COLLEGE OF HEALTH SCIENCES

SCHOOL OF PUBLIC HEALTH

ASSESSING THE ATTITUDES AND PERCEPTIONS ON USE OF SOCIAL MEDIA TECHNOLOGIES AS HEALTH COMMUNICATION TOOLS AMONG ENVIRONMENTAL HEALTH PROFESSIONALS IN WAKISO DISTRICT, UGANDA

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A BACHELOR'S DEGREE IN ENVIRONMENTAL HEALTH SCIENCES OF MAKERERE UNIVERSITY
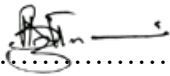
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DECLARATION

I, Newton Balenzi, registration number 20/U/16171/PS, hereby declare that this dissertation is my original work and it has never been submitted to any university or institution for any academic award or qualification. I, therefore, submit it for the award of the Degree of Bachelor of Environmental Health Science of Makerere University, Kampala.

…………………………………..   …………8th/7/2023……………

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SUPERVISOR APPROVAL

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DEDICATION.

I dedicate this research dissertation to God almighty who has enabled me to complete this study. I also dedicate it to all the Environmental Health Professionals and participants in Wakiso District, Uganda, whose dedication and commitment to improving Public Health have inspired and fueled this study. Further, this dissertation is dedicated to all Environmental Health Professionals in Uganda who strive to bridge the gap between technology and public health, working tirelessly to harness the power of social media technologies for effective health communication. Lastly, I extend my appreciation to Makerere University, School of Public Health academic fraternity

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Lastly, to my fellow BEH students of the 2020 intake, I offer my deepest gratitude. Your support, encouragement, and collaboration have made this study and overall academic journey possible. May the outcomes of this research contribute to the advancement of knowledge and the improvement of health communication practices among environmental health professionals.

OPERATIONAL DEFINITIONS

Environmental Health Professionals: Health officials who work to protect and promote public health by addressing environmental factors that can impact human health. In this study they include Environmental Health Officers, Health Inspectors and Health Assistants.

Social media: online platforms and technologies that allow individuals to connect with one another, share information, and collaborate on particular projects.

Health messages: information, guidance, or recommendations related to health and wellness of a given audience intended to educate, inform, motivate, and influence their behavior to improve health and well-being.

Health communication: systematic approach to conveying essential information about a specific health issue with an intention of mitigating the effects and enable them to make appropriate decisions.

Attitudes: Person's feelings, evaluations, or beliefs about people, objects, events or ideas. They can range from positive to negative and they can be influenced various factors such as personal experiences, cultural norms and social influences.

Perceptions: Individual's subjective understanding, awareness, or interpretation of the environment.

ABBREVIATIONS

EHPs - Environmental Health Professionals

SMTs – social media Technologies

FB - Facebook

HI – Health Inspector

HA – Health Assistant

EHO – Environmental Health Officer

DOH – Department of Health

PHD – Public Health Department

PHA – Public Health Act

UBOS – Uganda Bureau of Statistics

WHO – World Health Organization

MakSPH – Makerere University School of Public Health

WLG – Wakiso Local Government

ICT - Information, computer and Technology

ABSTRACT

Introduction; The use of social media technologies such as Facebook, Twitter, Instagram, YouTube and TikTok has gained popularity in recent years and it has been used in a variety of ways to improve health communication. One of the main advantages of using social media for health communication is the ability to reach a large and diverse audience. Additionally, social media technologies allow for real-time communication and engagement with communities, which can be particularly beneficial for EHPs working to address pressing public health issues. However, the extent to which environmental health professionals are using social media for health communication, and its effectiveness is not well understood.

Objective; This study aims to bridge the knowledge gaps by examining the current state of attitudes and perceptions of use of social media as health communication tools among Environmental Health Professionals in Wakiso District, Uganda in order to improve their effectiveness during the delivery of health messages.

Methods; The study was a cross-sectional design involving a survey among 47 EHPs in Wakiso district using physical questionnaires. Face to face interviews were conducted to explore Environmental Health Professionals' attitudes and perceptions in using social media tools for health communication and to identify the challenges faced by them.

Results; The majority of the respondents were age 31-40years, followed by 41-50years. The respondents were predominantly male. The highest proportion being certificate level holders followed by diploma. The majority of respondents were married. Health assistants comprised the largest professional group, followed by Health Inspectors. The majority of respondents reported using social media for health communication with WhatsApp being the most common. Most respondents perceived social media as effective for Health communication. However, concerns were raised about the safety of social media with credibility and privacy being top risks identified. Participants had mixed opinions regarding social media's ability to facilitate better community engagement compared to traditional channels.

<center>**CHAPTER ONE**</center>

INTRODUCTION AND BACKGROUND

1.1 Introduction

The use of social media technologies, such as Facebook, Twitter, Instagram, YouTube and TikTok, have gained popularity in recent years. These platforms have proven to be effective in disseminating health information, facilitating health-related conversations, and providing support to health-related activities, as evident during the COVID-19 pandemic(Stellefson et al., 2020). Environmental Health Professionals (EHPs) have started to explore the use of social media technologies to engage with their communities and share crucial information about environmental health risks and hazards(Dhir et al., 2018) .

Traditionally, the internet was primarily used by consumers to access content, such as reading, watching and purchasing products and services. However, consumers now leverage social media platforms to influence a firm's reputation, sales, and even survival. Social media technologies enable individuals and communities to create and share user-generated content(Kietzmann et al., 2011). Africa has experienced significant internet penetration rates, with an estimated 46.8% throughout the continent, and growing. Notably, in East Africa, Kenya has the highest penetration rate at 28%, followed by Uganda with 13%(Internet World Stats,2022). It is Interesting to note that out of the 566 million internet users in Africa, around 384 million also utilize social media platforms with Facebook being the most popular among them (Saifaddin Galal, 2022).

One of the primary advantages of using social media for health communication is the ability to reach a large and diverse audience. Facebook, Twitter, Instagram and TikTok with their billions of active users, serve as ideal platforms to disseminate health-related information to a broad audience (Zhu et al., 2020). Furthermore, social media technologies enable real-time communication and engagement with communities, which is particularly beneficial for EHPs dealing with urgent public health issues like air and water pollution, lead exposure, and pesticide exposure (McKee et al., 2019).

Despite the potential benefits of using social media for health communication, further research is needed to understand how these technologies are being used by EHPs and their impact on public health outcomes (Schillinger et al., 2020). Specifically, there is a lack of research on the use of Social media technologies(SMTs) among EHPs in low and middle-income countries, where the majority of the world's population lives (Yadav et al., 2020). To contribute towards bridging this existing knowledge gap, the researcher aims to assess the attitudes and perception on use of social media technologies as health communication tools among environmental health professionals in Wakiso district, Uganda.

1.2 Background

Environmental health encompasses all aspects of human health, including quality of life, that are influenced by physical, chemical, biological, social, and psychosocial factors present in the environment. Environmental Health Professionals (EHPs) play a crucial role in safeguarding the public from various environmental hazards such as hazardous chemicals, radiation, climate change disasters and inadequate healthcare infrastructure (WHO, 2022). Effective communication is paramount in the field of environmental health as it ensures the delivery of vital health messages to communities and facilitates the exchange of relevant information among peers(WHO, 2022).

In recent years, the emergence of social media technologies(SMTs) has gained popularity as a valuable tool for health communication among EHPs (Oyeyemi et al., 2014).Platforms like Facebook, Twitter, and Instagram have provided new avenues for sharing information, images, and videos with a broad audience. Moreover, these platforms foster two-way communication, enabling health professionals to establish meaningful connections with their communities(Sseviiri et al., 2022).

