World Journal of Advanced Research and Reviews
eISSN: 2581-9615 CODEN (USA): WJARAI
Cross Ref DOI: 10.30574/wjarr
Journal homepage: https://wjarr.com/

(RESEARCH ARTICLE)

Check for updates

Evaluating the effectiveness of social media in health communication: assessing the impact and outcomes of health communication campaigns conducted on x (Twitter)

Oladimeji Uchenna Lawrence [1,*], Ayodimeji Joshua Falade [2], Yusuff Bayonle Sulaimon [3], Shehu Abdullahi Abdulkadir [4] and Victoria Uchechi Onuoha [5]

[1] *Caleb University, Department of Mass Communication, Ikorodu, Lagos State, Nigeria.*
[2] *Adekunle Ajasin University, Department of Mass Communication, Akungba-Akoko, Ondo State, Nigeria.*
[3] *Osun State Polytechnic, Department of Mass Communication, Iree, Osun State, Nigeria.*
[4] *Federal Polytechnic Bauchi, Department of Mass Communication, Gwallameji, Bauchi State, Nigeria.*
[5] *University of Lagos, Department of Mass Communication. Akoka, Lagos State, Nigeria.*

World Journal of Advanced Research and Reviews, 2024, 22(02), 1107–1112

Publication history: Received on 04 April 2024; revised on 13 May 2024; accepted on 15 May 2024

Article DOI: https://doi.org/10.30574/wjarr.2024.22.2.1413

Abstract

Twitter, a leading health communication channel, has effectively promoted health awareness and continues to do so. It provides health information quickly and easily, serving as a vital source of health information. Health practitioners often use Twitter to disseminate health information, a trend that has become more prevalent than engaging audiences in multi-way conversations and interactions. This reassures us of the platform's effectiveness in reaching a broad audience. Twitter has emerged as a powerful tool for reaching a broader audience, offering platforms like Twitter Space for discussion and engagement with health professionals. This technology has brought a new dimension to healthcare, enlightening the public and promoting health behaviors, benefits, challenges, and preventive measures. This research delved into the effectiveness of Twitter in health communication. The study employed a quantitative approach, using a survey to assess the impact of health-related content on Twitter and evaluate the effectiveness of shared health communication. The anticipated outcomes of this research include a comprehensive understanding of the effectiveness of Twitter on health communication, insights into the effectiveness of health content Twitter users access, and recommendations for improving health outcomes through targeted audience campaigns by providing empirical evidence on the effectiveness of Twitter on health communication and a positive and crucial role play in promoting health awareness. Twitter has been used as a tool for health communication campaigns, and many Twitter users benefit from the health information gained there.

Keywords: Social Media; Health Communication; Twitter; Assessment; Campaign; Effectiveness.

1. Introduction

Social media has proven to be a determining force in reaching the target audience. Its vast coverage stands out among arrays of Mass communication coverage apparatus, including Radio, Television, Newspapers, and Magazines, among other conventional mediums.

However, social media continues to supersede traditional media's flaws in Speed, time consumption, media availability, and user experience, among other things. It has also proved effective in many areas of human life, including Security, Health, Finance, and Welfare. Information and technologies have significantly impacted every aspect of society over the past decades. They can enhance teaching and learning in formal school settings when used appropriately.

* Corresponding author: Oladimeji Uchenna Lawrence

Nonetheless, the understanding of creating social media is open to messaging, texting, and video chatting, which many users believe to be their only purpose. The advent of social media in Mass communication space has evolved among curators and their audiences. The term "Social media "is described in many forms, wherein one of its popular definitions is "a group of internet-based applications that create technical and ideological foundations of Web 2.0 and that allow the creation and exchange of user-generated content." Groups, individuals, and private business entities from companies have derived a unique way of using social media beyond texting and connecting purposes but have added business interest and profitability by using social tools such as YouTube, Twitter, and Facebook. The researchers have described the basics of social media and its benefits for industrial growth, (Kaplan and Haenlein, 2010).

Furthermore, Health Communication is pertinent to creating informative and educative health-related information for the audience. The reason for spreading health data is to impact individual health decisions by improving health education. Health communication is an exceptional specialty in medical care that permits experts to utilize communication systems to illuminate and influence the choices and activities of people in general to improve health, (Indhu, 2021).

