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## **DIGITAL HEALTH COMMUNICATION CAMPAIGNS AND PERCEIVED NORMS OF DRUG USE AMONG STUDENTS OF TERTIARY INSTITUTIONS IN AKWA IBOM STATE**

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### **ABSTRACT**

*This study examined digital health communication campaigns and how they shaped students' beliefs about drug use in tertiary institutions in Akwa Ibom State. The aim of the study was to assess students' level of exposure to digital health campaigns, to examine what they believed was normal or acceptable about drug use, and to find out if these campaigns had any effect on how they viewed drug use. The study adopted a cross-sectional survey design to gather data from students at a single point in time. The population consisted of 55,849 male and female students from different tertiary institutions across the state. A sample size of 381 students was selected using the Krejcie and Morgan formula. The data were collected using structured questionnaire and analysed using weighted mean scores (WMS) and standard deviation. Findings showed that many students (WMS = 2.92) took part in digital health campaigns by liking, sharing, or joining health discussions online. It was also found that some students believed it was okay to try drugs in certain situations like parties or to reduce stress. Also, the study showed that digital health campaigns helped many students think differently about drug use and even changed how they talked about it with their friends. The study concluded that digital health messages reached students and shaped their thoughts, but more engagement was still needed. It recommended that schools and health groups improve online campaigns, guide students on drug-related beliefs, and use friendly platforms to reach more young people.*

**Keywords:** *Digital Health, Drug Use, Students, Campaigns, Communication, Perceived Norms*

### **INTRODUCTION**

In recent years, digital health communication has witnessed tremendous advances as a tool in public health that have the effect of radically altering the way health information is conveyed, received, and applied — especially among young populations. This is a result of the digital explosion and the use of social media, which have aided the

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reaching of a geographically large and diverse audience with tailor made messages that are made easier and fast. With regard to the use of digital media in health promotion and behavioural change, it is particularly significant in contexts where there are high prevalence of health challenges such as drug abuse and a proportionately young population which constitutes the largest user of digital media.

In general, health communication is the study and use of communication strategies to influence individual or community decisions that impact health (Aondowase *et al.*, 2023). It spans interpersonal, organizational and mass levels of communication, and is a key part of the planning, implementation and evaluation of public health programmes. With the advent of the internet and mobile technology, health communication has evolved into digital health communication. Digital health communication is the integration of traditional health promotion and modern ICT tools to improve health outcomes (Udoudom & Igiri, 2024).

Digital health communication utilises electronic channels such as social media, websites, emails, text messaging, blogs and apps for sharing of health information, providing support and creating behaviour change. Aabel and Abeywarna (2018) further explains that digital health tools can improve accessibility, increase user engagement, personalise the contents and enables real time feedback. As internet penetration increases and mobile phone access expands amongst the youth in Africa, the use of digital health communication is steadily developing. Over 100 million Nigerians are projected to be internet users, as shown in 2023 by the Nigerian Communications Commission (NCC, 2023), making Nigeria a fertile ground for digital health campaigns, especially those targeting behaviours such as drug and substance abuse.

The goal of health communication is not just about passing information, it involves crafting meaningful and persuasive messages that are culturally relevant, and actionable (Abernethy *et al.*, 2022). It operates under several behavioural theories and models notably Health Belief Model, Theory of Planned Behaviour and the Social Norms Theory, all of which help explain how people understand health messages and what response they give to them.

Digital health communication is a somewhat more specific communication field that uses modern digital technologies to communicate health-related information (Adjekum *et al.*, 2018). According to Escoto *et al.* (2021) digital health communication enables personalised and timely health interventions, which thus gives it advantage over traditional media.

Globally, digital health campaigns function now as the central approach for health promotion efforts. The Centres for Disease Control and Prevention (CDC) utilises YouTube together with Twitter platforms to deliver continuous smoking cessation and sexual health and mental health messages in the United States as well as other countries. The National Health Service (NHS) in the United Kingdom conducts digital campaigns to handle obesity management and alcohol abuse and mental health issues using social media platforms to target young people.