Uganda, like many other countries, has experienced a significant presence of social media platforms. According to current statistics, Facebook holds a market share of 47.48%, followed by Twitter at 26.39%, Pinterest at 10.13%, LinkedIn at 7.43%, YouTube at 5.12%, and Instagram at 3.06% (Internet World Stats,2022). The COVID-19 pandemic further demonstrated the impact of these platforms as they became instrumental in delivering daily updates and advisories from Uganda's Ministry of Health and other relevant institutions regarding disease prevention and control (Fergus et al., 2021). A survey conducted during this period revealed that 98% of social media users were aware of COVID-19, and 100% perceived the severity of the outbreak (Ministry of Health, 2020). The World Health Organization recognizes the potential of social media in supporting people and disseminating health messages that empower individuals to take control of their lives(Gemma A.Wasiams and Isabelle Zablit-Schmidt, 2022).

Although social media platforms have been hailed for their potential in health communication, the specific utilization of SMTs among EHPs in Uganda, particularly in Wakiso District, remains understudied. Given the critical role of environmental health and the significance of effective

communication, it is essential to gain insights into how EHPs in the district are employing SMTs to communicate environmental health hazards to the public.

This study aims to bridge the research gap by assessing the attitudes and perceptions on use of social media technologies as health communication tools among environmental health professionals in Wakiso district, Uganda in order to improve their effectiveness during the delivery of health messages.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction and general overview

Environmental Health Professionals (EHPs) play a crucial role in delivering timely and accurate health messages during crisis situations to promote behavioral change and mitigate risks(Guidotti, 2013). To achieve effective health communication, it is important to integrate traditional media tools with emerging web-based platforms, including social media (Sonke et al., 2018). Social media has gained immense popularity across various sectors, including healthcare, with its ability to rapidly disseminate information and reach diverse audiences (Chen and Wang, 2021). However, there are both advantages and challenges associated with utilizing social media as a communication tool in the context of health education campaigns.

The widespread use of social media platforms, boasting 2.82 billion users worldwide, presents an opportunity for EHPs to leverage its reach and effectiveness in disseminating health information (Stellefson et al.). Social media's cost-effectiveness has led funders of health education campaigns to prefer it over traditional communication channels such as newspapers, radios, and televisions.

Despite these challenges, social media platforms, in conjunction with other media channels, have proven to be valuable sources of reliable information during crises, as observed during the COVID-19 pandemic(Olum and Bongomin, 2020). EHPs can utilize social media to rapidly disseminate accurate and timely updates, engage with communities, and address public concerns. However, it is crucial to ensure the authenticity and credibility of information shared on social media platforms.

Examine the attitudes and perceptions of EHPs towards use of social media as a communication tool in the health promotion in Wakiso, Kampala.

In the digital era, the use of social media as a communication tool has become increasingly prevalent in various sectors, including healthcare. Understanding the attitudes and perceptions of Environmental Health Professionals (EHPs) towards utilizing social media for health communication is crucial to harnessing its full potential. This literature review aims to explore existing research and insights regarding the attitudes and perceptions of EHPs specifically in

Wakiso, Kampala, towards the use of social media as a communication tool in health communication.

Studies have shown a range of attitudes and perceptions among EHPs towards social media in health communication. Some research indicates a positive outlook, with EHPs recognizing the benefits of social media platforms for disseminating health information, engaging with the community, and addressing public concerns. These professionals appreciate the wide reach, immediacy, and cost-effectiveness of social media compared to traditional communication channels (Sonke et al., 2018; Chen and Wang, 2021). Furthermore, they acknowledge the potential of social media to facilitate behavior change and enhance health education campaigns (Guidotti, 2013).

However, other studies reveal mixed attitudes among EHPs. Some professional's express concerns regarding the reliability and accuracy of health information shared on social media platforms. They highlight the challenge of distinguishing misinformation from evidence-based content, which can undermine public trust and compromise the effectiveness of health communication (Stellefson et al.). Additionally, EHPs may have reservations about privacy and security issues related to sharing health information on social media platforms (Charles C. Dike et al., 2019).

Despite the potential benefits, EHPs may face several barriers and challenges that influence their attitudes and perceptions towards the use of social media in health communication. Organizational factors, such as limited access to social media platforms due to workplace restrictions or policies, can hinder EHPs from effectively utilizing these tools (Agena, 2019). Additionally, inadequate training and skills in social media management may limit their ability to leverage these platforms effectively (Azzopardi-Muscat and Sørensen, 2019).

Moreover, contextual factors specific to Wakiso, Kampala, may impact the attitudes and perceptions of EHPs. Factors such as cultural norms, internet accessibility, and demographic characteristics of the target population could influence the adoption and utilization of social media as a communication tools.

2.2 Organisational factors
The use of social media as a health communication tool has gained significant attention and recognition for its potential to enhance organizational visibility, market products and services, and

engage with healthcare providers, communities, and patients(Ventola, 2014). However, the adoption and effective utilization of social media platforms by organizations, including Environmental Health Departments, can be influenced by various organizational factors. This review aims to explore the organizational factors that impact the use of social media as a health communication tool among Environmental Health Professionals (EHPs).

Limited Access to Technology and Internet: One of the primary barriers to the use of social media as a health communication tool is the limited access to technology and the internet. In many workplaces, the lack of internet infrastructure hinders EHPs from accessing and utilizing social media platforms effectively(Government of Uganda, 2013) . The absence of internet connectivity prevents EHPs from fully leveraging the potential benefits of social media in disseminating health information and engaging with the community.

Digital Literacy and Skills Gap: Limited digital literacy and skills among EHPs pose a significant organizational challenge to adopting social media as a health communication tool. Many EHPs may not be familiar with social media technologies and lack the necessary skills and knowledge to utilize them effectively(Uganda Communication Commission, 2018). The lack of digital literacy can hinder EHPs from leveraging social media's full potential and utilizing its features for effective health communication.

Lack of Training and Support: The absence of adequate training and support is another organizational factor that hampers the use of social media as a health communication tool among EHPs. Many EHPs do not receive formal training on social media platforms and may lack the guidance and support necessary to navigate and utilize these technologies effectively (Uganda Communication Commission, 2018). The lack of training and support limits their confidence and ability to incorporate social media into their health communication strategies.

Limited Organizational Policies: The absence of organizational policies supporting the use of social media as a health communication tool is another factor that affects its adoption among EHPs. Some organizations, both governmental and non-governmental, may lack clear policies and guidelines that encourage and facilitate the use of social media for health communication purposes (Uganda Communication Commission, 2018).The lack of supportive policies can create uncertainty and reluctance among EHPs to utilize social media platforms due to concerns about professional boundaries, privacy, and reputational risks.

Trust and Attitudes Towards social media: Organizational factors such as trust and attitudes towards social media can influence its adoption as a health communication tool. Some EHPs may harbor reservations or negative attitudes towards social media due to its ambiguous nature and concerns about reliability, privacy, and the potential for misinformation (Government of Uganda, 2013). Building trust and changing attitudes towards social media may require efforts to address these concerns through education, awareness, and demonstrating the benefits and effectiveness of social media in health communication. In a study which was done on the use and acceptance of social media among health educators, it was found out that Social Media is being viewed as a good tool for enhancing job performance among health educators because of its effectiveness in delivery and getting feedback from health communication (Hanson et al., 2011).