Sallam et al. (2020) opined that people still rely on using various social media applications for health information by sharing health broadcast messages on instant messaging applications like WhatsApp, Telegrams, Wechat, and iMessage (iPhone users). Applications like Instagram and Twitter rely on post sharing or tweeting, which can be video or pictorial, in communicating health information by specific content creators or application users. Social media has altered the way we communicate with one another, and this is particularly true in the area of health communication. Social media sites like Facebook, Twitter, and Instagram have become crucial components of the health communication landscape because they enable people to exchange health-related information, connect with people with similar health interests, and discover new treatments and procedures, (Udjimba, 2023).

Twitter, an online social networking and micro-blogging service called Tweets, enables users to send and read text-based messages of about 140 characters. Twitter, also known as X, has become a giant in the arena of many social media platforms. Dean (2024) presented the competing strength of X/Twitter, which boasts a broader user of 500 million yearly and 200 million weekly, ranking it among the world's 12 most popular social media platforms. Using (#) tags is a notable feature that helps link keywords and trend a particular content theme. It is helpful to create a community-like street gist and gossip model.

Considering its impeccable capacity to reach a larger audience, X (Twitter) has become a significant pointer in the health industry and health part of people's lives, which has exposed more audiences to ground-breaking health information, vaccine breakthrough anticipations, precautions /safety guild, and health advice among others. However, this has not stopped the significant problems encircling health-related information, which are misinformation and propaganda. These are evident in various social media spaces in Nigeria, where much misinformation crawled through multiple applications such which are: in 2020, COVID-19 Twitter tweets on 5G network cause and staying in the sun cures COVID-19; in 2014, drinking hot water to cure Ebola among many other unapproved medications. This information trended across all social media platforms, especially on X (Twitter), which resulted in misinformation and caused bodily and psychological harm to various users. To help educate the people, news stations dedicated to social handles vigorously debunked many claims on the salt water cure of Ebola in 2014 and health conspiracy on the 5G cause of COVID-19 in 2020 using the X(Twitter) social application.

These reflect the plague of misinformation, even though social media has proven its greater good to humans regarding health information. However, Public relations rely on social media for campaigns relating to the public; these campaigns use social media as a tool. Health and news organizations often use their handles to relay health sensitization across various social media applications. Given this, the National Agency for the Control of Aids (NACA) has continuously done various social media campaigns on X (Twitter) by curating influencers and Corp members active on social media to help spread more information on the prevention of Aids and continuous sensitization on the disease.

However, X (Twitter) projects more health campaigns. At the same time, many agencies have successfully employed its features to get information to their targeted audience, which has justified the prominence and uniqueness of social media as a public relations tool.

2. Materials

Although there are many potential benefits of adopting social media for medical practices and health care (Lim, 2016), and despite users who are becoming more and more informed on health topics thanks to the Internet (Sarasohn-Kahn,

2008; Hu; Sundar, 2010), health care organizations are latecomers to the digital arena. Also, much remains to be done to educate, give answers, and open more direct communication paths with users (Huerta et al., 2014).

2.1. Health Communication

Throughout history, communication has played a vital role in providing information and education about health. Over time, communication has evolved into various sub-disciplines. One such sub-discipline is health communication, which has gained recognition as an essential field of study. The Centers for Disease Control and Prevention and the National Cancer Institute define health communication as exploring and utilizing communication strategies to inform and influence individual decisions that promote better health outcomes.

Health communication encompasses employing communication strategies to shape individual and societal knowledge, attitudes, and behaviors related to health and healthcare. It is widely acknowledged as a crucial element in personal and social well-being. Health communication plays a significant role in all aspects of health, with particular effectiveness in disease prevention and health promotion. In the United States, traditional methods of mass communication, such as public service announcements on radios and televisions, as well as the distribution of printed materials and health messages, have been instrumental in encouraging healthy behaviors, raising awareness, shifting attitudes, and motivating individuals (Schiavo, 2013).