Digital health campaigns are beginning to have a great impact in Africa, and Nigeria in particular. For their part, organisations and government bodies are now recognising the possibilities of digital platforms in reshaping health attitudes and behaviours. There are a few campaigns that have made their way in the Nigerian health communication landscape such as drug abuse prevention, mental health awareness and diseases associated with lifestyle.

In 2023, the National Drug Law Enforcement Agency (NDLEA) launched the War Against Drug Abuse (WADA) campaign, a digital intervention for 15–35 year–old youth in Nigeria. Through platforms as such as YouTube, Instagram, Twitter and Facebook the campaign shared emotionally charged stories of drug reformed users and informative content to discourage drug abuse. With partnerships that involved celebrities like Naira Marley and others, the campaign reached over five (5) million young Nigerians. The outcomes were—23% more calls to the helpline and establishment of 126 drug-free clubs in secondary schools (NDLEA, 2023).

Also, another significant initiative in 2023 was 'the Sober Nigeria' campaign by the Youth Against Drug Abuse (YADA) Foundation. The goal of this campaign was to share consequences of alcohol abuse to university students and young professionals (18–30 years old), using Facebook, TikTok and YouTube. By partnering with authorities of tertiary institutions and state governments, YADA reached over 3 million youth and recorded a 15% drop in alcohol-related incidents on participating campuses (YADA, 2023).

In 2022, The Nigerian Psychiatric Association (NPA) implemented a digital campaign, 'Speak Up Nigeria', to enlighten Nigerians on the issue of mental health stigma. It engaged audiences actively on Twitter, Facebook, Instagram, and via roadwalks and radio shows. The campaign successfully reached 2.7 million Nigerians, led to a 50% increase in mental health clinic consultations, and established 300 support groups nationwide (NPA, 2023).

Similarly, in 2022, the Nigerian Heart Foundation (NHF) carried out the Heart of Gold campaign aimed at educating urban professionals in Lagos, Abuja, and Port Harcourt in the area of heart health. Facebook, blogs and WhatsApp Business presence helped to get the message to around 2 million professionals (NHF, 2023) which led to a 35% increase in knowing about risk factors of heart disease and a 28% jump in health checks.

In attempt to control tobacco consumption, a joint initiative between the Federal Competition and Consumer Protection Commission (FCCPC) and the National Drug Law Enforcement Agency (NDLEA) resulted in the 'Smokers Are Liable to Die Young' campaign. Utilising Facebook, YouTube and Instagram, the campaign targetted young people aged 18 - 25 with powerfully emotional videos and educational infographics focusing on the harms of smoking and vaping. Fitzpatrick (2023) reported a 10% decrease in smoking prevalence among young people within three years of the campaign's launch.

The NDLEA also ran a Substance Abuse Prevention campaign through websites, YouTube alongside Facebook and Twitter (now X), and online ads to reach young adults between 15 to 30 years old. The campaign increased public understanding of the dangers of psychoactive substance abuse and drove higher engagement with NDLEA's online education platforms (NDLEA, 2023).

“Perceived norms” are an individual's belief about how prevalent a behaviour is in his peer group or even in society. If students think that it is common and socially acceptable to use psycho-active substances, regardless of whether this might be true, they are more likely to do so (Eka, Onwurah, Ngozi, & Emeagui, 2020). Among tertiary institution students, perceived norms are shaped or developed by media portrayals, peer influence, and campus culture.

Previous studies have shown that peer perception is a strong predictor of substance use behaviour. The survey conducted by Eka *et al.* (2020) indicates Nigerian university students frequently consume drugs because they believe most other students are involved in drug behaviour. Adebayo (2019) conducted research which demonstrated that southwestern Nigerian university students exceeded 30% in the number of students who had

experimented with psychoactive substances driven by social acceptance and peer behaviour. Johnson *et al.* (2017) also discovered that students with greater online pro drug content exposure were at greater risk due to increased likelihood of perceiving the use of drugs as normal.

These perceptions are closely shaped by digital media. In particular, social media facilitates the transmission of both healthy and destructive content at a fast rate. Güzel and Arı (2022) mention targeted digital interventions can effectively reduce smoking rates by reshaping perceived norms and correcting misbeliefs. In a similar manner, Eka *et al.* (2020) opine that social media influenced health campaigns, primarily focusing on the dangers of drug use, and featuring positive alternatives, can greatly affect the behaviour of the youth.