2.3 Economic factors

The use of social media as a health communication tool among Environmental Health Professionals (EHPs) can be influenced by various economic factors.

Lack of Economic Resources: One of the primary reasons for the limited use of social media tools (SMTs) among EHPs is the lack of economic resources to maintain communication using these platforms. In low and middle-income countries, such as Uganda, Public Health Professionals (PHPs) often face financial constraints in accessing and utilizing technology and internet services. The high costs associated with purchasing and maintaining ICT equipment, as well as the expense of data and internet connectivity, pose significant barriers to the adoption of social media for health communication (Uganda Communication Commission, 2022).

Limited Staff Economic Incentives: The lack of economic incentives for staff members can also affect the use of social media as a health communication tool. If PHPs do not receive adequate financial support or incentives to incorporate social media into their work, they may be less motivated to invest time and resources into utilizing these platforms effectively. Without proper economic incentives, the adoption and sustained use of social media for health communication purposes may be hindered (Uganda Communication Commission, 2022).

Cyber Insecurity: Another economic factor that can influence the use of social media for health communication is the issue of cyber insecurity. In regions where internet infrastructure and cybersecurity measures are not well-established, EHPs may be hesitant to use social media

platforms due to concerns about data breaches, privacy infringements, and online security risks. The need for robust cybersecurity measures and investments to ensure the protection of sensitive health information can impact the willingness of EHPs to adopt social media for health communication purposes.

High Cost and Unreliable Electricity Supply: The high cost and unreliability of electricity supply can further impede the use of social media as a health communication tool. In areas with limited access to affordable and reliable electricity, EHPs may face challenges in maintaining continuous connectivity and utilizing social media platforms effectively. The lack of stable power supply can hinder the adoption and sustained use of social media for health communication purposes. (Uganda Communication Commission, 2022).

Government Policies and Control Measures: To address some of these economic challenges, governments have developed policies to regulate and promote the use of social media for government agencies, including health bodies. These policies aim to create an enabling environment and provide support for the adoption of social media as a health communication tool. Additionally, some social media platforms have implemented control measures to curb the spread of misinformation and divergent views regarding health matters. These initiatives help create a more trustworthy and reliable online environment for health communication.

2.4 Social demographic factors

The limited use of social media in health communication among Environmental Health Professionals (EHPs) can be influenced by various social demographic factors.

Age Group: Age is a significant social demographic factor that influences the use of social media in health communication. Elderly EHPs may be less familiar with computer usage and may lack the necessary digital skills and knowledge to effectively navigate and utilize social media platforms. As a result, they may be less likely to adopt and use social media for health communication purposes compared to younger EHPs.

Knowledge, Education, and Skills: The level of knowledge, education, and skills related to technology and social media can significantly impact the adoption and use of these platforms for health communication. EHPs with limited knowledge and skills in using social media may be hesitant to incorporate these tools into their practice. Providing comprehensive training and

support to enhance EHPs' understanding of the value and benefits of social media, as well as their proficiency in using these platforms, can help overcome this barrier.

Time Constraints: Time constraints are another social demographic factor that can affect the use of social media in health communication. EHPs often have busy schedules with various responsibilities, such as monitoring, surveillance, risk assessment, and public education. Limited time availability may make it challenging for EHPs to allocate sufficient time for social media engagement and communication. Addressing time management and providing strategies to integrate social media into their routine activities can help overcome this barrier.

Perceived Value and Trust: The perceived value and trust associated with social media platforms also influence their adoption and use for health communication. If EHPs perceive social media as untrustworthy or irrelevant to their work, they may be reluctant to utilize these platforms. Building awareness of the value and benefits of social media for health communication, addressing privacy and confidentiality concerns, and providing social support can help foster trust and increase the acceptance and use of social media among EHPs.

Attitude toward the Use of Social Media for COVID-19 Related Information in Northwest Ethiopia, it was found that health professionals had a moderate attitude toward the use of social media for accessing COVID-19-related health information (Tegegne et al., 2022) .

Hence there is need to close the gaps by providing comprehensive training of EHPs on the perceived value and use of social media tools including privacy and confidentiality, and provide social support to build trust among EHPs toward using social media for health communication

CHAPTER THREE

3.1 Problem statement:

The use of social media technologies for health communication has witnessed rapid growth, with numerous health professionals recognizing their potential benefits in disseminating health information and engaging with patients and communities (Azzopardi-Muscat and Sørensen, 2019). However, the extent to which environmental health professionals in Uganda utilize social media for health communication, as well as its overall effectiveness, remains poorly understood(Agena,

2019). This lack of understanding stems from the reluctance of Public Health Professionals (PHPs) to embrace social media, impeding the identification and mitigation of dominant health misinformation trends that contribute to the spread of false information (Manuel M. Dayrit, 2022). Consequently, the absence of PHPs on social media platforms leaves students, patients, health professionals, the general public, and caregivers vulnerable to misinformation that can adversely affect their lives (Yemisi Adegoke, 2020, Zhang Y-t, et al. 2021). Notably, young people, constituting a significant portion of Uganda's population, are highly influenced by social media compared to traditional media forms (Nabwiiso, 2015)

In an effort to enhance public engagement and communication, the Government of Uganda mandated all Ministries, Departments, Agencies, including Local Governments, to establish Twitter and Facebook accounts and developed a social media guide to regulate their use, defining resources, goals, objectives, audience, benefits, risks, mitigations, and success metrics (NITA-UG, 2013). Despite these initiatives, the utilization of social media in the healthcare sector is hindered by organizational barriers that restrict staff, including health educators, from accessing and using social media in their work. Social media's potential as a health message delivery platform is limited by concerns over reliability, confidentiality, privacy, the risk of personal information disclosure, dissemination of incorrect advice, information overload, promotion of negative health behaviors, and potential deterrence of face-to-face interactions with healthcare professionals (Charles C. Dike et al, 2019).

To address these challenges, the study assessed the attitudes and perceptions on use of social media technologies as health communication tools among environmental health professionals in Wakiso district, Uganda in order to improve their effectiveness during the delivery of health messages.

3.2 Justification of the study:

This study generated valuable information on the attitudes and perceptions on the use of social media technologies as health communication tools among environmental health professionals in Wakiso district, Uganda.

This information will contribute to enhancing the effectiveness of social media in health communication, and inform the development of strategies to effectively integrate social media

technologies into health communication efforts as well as provide a solid foundation for future studies in this domain.

3.3 Research Questions:

i)   What is the current level of social media technology utilization among Environmental Health Professionals in Wakiso, Uganda?

ii)   What are the attitudes and perceptions of EHPs towards social media as a communication tool in the health care sector?

CHAPTER FOUR

4.1 Objectives of the study:

The main objective of the study was to assess the attitude and perceptions of the use of social media technologies as tools of communication among Environmental Health Professionals in Wakiso district, Uganda in order to improve their effectiveness during the delivery of health messages.

4.2 Specific objectives:

i)   To assess the current level of social media technology utilization among Environmental Health Professionals in Wakiso, Uganda.

ii)   To examine the attitudes and perceptions of EHPs towards social media as a communication tool in the health care sector.

4.3 Conceptual framework:

Social demographic factors:

- Sex
- Age
- Level of education
- Salary/ income
- Time
- Locality

Organizational factors:

- Organizational support
- Regulation and ethical consideration
- Organizational culture

Perceptions and attitudes of EHPs on Use of social media technologies as a Health communication tool.

Perceived benefits and risks.

