informed choices are being made by women through the exposure they gain from the social media. Through the informed choices made by these women, the nation will also be closer to achieving the Millennium Development Goals it has set for itself which is to eradicate/reduce maternal and infant mortality, which the social media health information is contributing to.

This study recommends that women should keep seeking for knowledge about basic healthcare. The study also advocates for social media literacy, which will assist social media audience selectively access and use only information that is beneficial to them. It is also recommended that more professionals (health workers, journalists covering health) should key into supplying reliable information online to dissuade quacks from taking over health related matters online.

Future Research

In view of the limitations of this study which include financial resources to expand the scope of the study, and also the adoption of qualitative method of enquiry, a mixed method is recommended for further studies to explore more, as well as describe the data in statistical terms. Since this study is restricted to University of Ilorin, similar studies should be geared towards exploring other universities and institutions of higher learning. The opinions of a wider group of women should also be sought in subsequent studies which should not be limited to female technologists.

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AUTHOR BIOGRAPHIES

Ghaniyah, O. Aderinoye, is a Principal Technologist in the Department of Mass Communication, University of Ilorin, Ilorin, Nigeria, where she co-teaches some practical-based courses in broadcasting. Ghaniyah holds a Higher National Diploma from The Polytechnic Ibadan, a BA/ED in History from the University of Ilorin, and a Postgraduate Diploma in Mass Communication from National Open University of Nigeria. Her area of research is broadcasting.

Prof. Adesina Lukuman Azeez is a Professor in the Department of Mass Communication, University of Ilorin, Ilorin, Nigeria. He has diverse teaching and research interests in communication theories, media effects, media representations and the emerging film industry in Nigeria. Dr. Azeez has published in reputable journals of communication and media studies such as the Journal of Africa Cinema.

Tajudeen Olanrewaju YUSUF is a Principal academic Technologist in the Department of Mass Communication, University of Ilorin, Ilorin, Nigeria. He holds a BA in Mass Communication from Bayero University Kano, and a master degree in Public Administration from University of Ilorin, and also, a PGD in Mass Communication from National Open University of Nigeria. His areas of research include Print Journalism, Public Relations and Advertising as well as New Media.

Kebesobase Ibiang Ofem is a Masters student in the Department of Mass Communication, University of Ilorin, Ilorin, Nigeria. He holds a BSc. in Mass Communication from Cross River University of Technology, now University of Cross River State. His research interest includes political communication, media effects and social media discourses.

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