With most students in tertiary institution being digital natives, they therefore come into contact with online content – be it good or bad – which has a direct impact on their decision making. It is therefore necessary to assess how students perceive current digital health communication campaigns in Akwa Ibom State, Nigeria, and whether these campaigns have the capacity to change or even suppress the perceived norms that influence drug use or prevent them.

There were several reasons why this study is necessary and timely. The first one deals with the fact that drug use among Nigerian youths (particularly, students in tertiary institutions) has become rife to the extent that both digital media contributes to this and can act as an antidote to it. Secondly, although digital health communication campaigns are becoming popular, there is no empirical evidence on how they affect students' perception and behaviours in specific regions like Akwa Ibom State.

## STATEMENT OF THE PROBLEM

In recent years, digital health campaigns have become a common tool for promoting better health choices among young people. These campaigns, often spread through social media and online platforms, are aimed at curbing risky behaviours such as drug use. However, among students in tertiary institutions across Akwa Ibom State, drug use continues to be a troubling issue. Many of these students are regularly exposed to digital messages warning against drug abuse, yet the expected change in behaviour seems lacking. This raises concern about whether these campaigns are connecting with students in ways that truly influence their actions, especially when social pressure and peer approval appear to carry more weight than the health advice presented online.

Although there have been studies on drug use and media campaigns in general, there is very little focused attention on how students in this part of the country actually respond to these digital efforts. What remains unclear is how these messages shape – or fail to shape – the beliefs and expectations students hold about drug use. Most of all, there is a gap in understanding whether these campaigns can shift the perceived norms within student circles or if they simply get ignored. This study, therefore, is guided by a key question: How do digital health communication campaigns influence the way students in tertiary institutions across Akwa Ibom State perceive the norms surrounding drug use?

## OBJECTIVES OF THE STUDY

Specifically, this study seeks to:

- I. find out how students in tertiary institutions in Akwa Ibom State take part in digital health communication campaigns.
- II. examine what students believe is normal or acceptable when it comes to using drugs.
- III. explore if digital health campaigns have any effect on how students view drug use.

## LITERATURE REVIEW

### Understanding Digital Health Communication Campaigns

It is indisputable that health communication today has changed from what it used to be before the rise of technology and the internet. Digital health communication has become one of the most powerful media of communicating messages for public health, especially for young people. Many young people are tied to digital devices. Understanding how digital health campaigns operate; their different types and application in the fight against drug use is vital for planning more effective interventions, especially for students in tertiary institutions.

Health communication can be defined as the study and use of communication strategies to inform and influence individual and community decisions that enhance health. It involves the use of messages intended to promote healthy behaviours and reduce risk behaviours such as drug abuse (King *et al.*, 2021). Digital technology redefined the old form of health communication. Today, there exist organized campaigns for digital health communication, which make use of digital platforms such as social media, mobile applications, websites, and SMS to reach specific groups of the population with health messages (Udoudom & Igiri, 2024).

Unlike posters and flyers that one might find on a wall or study table, digital campaigns are much more advanced versions. They are interactive, fast, driven by data, and can be distributed in real-time to reach a wider audience that is more diverse. Digital health campaigns content can range from video, graphics, quizzes, storytelling, chatbots, and even influencers (Adebayo, 2019). In essence, digital health campaigns have proven to be a more engaging and effective way of informing communities about health risks and changing behaviour positively.

Digital health campaigns can take many forms, depending on the goal, platform, and target audience. Here are some common types:

- I. **Social Media Campaigns:** These campaigns employ platforms such as Facebook, Instagram, Twitter (X), and TikTok to communicate health messages in creative and relatable forms. For example, drug abuse awareness campaigns could engage users with hashtags, reels, and influencer posts.
- II. **Mobile Health (mHealth) Campaigns:** These mobile phone interventions are characterized by the mass sending of tips and alerts via SMS reminders, health apps, or WhatsApp broadcasts. This remedy is brilliant, especially for low-resource settings (Udoudom & Igiri, 2024).
- III. **Web-Based Campaigns:** These activities are run through blogs, YouTube channels, and health-related websites where communities can find detailed information and resources on drug use prevention and treatment.
- IV. **Interactive Digital Tools:** Virtual games, quizzes, or simulation apps are tools that provide young people with interactive and educational approaches to learning about the dangers of drug use (Berkowitz *et al.*, 2017).
- V. **Influencer-Driven Campaigns:** They involve engaging digital influencers in these campaigns to promote healthy behaviours, particularly effective among young audiences who admire and follow these personalities (King, Della, Eckler, & Mullis, 2021).