– Perceived effectiveness

– Perceived reach and accessibility

– Perceived interactivity and engagement

– Perceived risks

Individual characteristics

– Personal beliefs and values

– Digital literacy and skills

– Professional experience

4.4   Conceptual narrative:

Attitudes and perceptions of environmental health professionals (EHPs) towards social media as a communication tool in the health communication can be influenced by several factors;

EHPs' own beliefs and values regarding technology, communication, and professional responsibilities can shape their attitudes towards social media. EHPs' level of proficiency and familiarity with social media platforms can influence their perceptions of its usefulness and effectiveness. EHPs' previous experiences using social media for health communication and their exposure to its potential benefits or drawbacks can impact their attitudes.

Perceived effectiveness: EHPs' beliefs about the ability of social media to effectively disseminate health information, engage with the public, and promote behavior change. The extent to which EHPs perceive social media as a means to reach diverse populations and communities, including those traditionally difficult to engage with.

Perceived interactivity and engagement: EHPs' perceptions of the ability of social media to foster two-way communication, facilitate dialogue, and build relationships with stakeholders. Perceived risks: EHPs' concerns regarding potential risks associated with social media use, such as misinformation, privacy breaches, professional ethics, and cyber-attacks.

Organizational Factors:

Organizational support: The extent to which EHPs' employing organizations promote and facilitate the use of social media as a communication tool, provide resources, training, and guidelines. Regulatory and ethical considerations: The presence of guidelines, policies, and professional codes of conduct that shape EHPs' use of social media in their professional capacity. Organizational culture: The prevailing attitudes, values, and norms within the healthcare organization regarding the adoption and integration of social media for communication purposes.

External Influences:

Public perception and demand: EHPs' awareness of public interest and demand for health information through social media, and the perceived role of EHPs in meeting this demand.

Peer influence and professional networks: The influence of colleagues, professional networks, and opinion leaders within the field of environmental health on EHPs' attitudes towards social media.

Media portrayal: The portrayal of social media in the mainstream media, including news articles, reports, or studies highlighting success stories or negative incidents related to social media use in healthcare.

Contextual Factors:

Cultural and social context: The influence of cultural norms, values, and social structures on EHPs' attitudes towards the use of social media for health communication.

Resource availability: The level of access to necessary technological infrastructure, internet connectivity, and resources required for effective social media use.

CHAPTER FIVE

5.0 METHODOLOGY

5.1 Study site:

The study was conducted in Wakiso District, formally part of Mpigi district is located in Buganda, central region of Uganda. The district was formed in 2000 and is made up of two counties of Busiro and Kyadondo, seven constituencies, six town councils, fifteen sub counties, two town boards, 146 parishes and 704 villages. The district surrounds Kampala Capital City and borders with Nakaseke and Luweero districts to the north, Mukono district to the East, Kalangala district in the Lake Victoria to the south, Mpigi district to the southwest and Mityana district o the northwest. The headquarters are located in Wakiso Town Council, 16km from Kampala Capital City, off Hoima highway, coordinates 00 24N, 32 29E. The current population of the district is 2,007,700 with a growth rate of 4.1% and a population density of 700 persons per square kilometer. (Wakiso District, 2023)

5.2 Study population:

All district staff under the public health department. That is, Environmental Health officers, health inspectors, and health assistants.

5.3 Study design:

The study was a cross-sectional design using quantitative method.

5.4 Sample size:

The sample was estimated using the Leslie Kish formula (1965)

$$N = \frac{Z^2 pq}{d^2}$$

Where;

N is the sample size

P is the proportion of EHP using SMTs as health communication tools in Wakiso which is 0.5 since I wasn't able to find a previous study about the subject.

Z=1.96 is the standard normal value corresponding to the alpha level of confidence

q Is the proportion of medical students who do not consume alcohol is (1-p) = 0.5

d= 0.05 the expected error

$$N= \frac{1.96^2 \times 0.5 \times 0.5}{0.05^2}$$

N=384

Wakiso district has approximate 67 environmental health workers. Therefore, the sample size was adjusted to fit the finite EHPs using the formular.

Sample size for a finite population = N/1+((N-1)/EHPs)

$$= 384/1+((384-1)/67)$$

$$= 57$$

5.5 Sample procedures and selection criteria:

The study used a simple random sampling method to select environmental health professionals in Wakiso District. The sample size was 57.

5.6 Inclusion criteria:

Environmental Health Officers, Health Inspectors and Health Assistants registered in the Public Health Departments of all the Local Government structures of Wakiso district.

5.7 Exclusion criteria:

Any Environmental Health Professional who chooses not to take part in the study.

Other professionals both in public health and other departments in Wakiso local government.

5.8 Data collection tool:

57 physical questionnaires were designed to satisfy the research questions and objectives of the study.

5.9 Data collection procedure:

Quantitative Data Collection: A structured physical questionnaire was used to collect quantitative data from the study. The questionnaire contained questions on the attitudes and perceptions on the use of social media technologies as health communication tools, the effectiveness of these tools in promoting health communication and behavior change, and the challenges faced by environmental health professionals in using these tools.

5.10 Quality control:

After consenting to participate in the study, guidelines and questionnaires was sent to willing participants. The self-interview took 15 – 20 minutes while filling and only completed questionnaires was considered.

5.11 Variable:

Dependent variable,

- Use of social media as a health communication tool

Independent variable,

1. . Demographic information

Age, Sex, Marital Status (married, single, divorced or separated), Education background, income (salary), area of residence,

2. Social media usage
3. Perceived benefits
4. Perceived barriers
5. Peer influence
6. Knowledge and skills
7. Target Audience Engagement
8. Future perspectives

5.12 Data management and analysis:

Data was collected from the structured questionnaires and data was analyzed using descriptive statistics. Questionnaires were checked for completeness and entered into STATA software for analysis.

5.13 Ethical consideration:

The study was conducted in compliance with the guidelines of the Uganda National Council for Science and Technology (UNCST) and the World Health Organization (WHO). Respondents were informed of the purpose of the study, and provided with a consent form each to sign before filling the research questionnaires. Participants were assured of confidentiality and anonymity.

5.14 Study limitations:

There were many incomplete questionnaires due to use of physical forms. This was collected by crosschecking for completeness.

5.15 Dissemination of results:

The research findings will be presented to Makerere University, School of Public Health as a part of the requirement for the award of a Bachelor's Degree in Environmental Health Sciences.

CHAPTER SIX

6.0 RESULTS

6.1 Demographic Characteristics of Environmental Health Professionals in Wakiso Division.

The majority of respondents were age 31-40 years (46.8%), followed by 41-50 (29.8%). The age group above 51 years has the lowest representation (10.6%). The respondents are predominantly male (63.8%) compared to female (36.2%). The highest proportion of respondents have a certificate level of education (46.8%), followed by a diploma (34%). The majority of respondents are ever married (51.1%), while 44.7% have never married. The largest religious group among respondents is Muslim (40.4%), followed by Catholic and Anglican (both 21.3%), and Pentecostal (17%). Health assistants comprise the largest group (55.3%) followed by health inspectors (25.5%). The respondents are almost evenly distributed across urban (29.8%), semi-urban (40.4%), and rural (29.8%) areas. The majority of respondents earn a salary ranging from 1-1.9 million Ugandan Shillings (63.8%).

Table 1:

Descriptive analysis of demographic characteristics of Environmental Health Professionals in Wakiso District.