2.2. Role of Social Media in Health Campaigns

Evaluating the effectiveness of social media in health communication campaigns, particularly those conducted through Twitter, is a crucial and timely undertaking. This holds significant relevance in countries like Nigeria, where most of the population resides in rural and semi-urban areas. Accessing healthcare services is fraught with challenges related to affordability, acceptability, accommodation, availability, and accessibility. The need for healthcare providers compared to the number of patients further compounds the general population's difficulties in accessing the necessary health information and resources. Factors such as rising healthcare costs, shifting demographics, and a growing population also emphasize the pressing need for a robust and inclusive health communication platform. Integrating new technologies into the healthcare system becomes imperative to bridge these gaps and improve accessibility. Enter social media, a powerful tool that has revolutionized digital communication. In the past, health campaigns often needed more attention in terms of their delivery methods. However, with the advent of social media, there has been a paradigm shift toward a more proactive and engaging approach encompassing various media platforms. This transformation recognizes the potential of social media to play a more impactful role in disseminating health information, fostering interactions, and empowering individuals to make informed decisions about their well-being.

3. Methodology

As part of our research methodology, we conducted an in-depth literature and empirical review to delve into the various aspects of our chosen topic. Through this review, we observed a recurring gap in the existing literature, specifically the need for more emphasis on evaluating the long-term impact of health campaigns conducted through Twitter. This gap is particularly concerning given the critical nature of health crises and outbreaks that individuals often face.

The survey method was the most suitable approach for this study. It was chosen primarily because of its capacity to gather quantitative data and apply the findings specifically to a particular social media platform. A structured questionnaire collected information on the impact and outcomes of effective health communication campaigns delivered through social media. This questionnaire aimed to gather insights from the target respondents regarding their exposure to and influence of various health campaigns on Twitter. It also sought to identify individuals' barriers or challenges when engaging in such campaigns.

The data collection instrument consisted of multiple sections. The first section was designed to gather demographic information and create a profile of the respondents. The second section focused on assessing the influence and exposure to different health campaigns on Twitter. Furthermore, it aimed to uncover individuals' obstacles or difficulties when participating in these campaigns.

3.1. Empirical Review

The studies conducted by Chew and Eysenbach (2010) and Signorini et al. (2011) focused on using Twitter about the Swine Flu. Although both studies examined Twitter content, they differed in their approach. Signorini et al. (2011) utilized over 16 keywords, while Chew and Eysenbach (2010) employed only two. However, neither study provided a rationale for their choice of keywords. Chew (2010) analyzed approximately 20 million tweets and found that only 4.5%

contained misinformation. Furthermore, Chew and Eysenbach (2010) discovered that tweets from news organizations were more popular than those from health organizations and government sources. Their analysis of retweet factors indicated that personal experience and personal tweets were not significantly more likely to be retweeted than general tweets. It is important to note that their analysis focused solely on English tweets.

Vos and Buckner (2016) examined tweets during the Bird Flu crisis to assess if individuals could comprehend the messages from health organizations and whether these messages facilitated appropriate responses to the crisis. Their research emphasized the need to investigate the features of tweets that contribute to the dissemination of information, particularly for health organizations. They criticized the overall quality of tweets, stating that only 2% of the collected tweets contained helpful information. Their conclusion highlighted that social media (SM) has yet to be effectively utilized as a platform for health communication due to the poor quality of information shared in tweets, despite its significance as a means for the public to communicate during crises.

In a study by Kalyanam et al. (2015), Twitter hashtags during Ebola outbreaks were analyzed to determine whether they could differentiate between hashtags containing misinformation and those considered credible sources based on their characteristics. Their findings revealed distinct differences between credible and speculative hashtags. Additionally, they discovered that nearly 25% of the analyzed tweets were speculative.

These studies provide valuable insights into the characteristics and quality of health communication tweets on social media platforms such as Twitter. Aligning with my research topic on evaluating the effectiveness of social media in health communication, they highlight the importance of assessing the impact and outcomes of health communication campaigns conducted through Twitter. They also emphasize the need to consider the credibility, quality, and dissemination of health information on social media platforms and the potential challenges and opportunities they present for effective health communication.

4. Results and Discussion

To properly evaluate and assess the effectiveness of social media in health communication campaigns, the researchers employ survey methodology to gather data using questionnaires to elicit responses from the respondents. We sampled the opinions of 250 (Two hundred and Fifty) participants using open-ended questions; meanwhile, 155 (One Hundred and Fifty-Five) responses were valid for this research.