Each of these types essentially contribute toward establishing a health-supportive digital environment, where students are reached from the milieu in which they are most prevalent—the online world.

Several international digital health campaigns have effectively targeted drug abuse issues. For example, the US-based 'Truth Initiative' has run anti-smoking and -vaping campaigns directly aimed at youth using popular video-sharing sites, such as YouTube, and social platforms, such as Snapchat, delivered through high-impact visuals and peer-initiated messaging (Hu, 2015). In Nigeria, platforms like '# Stop Drug Abuse NG,' have used Twitter/X and Instagram to hold dialogue with young people on the subjects of drug addiction through infographics and testimonials.

Another notable example is the 'Talk2Me' mobile application, addressing drug use and mental health issues and providing confidential consultation and education to Nigerian youths (Dutta, 2024). The app uses a friendly interface to connect students to peer mentors and health professionals.

Similarly, the United Nations Office on Drugs and Crime (UNODC)'s 'Listen First Campaign,' which relies on digital storytelling and animation to get the prevention message across through science and understanding for youth and teachers all over the world (UNODC, 2022). Such campaigns indicate that digital strategies can indeed deliver very complex messages within formats that are entertaining and informative.

## HOW DIGITAL CAMPAIGNS ARE USED TO ADDRESS DRUG USE

Digital health campaigns play a major role in preventing drug abuse by providing real-time, tailored messages that speak directly to their situations. Some of the stages they contributed to include:

- I. **Awareness Creation:** These campaigns teach students about the health, social and legal implications associated with drug use. Short video skits, or influencer posts on Instagram, make drug education more attractive and relatable (King et al., 2021).
- II. **Influencing Perceived Norms:** Many students try drugs when they think "everyone is doing it." This misconception can be addressed by showing on digital campaigns that most of their peers are drug-free (Escoto et al., 2021). The more such positive examples a student sees of peers avoiding drugs, the more he is likely to do the same.
- III. **Motivating Behaviour Change:** Digital campaigns could also lead the way to better choices for students by means of motivational content; online support groups, interactive tools, etc. can guide them toward making the decision to quit, showing them that it really can be done and that help is out there.
- IV. **Linking to Support Services:** Several campaigns link to or put out contact details for rehab centres and helplines or counselling services. Others offer live chatting with health professionals that can serve as decisive assistance in helping students get over fears of stigma or judgment.
- V. **Creating Peer Support Networks:** Facebook groups, WhatsApp communities, and other online spaces help students support one another, share experiences, and keep each other accountable thus further strengthening the campaign's impact.

Digital health communications are more than a trend; they serve as a great weapon against drug use among students in tertiary institutions. By understanding their meanings, forms, and effectiveness, stakeholders, especially in Nigeria, may tap their potentials for the promotion of healthier lifestyles and for the reduction in the incidence of substance abuse. As students increasingly meet in real and digital spaces for connection and information, it becomes even more urgent to meet them there with pertinent messages through strategies that speak to them in ways they understand.

## STUDENTS' PARTICIPATION IN DIGITAL HEALTH CAMPAIGNS

In this era of digitisation, students are not merely passive consumers of information; they are actively involved in health discussions online. This audience is being allured by e-health promotion campaigns that have set up taking off points to enable students to take part in health promotion activities, be educated by them, and even contribute to health promotion efforts. The innovations concerning digital health have opened up different spaces for school students to interact with, learn from and also participate in health promotion efforts, such as liking or following a post on Instagram, partaking in a challenge on TikTok, or just downloading a mental health app.