Variable	Category	Number(n=47)	Percentages (%)
Age	20-30	8	17
	31-40	21	46.8
	41-50	13	29.8
	51-55	5	10.6
Gender	Male	30	63.8
	Female	17	36.2
Education	Certificate	19	46.8
	Diploma	16	34
	Degree	8	17
	Post-graduate	4	8.5
Marital status	Never married	21	44.7
	Ever married	26	51.1
Religion	Muslim	19	40.4
	Catholic	10	21.3
	Anglican	10	21.3
	Pentecostal	8	17
Employment rank	Health Assistant	26	55.3
	Health inspector	12	25.5
	Senior Health Inspector	4	8.5
	Principal health inspector	4	8.5
	ADHO	1	2.1
Locality	Urban	14	29.8
	Semi-urban	19	40.4
	Rural	14	29.8
Salary	400,000-490,000	1	2.1
	1-1.9 million	30	63.8
	Above 2 million	17	36.2

6.2 Univariate analysis:

6.2.1 Assessing the current level of social media technology utilization among Environmental Health Professionals in Wakiso, Uganda

Majority of respondents (95.7%) reported using social media, with the most commonly used platform being WhatsApp (71.9%). About 46.8% of respondents reported using social media for health communication. The majority of respondents reported using social media for health communication occasionally (44.7%). A significant number of respondents expressed being very confident (41%) in using social media for health communication. The most common types of health information shared were sharing health information and resources (42.6%) and communicating with community members (31.9%).

Table 2:

| Variable	Category	Number(n=47)	Percentage (%)
Use social media	Yes	45	95.7
	No	2	4.3
Social media platforms used	Facebook	6	13
	Twitter	5	10.9
	Instagram	1	2
	WhatsApp	33	71.9
	YouTube	2	2.2
Use social media for health communication	Yes	22	46.8
	No	25	53.2
Social media platforms used for health communication	Facebook	13	27.7
	Twitter	11	23.4
	WhatsApp	45	95.7
	YouTube	3	6.4
Current social media usage for health communication	Multiple times a day	11	23.4
	A few times a week	14	29.8
	Occasionally	21	44.7
	Rarely or never	1	2.1
Types of health information shared on social media	Sharing health information and resources	20	42.6
	Communicating with community members	15	31.9
	Collaborating with fellow EHPs and other professionals	11	23.4
	Monitoring and surveillance of health-related events	1	2.1
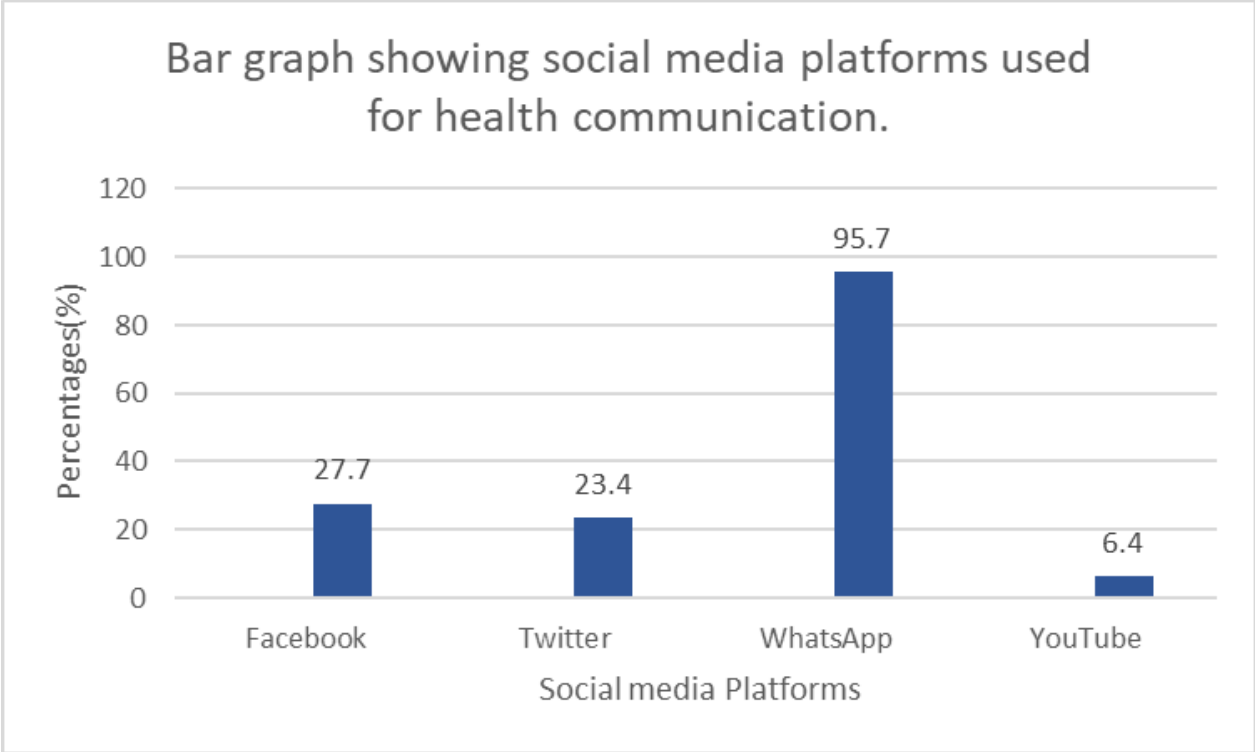
Fig 1: A bar graph showing social media platforms used for health communications.

6.2.2 **Assessing the Attitudes and Perceptions of use of social media as a health communication tool among Environmental Health Professionals in Wakiso District.**

The majority of respondents perceived social media as effective (44.7%) or very effective (12.8%) for health communication. Nearly half of the respondents (48.9%) reported being moderately familiar with social media features and functionalities. A significant proportion of respondents (44.7%) believed that social media can influence public awareness and behavior. More respondents expressed concerns about social media not being safe (59.6%) compared to those who believed it was safe (40.4%). The top risks identified by respondents were the credibility of the source of content (81%) and privacy concerns (69%). The most common challenges reported were lack of access to the internet (78.7%), lack of training (72.3%), and difficulty in reaching certain communities (72.3%). A majority of participants (46.81%) selected the neutral option, indicating a lack of strong agreement or disagreement regarding social media's ability to facilitate better community engagement compared to traditional channels. A smaller proportion of participants either strongly agree (23.40%) or strongly disagree (19.15%) with the statement that social media allows better engagement with the community compared to traditional channels.

Table 3;

Variable	Category	Number(n=47)	Percentages (%)
Effectiveness of social media as a health communication tool	Very ineffective	10	21.3
	Neutral	13	27.7
	Effective	21	44.7
	Very effective	6	12.8
Familiarity with social media features and functionalities	Not familiar at all	4	8.5
	Moderately familiar	23	48.9
	Very familiar	12	25.5
	Extremely familiar	9	19.1
Believe social media can influence public awareness and behavior	Not at all	10	21.3
	Moderately	13	27.7
	Quite a bit	21	44.7
	Very much	6	12.8
Social media is safe	Yes	19	40.4

35

	No	28	59.6
Risks in using social media	The credibility of the source of content	34	81
	Privacy	29	69
	Professional ethics	26	61.9
	Cyber-attacks and bullying	19	45.2
Challenges faced when using social media	Lack of time	30	63.8
	Lack of training	34	72.3
	Difficulty in measuring impact	30	63.8
	Difficulty in reaching certain communities	34	72.3
	Lack of access to the internet	37	78.7
Social Media is a reliable source of health information	Strongly agree	20	42.55
	Agree	9	19.15
	Neutral	1	2.13
	Disagree	12	25.53
	Strongly Disagree	5	10.64
Social media allows better engagement with the community compared to traditional channels	Strongly agree	11	23.40
	Agree	4	8.51
	Neutral	22	46.81
	Disagree	1	2.13
	Strongly Disagree	9	19.15