Our demography primarily consists of educated Males and Females. Out of the 155 valid sampled population, 75 were males (48.4%), and 74 were females (47.7%). Meanwhile, six participants decided to be anonymous with their gender. Also, the Age group of our participants spans between 18 years and 35 years and above. A large chunk of the responses came from the age bracket 26 years to 35 years (62.3%), while reactions from Gen Z (18 years to 25 years) constitute 28.4%. The responses from the age bracket 36 years and above were 10.3%. As a result, males' responses were slightly higher than females'. The highest responses recorded were from 26 years to 35 years.

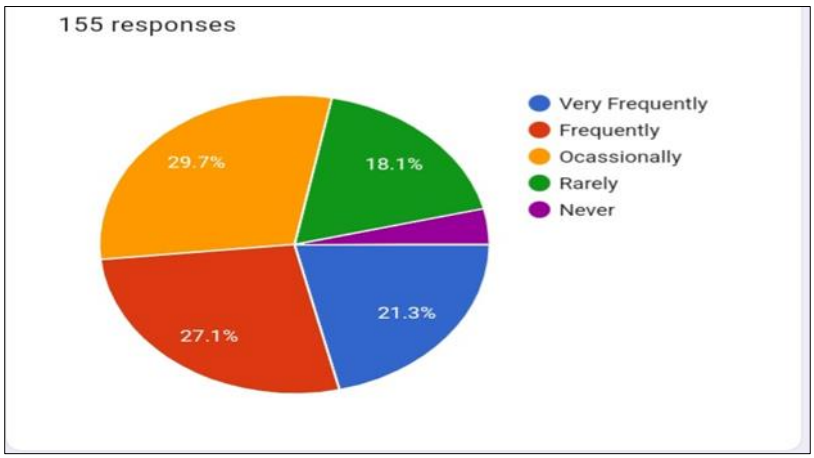

Figure 1 Frequency of Exposure to Health-Related Content on Social Media

From the valid 155 responses, we determined how often the participants come across health-related content on social media platforms (Twitter). The data gathered shows that 29.7% occasionally came across health communication

campaigns on their Twitter timeline, 27.1% saw them frequently, and 18.1% of the respondents claimed to come across health information on Twitter barely.

Social media platforms, particularly Twitter, have both advantages and disadvantages. In this study, social media's more upbeat and crucial role can be beneficial in promoting health communication campaigns. The illustration above shows that 41.3% of respondents acknowledge that by engaging in health-related information on Twitter, this information has helped in solving their various health challenges, which in turn improved their overall health status. 38.1% disagree that the health communication campaign on Twitter has not helped remediate their health challenges. In comparison, 20.6% are indifferent to the question.

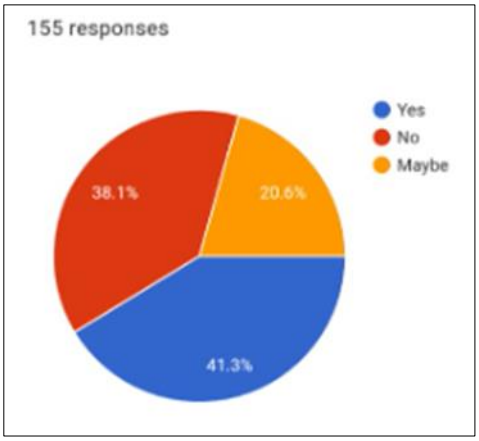

Figure 2 Assessing the Advantages of Health Communication Campaigns on Social Media Platforms

In this study, it is pertinent to further elaborate on the data collected. The population sample gives the researchers first-hand information on the factors that influence their engagement in health information on social media platforms. These factors hinge on personal interest, the most critical health information sought after. The credibility of the source has been cited as pertinent as other factors that determine the respondent's engagement; this shows that individual(s) tend to practice or follow health information from a certified medical practitioner rather than social media influencers, whose objectives are to advertise health product and make profits.

In evaluating the benefits of health campaigns on social media among our sampled population, the data above illustrates a sizeable number of respondents who benefit from health communications campaigns on Twitter. The results show that 41.3% find health communications campaigns on Twitter beneficial to them, while 38.1% do not. About 20.6% are on the fence about it.

To investigate the challenges or barriers the individuals face in accessing and engaging with health communications campaigns on Twitter, the population sample gives the researchers first-hand information on the challenges. The following factors mentioned by them are based on these experiences: bullying, lack of interest, medical terms, fake news or false information, verification of medical personnel, and toxicity. Fake news or false information takes the cake in the barriers they face in accessing and engaging with health communications campaigns on Twitter.