Within the framework of these digital health campaigns, one significant avenue for students engagement is the world of social media. Through platforms such as Instagram, Facebook, Twitter (X), and TikTok, students follow health pages, share content, and comment on posts, allowing health campaigns to become somewhat interactive (Udoudom, 2025). For example, hashtags such as # Say No To Drugs or #Mental Health Matters are often employed by students to promote awareness or send solidarity to a particular cause (Udoudom & Igiri, 2024).

In addition, mobile applications targeting health are trendy among students. These apps provide reminders, tips, educational resources, and sometimes anonymous chats where students can ask for help or ask questions. Talk2Me and Pacer Health are apps with a youth-friendly interface that makes access to sensitive information a lot easier, especially on subjects such as drug use, anxiety, or peer pressure (Kola *et al.*, 2021).

Web-based platforms and school health sites are also important channels for mobilization. Many students read the blogs, attend webinars, or do e-learning courses related to drug prevention, mental health, and sexual health (Hu, 2015). The convenience of being able to access information from a smartphone or laptop makes it more appealing to participate.

In fact, one of the most salient influences on student participation is peer influence. Students often follow their friends' lead in this respect: liking a post, sharing a video, or taking part in an online health challenge. The peer nature of the participation tends to magnify the digital campaign's reach and effect (Florido-Benítez, 2024).

In addition, some students become digital health ambassadors instead of merely consuming content. Digital health ambassadors are student volunteers or influencers who create content, run live sessions, or partner with health NGOs to deliver health campaigns (Adebayo, 2019). Such peer-led activism lends health messages credibility and relatability, thereby enhancing their effectiveness.

Participation is generally high; however, barriers do exist that prevent many students from realizing their full engagement potential; for example, a gap in digital literacy, low Internet access, or the presence of misinformation (Dutta, 2024). Thus, there is an urgent need for more inclusive, engaging, and youth-driven content that is relevant to these students.

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Students are now engaged in promoting digital health through varied platforms. The modes of participation is reshaping the way health information is disseminated, received, or acted on. Understanding participation patterns will is key in designing effective campaigns to address issues surrounding drug use among students in Akwa Ibom State and beyond.

### **PERCEIVED NORMS OF DRUG USE AMONG STUDENTS**

Perceived norms refer to what students believe is typical or accepted lifestyle/behaviour within their social or school environment, regardless of whether these beliefs actually represent reality. Among students in tertiary institutions, drug use especially drugs like cannabis, codeine, tramadol, or even alcohol, is always perceived to be common, socially accepted, or necessary for coping with academic stress and social pressure (LaBrie *et al.*, 2017). Such beliefs are usually shaped through peer influences, media portrayal, and some cultural attitudes that glamourise or downplay the risks associated with drug use (Evans *et al.*, 2017). In fact, studies have shown that the different perceptions students might have about how common certain types of drug use are—"everyone else is doing it"—increase the possibility of students trying drug use themselves, despite the fact that the real figure would have been much lower than what they perceive (Kilmer *et al.*, 2018). This false perception, termed "false consensus," could be a major driving factor for such risk behaviour in settings where substance use is usually normalised or encouraged.

Moreover, perceived norms are reinforced in online spaces where students often interact. Posts on social networks of peers engaging in drug-related behaviour, memes, or even popular influencers casually talking about substance use can sometimes twist reality into making the behaviour seem more normatively adopted than it actually is (Yang *et al.*, 2021). This extension of peer group culture in dorms and off-campus settings intensifies such perceptions in Nigeria, where some students believe that using drugs increases confidence, sharpens focus, and enhances social acceptance (Oshodi *et al.*, 2020). Overestimating peer drug use is also a characteristic that produces students who care less about averting such behaviours or seeking help (Berkowitz, 2017; Glozah & Adu, 2022). It is important to target these perceived norms with correct information and peer-led corrections as a strategy to change the narrative and de-stigmatize harmful behaviours.

### **IMPACT OF DIGITAL CAMPAIGNS ON PERCEPTIONS OF DRUG USE**

Digital health campaigns have proven to be powerful tools in reshaping how students perceive drug use. The campaigns use messages laden with local contexts, peer-led storytelling, and evidence-soaked messages that often counter the myths and misconceptions surrounding drug and substance abuse. For instance, when students see online messages that contradict the perception that "everyone is using drugs," the caused pressure to conform decreases (Kostkova, 2015). Campaigns resonate deeper with the audience by offering stimuli that include real-life testimonials or short skits—often proliferated on platforms such as Instagram, TikTok, or YouTube—making the dangers of drug use seem that much more personal and real (Eka *et al.*, 2020). Engaging digital content that appears authentic and peer-led will lead to students trusting and co-opting the message (Udoudom, 2025).