A Pie Chart showing the percentages of respondents who believed social media is safe for health communication.
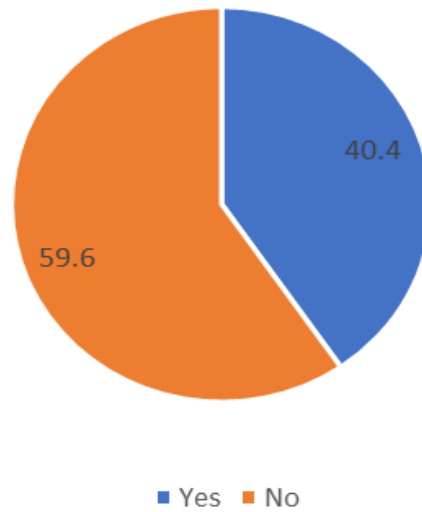
40.4

59.6

■ Yes ■ No

Fig 2: A pie chart showing the percentages of respondents who believe social media is safe for health communication.
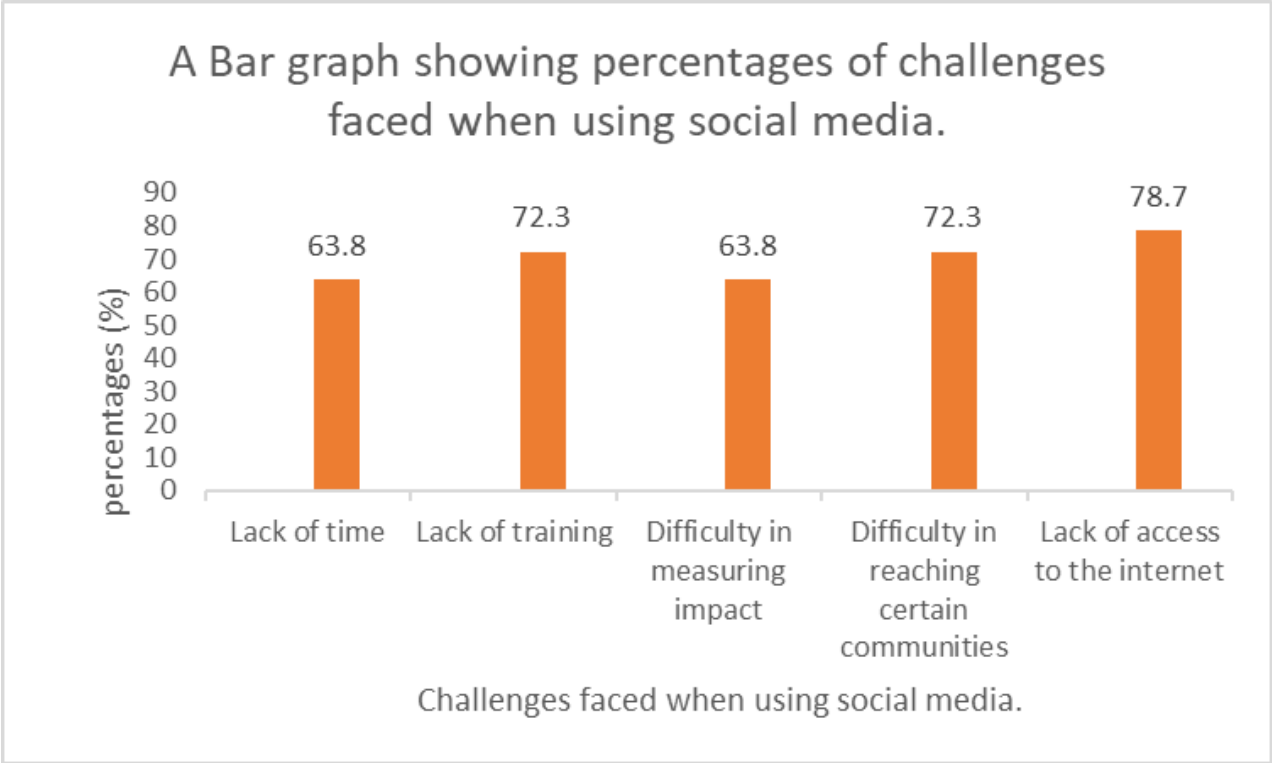
Fig 3: A Bar graph showing the percentages of challenges faced when using social media

CHAPTER SEVEN

7.0 DISCUSSION:

The demographic characteristics of the respondents provide important contextual information that can help interpret the findings and implications of the study. The discussion will focus on key demographic trends observed among the participants, including age, gender, education, marital status, religion, occupation, location, and income.

The majority of respondents fell in the age group of 31-40 years (46.8%), followed by the 41-50 age group (29.8%). This distribution suggests that the survey reached a relatively younger population, which is important to consider when assessing the attitudes and perceptions of using social media as a health communication tool. The lower representation of respondents above the age of 51 (10.6%) may indicate a potential digital divide among older individuals, highlighting the need for targeted interventions to ensure inclusivity and accessibility of health information on social media platforms for all age groups.

In terms of gender distribution, the respondents were predominantly male (63.8%) compared to female (36.2%). This gender imbalance could influence the findings and may reflect broader gender disparities in internet access and social media usage patterns. Understanding these gender dynamics is crucial for tailoring health communication strategies to effectively reach and engage both male and female populations, ensuring equitable access to health information and resources.

In terms of educational attainment, the highest proportion of respondents had a certificate level of education (46.8%), followed by a diploma (34%). This suggests that the survey captured a diverse range of educational backgrounds, which can influence the digital literacy and information-seeking behavior of respondents. Considering the varying levels of educational attainment is essential for developing health communication initiatives that are accessible, user-friendly, and cater to the specific needs of different educational groups.

Regarding marital status, a slight majority of respondents were ever married (51.1%), while 44.7% reported never being married. These findings can have implications for health communication strategies, as the information needs and preferences may differ between married and unmarried individuals. Understanding these differences can help in tailoring content and delivery methods to effectively reach and engage different marital status groups in health promotion efforts.

Religious affiliation among the respondents revealed a diverse representation, with the largest religious group being Muslim (40.4%), followed by Catholic and Anglican (both 21.3%), and Pentecostal (17%). This diversity reflects the multicultural and multi-religious nature of the surveyed population. It is important to acknowledge and respect these religious beliefs and practices when designing health communication campaigns, ensuring that information is culturally sensitive and inclusive of diverse religious perspectives.

Occupationally, health assistants comprised the largest group of respondents (55.3%), followed by health inspectors (25.5%). These findings suggest that the survey primarily reached individuals working within the healthcare sector. The use of social media as a health communication tool, as they may play a significant role in disseminating accurate information and guiding health-related discussions on these platforms.

In terms of geographical distribution, the respondents were almost evenly distributed across urban (29.8%), semi-urban (40.4%), and rural (29.8%) areas. This geographic diversity is valuable as it allows for insights into the perceptions and challenges associated with social media use for health communication in different settings. Tailoring strategies to address the specific needs and infrastructure constraints of each area can contribute to more effective health communication interventions. Finally, the majority of respondents reported earning a salary ranging from 1-1.9 million Ugandan Shillings (63.8%). Understanding the income levels of the participants is important as it can influence internet access and affordability of digital devices, which, in turn, can impact social media usage patterns and preferences. Ensuring access and affordability for individuals with lower income levels is crucial to avoid exacerbating health information inequalities.