In conclusion, social media platforms such as Twitter have been used to communicate health campaigns to their users. While there have been concerns about barriers to the reception of health communication campaigns, such as bullying, fake information, lack of interest, etc., the dissemination of health communication campaigns using Twitter as a social tool has benefited the receivers.

5. Conclusion

Evaluation of the effectiveness of Twitter in health communication is essential for understanding its impact on health knowledge, attitudes, behaviors, and outcomes. This research has provided valuable insights into the reach, engagement, and influence of health-related content on the Twitter platform. The study highlights the significant role Twitter plays in disseminating health information, engaging diverse audiences, and promoting health behaviors. The Twitter platform offers unique opportunities for public health practitioners, policymakers, and stakeholders to connect with individuals and address pressing health issues. Future research should continue to explore strategies for enhancing the effectiveness

of health communication on Twitter and mitigating potential risks and barriers. Overall, this research contributes to the growing body of literature on Twitter and health communication and underscores the importance of evidence-based approaches to harnessing the potential of the Twitter platform for improving public health outcomes. The average number of people intercept health communication on Twitter, while others occasionally do so, and only some rarely come across health campaigns on Twitter. By leveraging the insights gained from this study, stakeholders can develop targeted interventions, campaigns, and policies that maximize the benefits of Twitter in health communication.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest is to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

[1] Chew C, Eysenbach, G. Pandemics in the age of Twitter: Content Analysis of Tweets During the 2009 H1N1 Outbreak. Plos One. 2010 Nov 29; 5(11): p.e14118.

[2] Dean B. [Internet]. Wyoming (US): Backlinko; © 2024 [cited 2024 April 6]. Available from https://backlinko.com/twitter-users.

[3] Huerta TR, Hefner JL, Ford WE, McAlearney AS, Menachemi N. Hospital Website Rankings in the United States: Expanding Benchmarks and Standards for Effective Consumer Engagement. JIMR Pub. 2014 Feb 25; 16(2): 64.

[4] Hu Y, Shyam S. Effects of Online Health Sources on Credibility and Behavioral Intentions. Sage Journals. 2009 Nov 25; 37(1): 105-132.

[5] Indhu S. Note on Health Communication. Health Econ Outcome Res Open Access. IOMC. 2021 May 27; 7(5) e113.

[6] Kalyanam J, Velupillai S, Doan S, Conway M, Lankriet G. Facts and Fabrications about Ebola: A Twitter Based Study. Research Gate. 2015 August 10.

[7] Kaplan A.M., & Haenlein M. Users of The World, Unite! The Challenges and Opportunities of Social Media. https://doi.org/10.1016/j.bushor.2009.09.003. 2010; 53(1):59-68.

[8] Lim WM. Social Media in Medical and Health Care: Opportunities and Challenges. Marketing Intelligence & Planning. 2016 Oct 3; 34(7): 964-976.

[9] Sallam M, Dababseh D, Yaseen A, Al-Haidar A, Taim D, Eid H. Et al. COVID-19 Misinformation: Mere Harmless Delusions or Much More? A Knowledge and Attitude Cross-Sectional Study Among the General Public Residing in Jordan. PLOS ONE. 2020 Dec 3; 15(12): e0243264.

[10] Sarasohn-Kahn J. The Wisdom of Patients: Health Care Meets Online Social Media. California HealthCare Foundation, January 2008.

[11] Schiavo, R. Health communication: From Theory to Practice. John Wiley & Sons. 2013.

[12] Signorini A, Segre AM, Polgreen PM. The Use of Twitter to Track Levels of Disease Activity and Public Concern in the US During the Influenza A H1N1 Pandemic. PLOS ONE. 2011 May 4; 6(5): 0019467.

[13] Udjimba P. [Internet]. Abuja (NG): FarePharm; © 2024 [cited 2024 April 6]. Available from https://farepharm.com/post/182-The-Impact-of-Social-Media-on-HealthCommunication#:~:text=Social%20media%20sites%20like%20Facebook,discover%20new%20treatments%20and%20procedures.

[14] Vos SC, Buckner MM. Social Media Messages in an Emerging Health Crisis: Tweeting Bird Flu. Journal of Health Communication. 2015 Aug 20; 21(3):301-308.