Through interactive campaigns like quizzes, polls, or challenges via a mobile app, students are engaged and encouraged to reflect on the choices they make. These digital

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activities can elicit positive behaviour change as they reinforce healthy norms and provide practical options to choose instead of drug use (Hu, 2015). In Nigeria and other parts of Africa, mobile health platforms have been used to pass across culturally relevant and locally accessible drug prevention content, even in low-resource settings (Lyles *et al.*, 2021). A well-designed digital campaign can do beyond creating awareness—it can change attitudes, reduce stigma, and encourage help-seeking behaviour (Aondowase *et al.*, 2023). As a large population of students consume digital content, the effect of digital health messages on their perception and behaviour will increase, making them a vital part of any drug prevention strategy in tertiary institutions.

### **STRATEGIES FOR IMPROVING DIGITAL HEALTH CAMPAIGNS**

One major reason that enhances the effectiveness of digital health campaigns in reducing drug use among students is employing audience segmentation and message tailoring. Campaigns that tailor to the particular age, culture, and surroundings where they school have been found to strike a more resonant chord with students (Aabel & Abeywarna, 2018). Digital content should encapsulate real-life situations students encounter made to reflect experiences of peer pressure, stress, or nightlife rather than general warning messages. Student voices should also be included in the development of education content, improving the credibility and relatability of the messages. Peer-led videos, testimonials, and stories have been shown to have effective impacts on attitude changes, transforming mentalities more than messages from authority (Abernethy *et al.*, 2022). Also, data analytics can be applied by campaign creators for monitoring engagement through likes, shares, comments and alter the mode real-time (Udoudom & Igiri, 2023).

Heightening interactivity and accessibility is another key strategy. Digital campaigns that engage audiences with interactive elements, such as polls, quizzes, live questions and answers (Q & As), or even gamified features, achieve higher levels of participation (Escoto *et al.*, 2021). The content itself should be mobile-optimized and delivered over platforms that students are already familiar with like TikTok, Instagram, and WhatsApp. For fighting against misinformation, campaign efforts should recruit student influencers, health workers, and even utilize campus radio or podcasts to promote evidence-based content in creative ways (Aondowase *et al.*, 2023). Another equally important aspect entails continuous evaluations. Campaigns should not stand alone; they must be part of a sustained and evolving initiative that keeps pace with student trends and needs (Fitzpatrick, 2023). Hence, the combination of creativity, strategy, and real-time feedback can empower digital campaigns at influencing drug use downward and inspiring healthier decisions by students.

### **THEORETICAL FRAMEWORK**

The Health Belief Model (HBM) is a psychological framework used to understand how people make decisions about their health. The model suggests that individuals are more likely to change their behaviour if they believe they are truly at risk of a health problem, if they see that the consequences could be serious, and if they feel that taking a certain action would actually help reduce that risk. It also considers whether the person sees more benefits than obstacles in making that change, and whether they believe they are capable of doing it. Sometimes, all it takes is a nudge-maybe a message online or a word from a friend-for someone to take the issue seriously and act.

This approach fits well with this study because it helps to explore why digital health messages might not always get through to students when it comes to drug use.

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Among students in tertiary institutions in Akwa Ibom State, decisions around drugs are often influenced by what they believe is normal among their peers and how seriously they take the risks involved. If a student does not think drug use is harmful, or does not feel personally affected by the warnings in digital campaigns, the message is likely to be ignored. Using the Health Belief Model allows this research to look closely at whether students actually see these campaigns as meaningful—and whether those beliefs are strong enough to shift the way they think and act when it comes to drugs.