The results of the study provide valuable insights into the attitudes and perceptions of Environmental Health professionals (EHPs) who responded regarding the use of social media as a health communication tool. The high percentage of respondents (95.7%) who reported using social media highlights its widespread adoption in the surveyed population. This indicates that social media platforms have become a prevalent means of communication in the context of health.

WhatsApp emerged as the most commonly used social media platform among respondents (71.9%). This finding suggests that messaging applications play a significant role in health communication, potentially due to their ease of use, convenience, and widespread availability.

Regarding the use of social media for health communication, approximately 46.8% of respondents reported utilizing social media platforms for this purpose. This finding indicates a considerable number of individuals recognizing the potential of social media as a tool for disseminating health-related information. This is in line with the recent survey done in Northwest Ethiopia which reported a moderate attitude toward the use of social media during COVID19(Tegegne et al., 2022).

Among those using social media for health communication, a majority reported doing so occasionally (44.7%). This suggests that social media is utilized as a supplementary communication channel rather than the primary means of conveying health information.

It is encouraging to note that a significant number of respondents expressed high confidence (41%) in using social media for health communication. This confidence suggests that respondents recognize the effectiveness and value of social media as a platform for engaging with communities and delivering health-related messages.

The types of health information shared on social media were primarily related to sharing health information and resources (42.6%) and communicating with community members (31.9%). These findings highlight the importance of social media in facilitating information dissemination and community engagement in the context of health promotion.

The majority of respondents perceived social media as effective (44.7%) or very effective (12.8%) for health communication. This positive perception underscores the potential of social media platforms in reaching a wide audience and influencing public awareness and behavior.

However, it is worth noting that a significant proportion of respondents expressed concerns about the safety of social media (59.6%), particularly regarding the credibility of the source of content (81%) and privacy concerns (69%). This explains why effective health communication by social media remains poor among EHPs in Uganda(Agena, 2019). These concerns reflect the need for strategies to address misinformation, promote credible sources, and ensure data privacy and security in health communication on social media platforms.

The survey also identified several challenges associated with using social media as a health communication tool. The most common challenges reported were lack of access to the internet (78.7%), lack of training (72.3%), and difficulty in reaching certain communities (72.3%). These

challenges underscore the importance of addressing infrastructure limitations, providing necessary training and support, and implementing targeted strategies to ensure equitable access to health information through social media. Overcoming these challenges was crucial in maximizing the potential of social media for health communication, especially in underserved communities.

In terms of community engagement, respondents showed a lack of strong agreement or disagreement regarding whether social media allows better engagement compared to traditional channels, with a majority selecting the neutral option (46.81%). This suggests a need for further exploration and evaluation of the specific benefits and limitations of social media in facilitating community engagement, as perceptions may vary based on factors

In conclusion, the survey results shed light on the attitudes and perceptions of respondents regarding the use of social media as a health communication tool. While social media is widely used and perceived as effective, concerns about safety and challenges related to infrastructure and training need to be addressed. These findings provide valuable insights for healthcare professionals and organizations to leverage the potential of social media while addressing the associated challenges to ensure effective and responsible health communication.

CHAPTER EIGHT

8.0 CONCLUSION AND RECOMMENDATIONS

8.1 Conclusion:

In conclusion, the survey provides valuable insights into the attitudes and perceptions of using social media as a health communication tool among environmental health professional respondents in Wakiso District. The findings highlight several key points.

Firstly, social media is widely used among the EHPs in Wakiso District, with WhatsApp being the most commonly used platform. This indicates the potential of leveraging social media platforms, particularly WhatsApp, for health communication initiatives.

A significant proportion of EHP respondents in Wakiso District reported using social media for health communication, although mostly on an occasional basis. This suggests that there is an opportunity to further promote and encourage consistent utilization of social media as a platform for disseminating health information and engaging with the community.

The EHP respondents expressed a moderate level of confidence in using social media for health communication, indicating a positive outlook towards its effectiveness in this context. This confidence can contribute to more active and meaningful engagement with health-related content on social media platforms The types of health information most commonly shared on social media included sharing health information and resources, and communicating with community members. These findings emphasize the importance of social media in facilitating the exchange of valuable health-related content and fostering community engagement.

The respondents generally perceived social media as effective for health communication, highlighting its potential to complement traditional channels and reach a wider audience. However, concerns regarding safety, particularly credibility and privacy, were expressed by a considerable number of participants. Addressing these concerns through verification mechanisms and privacy safeguards is crucial to build trust and maximize the effectiveness of social media as a health communication tool.

Challenges related to access to the internet, lack of training, and difficulties in reaching certain communities were identified. Overcoming these challenges is essential to ensure equitable access

to health information and maximize the benefits of social media in health communication, particularly in underserved areas and populations.

Demographically, the respondents primarily belonged to the age groups of 31-40 and 41-50, with a higher representation of males. The educational attainment varied, with a majority having certificate-level education. These demographic factors provide important context for understanding the attitudes and preferences of the respondents, guiding the development of tailored health communication strategies.

The survey highlights the potential and challenges of using social media as a health communication tool. It underscores the importance of consistent utilization, addressing safety concerns, overcoming challenges, and considering demographic characteristics when designing and implementing effective health communication initiatives using social media platforms.

8.2 Recommendations:

several recommendations can be made to enhance the use of social media as a health communication tool:

Promote awareness and education: Implement targeted awareness campaigns to educate the population about the benefits and risks of using social media for health communication. This can help address concerns related to credibility, privacy, and safety.

Strengthen training and capacity building: Provide comprehensive training programs to health professionals and individuals involved in health communication, equipping them with the necessary skills to effectively use social media platforms. This will enable them to create and share accurate and reliable health information while engaging with the community.

Enhance collaboration and partnerships: Foster collaborations between health authorities, organizations, and social media platforms to ensure the dissemination of accurate and up-to-date health information. Establishing partnerships can also facilitate the development of guidelines and best practices for health communication on social media.

Tailor content to different audiences: Recognize the diverse demographics of social media users and develop targeted content that addresses the specific needs and preferences of different age groups, genders, educational backgrounds, and religious affiliations. This will increase engagement and relevance of health information shared on social media.

Ensure inclusivity and accessibility: Address the challenges related to internet access and reach in underserved communities. Explore innovative solutions such as partnerships with internet service providers or community centers to improve access. Additionally, ensure that health information shared on social media is accessible to individuals with disabilities by incorporating features like closed captions and alt-text for images.

Foster engagement and interaction: Encourage active community participation and engagement on social media platforms. Facilitate discussions, respond to queries, and encourage sharing of personal experiences related to health topics. This will create a supportive and interactive environment that fosters trust and encourages knowledge sharing.

Monitor and evaluate impact: Implement mechanisms to monitor and evaluate the impact of social media interventions on health outcomes and behavior change. Collecting feedback from users and analysing engagement metrics can help identify areas of improvement and inform future strategies.

Continuous improvement and adaptation: Stay updated with evolving social media trends, features, and user preferences. Regularly review and adapt health communication strategies to align with the changing landscape of social media platforms.

By implementing these recommendations, health authorities, organizations, and individuals can harness the power of social media to effectively communicate health information, engage with communities, and promote positive health behaviours.

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APPENDICES

Appendix 1: Work plan

No	Activity	Time									Remarks
		Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023	Apr 2023	May 2023	June 2023	July 2023	
1	Proposal writing	██	██	██	██						
	Printing of the proposal				██						
3	Submission of the proposal				██						
4	Data collection				██	██					
5	Data entry and analysis						██				
6	Report writing							██	██	██	
7	Submission of the dissertation									██	

Appendix 2: Budget

No.	Item	Details	Unit price (UGX)	Amount (UGX)
1	Internet data	30GB for proposal writing, data collection and analysis	100,000 per 30GB	100,000
2	Airtime	For communicating during the data collection	100,000	100,000
3	Printing and binding	6 copies of proposal and dissertation	18,000	108,000
4	Transport	For visiting health departments in Wakiso		200,000
7	Miscellaneous			50,000
8	**Total**			**558,000**

Appendix 3: Informed Consent form

ASSESSING THE USE OF SOCIAL MEDIA TECHNOLOGIES AS HEALTH COMMUNICATION TOOLS AMONG ENVIRONMENTAL HEALTH PROFESSIONALS IN WAKISO DISTRICT, UGANDA

CONSENT FORM FOR PARTICIPANTS

Date: ………………………………

Good day Sir/ Madam,

My name is NEWTON BALENZI, a year three student pursuing a bachelor's degree in Environmental Health Science from Makerere University. As a requirement for the award of the degree, I'm carrying out a study on ASSESSING THE USE OF SOCIAL MEDIA TECHNOLOGIES AS HEALTH COMMUNICATION TOOLS AMONG ENVIRONMENTAL HEALTH PROFESSIONALS IN WAKISO DISTRICT, UGANDA. The purpose of the study is to assess the level of use of social media technologies as tools of communication among Environmental Health Professionals in Wakiso district, Uganda. This would improve effectiveness during the delivery of health messages.

I, therefore, request you to participate in this study as a stakeholder and an Environmental Health Professional in Wakiso District. Please note that your participation is voluntary. You may choose not to participate or withdraw from the study at any time you wish.

If you agree to participate in this study, you were asked to complete an online self-administering survey that was take approximately 20 minutes. It will include questions about you as an Environmental Health Professional on the use of social media tools in health communication, perceptions of the benefits and challenges of using these tools, and your demographic information.

This study has no known risks associated with participating in it. The findings will inform the development of strategies to effectively integrate social media technologies into health communication in the Wakiso district and form a foundation for future studies.

On confidentiality, information collected was kept confidential and used for research purposes only. Be assured that your name and other identifying information was not be used in any reports or publications resulting from this study. Survey responses was kept confidential and was identified only by a code number.

Consent:

By signing this consent form, you are indicating that you have read and understood the information provided in this form, and that you agree to participate in the study.

Signature of participant……………………...   Date: …………………….

Interviewer's signature……………...………..   Date……………………...

Appendix 4: Questionnaire

NO.	QUESTIONS	RESPONSE (tick to choose the option of your choice)
	Section A; Socio-Demographic	
1	Gender	1. Male 2. Female
2	Age	20 – 30, 31 – 40, 41 – 50, Above 51
3	Education level	Certificate, Diploma, Degree, Post Graduate, Others ……
4	Salary range	1. 400,000 – 490,000 2. 500,000 – 900,000 3. 1,000,000 – 1,900,000 4. 2,000,000 - above
5	Employment rank	1. Volunteer in the Public Health Department 2. Health Assistant 3. Health Inspector 4. Senior Health Inspector 5. Principle Health Inspector 6. ADHO – Environmental Health Others (Please specify) ……………………………………
6	Locality	1. Urban 2. Semi-urban 3. Rural
7	Religion	7. Muslim 8. Pentecostal 9. Catholic 10. Anglican 11. Indigenous religion 12. Others (specify) …………………………………
8	Marital status	1. Currently Married 2. Never Married 3. Divorced/Separated 4. Widowed 3.

Section B: Social media Usage (cycle the right answer)

1. Are you on social media?

   a. Yes b. No

2. If yes, which ones?

   a. Facebook b. Twitter c. WhatsApp d. YouTube e. Others (Please specify) ……………

3. How often do you use social media in health communication?

   a. Never b. Rarely c. Occasionally d. Always

4. Which social media platforms do you use most for health communication?

   a. Facebook b. Twitter c. WhatsApp d. YouTube e. Other (Please specify) ………………

5. What type of health information do you typically share on social media? (You can select more than one)

   a. Sharing health information and resources   b. Communicating with community members

   c. Collaborating with fellow EHPs and other health professionals

   d. Monitoring and surveillance of health-related events

6.In your opinion, how effective is the use of social media in enhancing health communication among environmental health professionals and the communities they serve?

   a. Not effective at all b. Somewhat effective c. Effective d. Very effective

Section c: Perceived barriers

1. Are there any challenges you face when using social media for health communication? (Select all that apply)

   a. Lack of time   b. Lack of training

   c. Difficulty in measuring impact   d. Difficulty in reaching certain communities

   e. Lack of access to the internet

2. How do you compare social media technologies with the traditional tools (Newspapers, TVs, Radio or physical means) in health communication?

   a. Not effective at all b. Somewhat effective c. Effective d. Very effective

3. Would you recommend the use of social media tools for health communication among environmental health professionals in Wakiso the district and other parts of the Country?

   a. Yes   b. No   c. Unsure

4. If No, what are some of the risks?

    a. The credibility of the source of content   b. Privacy

    b. Professional ethics   c. Cyber-attacks and bullying

    e. Others (specify)……………………………………………………

6. Are there any policies put in place at your workplace to support or regulate the use of social media tools in health communication?

    a. YES   b. NO

7. If yes, please list at least one.

……………………………………………………………………………………

……………………………………………………………………………………

Perceived Benefits

1. Do you think it's safe to use social media for health communication?

    b.   Yes   b. No

2. Have you observed any positive outcomes resulting from use of social media for health communication?

    a. Yes   b. No

Access and resources.

1. Do you have access to reliable internet connectivity for social media?

    a) Yes   b) No

2. Do you have access to necessary technology devices (e.g smartphones, computers) to use social media for health communication?

    a) Yes

    b) no

3.Have you received adequate training or guidance on how to effectively use social media for health communication?

    a) Yes

    b) No

Knowledge and skills

1.How would you rate your knowledge and skills in using social media platforms?

Very good   Good   Fair   Poor   Very Poor

On a scale of 1-5, how confident are you in using social media for engaging with the public on environmental health topic?

5   4   3   2   1

Please rate your agreement with the following statements;

1.social media is an effective tool for disseminating environmental health information.

Strongly agree   Agree   Not Sure   Disagree   Strongly disagree

How effective do you perceive social media to be in disseminating environmental health information?

Very ineffective

Ineffective

Neutral

Effective

Very effective

b. To what extent do you believe social media can influence public awareness and behavior regarding environmental health issues?

Not at all

Slightly

Moderately

Quite a bit

Very much

Confidence in using social media: On a scale of 1-5, please rate your confidence in using social media for engaging with the public on environmental health topics, with 1 being not confident and 5 being very confident.

Current social media usage: a. How frequently do you currently use social media platforms for professional purposes?

Multiple times a day

Once a day

A few times a week

Occasionally

Rarely or never

b. Which social media platforms do you primarily use for professional purposes? (Check all that apply)

Facebook

Twitter

Instagram

LinkedIn

YouTube

Other (please specify)

Familiarity with social media: a. How familiar are you with the features and functionalities of social media platforms commonly used for communication purposes?

Not familiar at all

Somewhat familiar

Moderately familiar

Very familiar

Extremely familiar

b. How confident are you in navigating privacy settings and ensuring data security on social media platforms?

Not confident at all

Slightly confident

Moderately confident

Very confident

Extremely confident