## METHODOLOGY

This study employed a cross-sectional survey research design. With this method, the researchers collected data from representative samples of the target population at a given point in time. The relationships between variables were studied without long-term follow-up or multiple measurements (Sertia, 2016). This study targeted undergraduates of tertiary institutions in Akwa Ibom State during the 2023/2024 academic year. The targeted population consisted of all undergraduates from different academic levels and disciplines in Akwa Ibom State Polytechnic, Ikot Osurua (8, 500), Heritage Polytechnic Eket (4,300), Federal Polytechnic Ukana (6,200), College of Education, Afaha Nsit (4000), Akwa Ibom State University (10, 126), University of Uyo (19, 890), Ritman University Ikot Ekpene (1000), Obong University (499), Top-Faith University Mkpatak (322), Federal University of Technology, Ikot Abasi (1, 012). This selection was based on the reason that undergraduate students tend to be young adult, from late adolescence to early adulthood. This age group is often considered a critical target audience for health promotion and behaviour change initiatives, as they are in a transitional phase of life where healthy habits and beliefs can be established or reinforced (Udoudom, 2025).

The population of this study was 55, 849 male and female students of tertiary institutions in Akwa Ibom State. The sample size for this study was determined using the Krejcie and Morgan (1970) formula for finite population. Thus, the sample drawn from the population of fifty-five thousand, eight hundred and forty nine (55, 849) was 381 respondents. The study adopted a multi-stage sampling technique involving stratified sampling for the representation of different faculties and simple random sampling for participants' selection. Data was collected using a structured questionnaire measuring awareness, usage, beliefs and engagement with the Internet as well as participation in digital health campaigns. Out of the number of distributed questionnaires, 368 copies (96.5%) were retrieved and found valid. The quantitative data collected were analyzed using descriptive statistics (weighted mean scores and standard deviation).

## RESULTS & DISCUSSION

### Results

**Table 4.1: Students participation in Digital Health Communication Campaigns(n = 368)**

Item	SA (4)	A (3)	D (2)	SD (1)	Mean ( $\mu$ )	Standard Deviation
I often see and follow digital health campaigns on social media platforms.	69	205	71	23	2.87	0.78
I've shared or reposted health campaign messages online before.	116	146	66	40	2.92	0.96
I enjoy joining WhatsApp or Facebook groups that talk about health and wellbeing.	91	180	22	75	2.78	1.04
I have participated in online discussions or surveys about health	114	164	16	74	2.86	1.07

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topics.						
I think students are actively involved in spreading digital health information.	97	63	108	100	2.43	1.15

**Source:** Survey data, 2024

The weighted mean scores on Table 4.1 above, range from 2.43 to 2.92, which indicates that students moderately agree with most of the items. The highest mean (2.92) indicates that students would repost digital health campaign messages, with many students participating in sharing digital health content. Meanwhile, the lowest mean (2.43) suggests that fewer students think that their peers are actively involved in spreading such information. The standard deviations which range from 0.78 to 1.15 suggest some differences in opinion. The high standard deviations seen in the last item would mean that these were matters on which students were more uncertain. This may mean some are engaged, while many are not that active or may not perceive digital health campaigns as common in their circles. The major finding indicates that while many students do participate by viewing or sharing digital health messages, fewer believe that there is a wider or collective involvement of students in promoting these campaigns.

**Table 4.2: Prevailing perceptions among students regarding the normality of drug use (n =368)**

Item	SA (4)	A (3)	D (2)	SD (1)	Mean ( $\mu$ )	Standard Deviation
It is normal for youths to try drugs at least once.	100	77	103	88	2.51	1.13
It is acceptable for students to take drugs to cope with stress or pressure.	12	32	00	24	1.90	0.91
For some students, consuming drugs at parties is just fine.	166	123	9	70	3.05	1.11
I know of students who use drugs for better focus during exams.	100	45	45	178	2.18	1.29
Students who use drugs are not always judged harshly by other students.	111	136	100	21	2.92	0.89

**Source:** Survey data, 2024

The weighted mean scores in Table 4.2, suggest disagreement and agreement across the various items assessed. The mean scores range from 2.18 to 3.05, with the highest mean score (3.05) about drug use at parties, which would suggest that a considerable number of students did not view it as a serious issue. The item with the lowest score (2.18) was regarding drug use to promote focus during examinations, which means that for the majority of students, it would be considered neither a common nor an acceptable practice. The standard deviation values, which range from 0.89 to 1.29, reveal some spread in how students feel about the issues. A higher deviation, especially in the examination-related item, suggests mixed views or strong disagreement among some students. Meanwhile, lower deviations, such as that secured in regard to the last item, show that there is general agreement among students concerning some perceptions. The major finding for this table reveals that while some students consider drug use at parties or for relieving stress to be fairly acceptable, fewer seem to support the argument for its use in enhancing academic focus. This shows that different situations affect students' perception of drug use.

**Table 4.3: Digital health campaigns influence on students’ perception of drug use (n =368)**

Item	SA (4)	A (3)	D (2)	SD (1)	Mean ( $\mu$ )	Standard Deviation
I now think differently about drug use after being exposed to online health messages.	103	117	100	48	2.75	1.00
I learnt about the dangers of taking drugs from digital health campaigns.	59	131	92	86	2.44	1.02
I feel more worried about drug abuse after seeing health posts online.	99	174	40	55	2.86	0.98
Health campaigns on social media have altered the way my friends perceive drugs.	132	127	47	62	2.89	1.07
I see drug use more negatively now than I used to, thanks to online health campaigns.	30	202	68	68	2.53	0.88

**Source:** Survey data, 2024

In Table 4.3 above, the weighted mean scores fall between 2.44-2.89, indicating generally agreement by the majority of students that digital health campaigns influence their perceptions concerning drug use. The highest mean (2.89) was that related to how their friends talk about drugs, which indicates that these digital health messages are probably changing social conversations. The lowest mean (2.44), on the other hand, pertained to the understanding of drug dangers, indicating that fewer students felt strongly influenced in that area. The standard deviations range from 0.88 to 1.07 indicate that the students had a mix of views, but not very far apart in their evaluations. The item with the highest spread (1.07) related to changes in how friends talk about drugs, indicating that many see a change while others do not. The item with the lowest spread (0.88) indicated more agreement among students now viewing drug use as more harmful. The major finding is that the digital health campaigns have been somehow a determinant of how students view drug use, specifically in the awareness of risks and the encouragement of candid discussions among their peers.

## DISCUSSION OF FINDINGS

### RESEARCH QUESTION 1: How do students in tertiary institutions in Akwa Ibom State participate in digital health communication campaigns?

The data in Table 4.1 above provided answers to this research question. The data revealed that students in tertiary institutions in Akwa Ibom State participated in digital health communication campaigns in a moderate, but meaningful ways. The weighted mean scores (WMS = 2.43 to 2.92) indicate that though a number of students were involved in these, their level of participation was not very high. The highest mean score (WMS = 2.92) indicates that a good number of the students reposted or shared digital health campaign messages through their WhatsApp, Facebook, and Instagram as a way of showing that they were willing to propagate useful health information through such platforms. On the other hand, the lowest score (WMS = 2.43) shows that fewer students believed their friends or classmates were doing the same. The standard deviations (0.78 to 1.15) indicate mixed opinions, especially with the wider spread in the last item, suggesting that while some students were active, many were either unsure or not involved at all.

This pattern of engagement can be explained using the Health Belief Model (HBM), which proposes that individuals take health-related action when they perceive a threat and believe that the benefits of action outweigh the barriers. Students may choose to share

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health messages if they believe doing so will protect them or others from health risks. But the low sense of peer involvement possibly made others less motivated, as the model also emphasise the importance of social cues and influence. A similar findings came up in the work of Udoudom & Igiri (2024), who found that students' participation in online health campaigns is often motivated by personal relevance and social influence. In summary, while the study shows that students do participate in digital health campaigns by reposting and viewing content, their perception of wider student involvement remains low. This highlights a gap between individual action and perceived collective engagement, suggesting the need for more visible peer-driven campaign strategies.

### **RESEARCH QUESTION 2: What are the prevailing beliefs and perceptions among students regarding the normality or acceptability of drug use?**

The data in Table 4.2 above answer this research question. The data reveal that students had mixed views in relation to drug use, with their views shifting depending on the situation in question. The mean scores which were between 2.18 and 3.05 show the perceived level of agreement or disagreement. High mean score (WMS = 3.05) was indicated for drug use at parties, meaning that many students did not perceive this practise as quite a serious and unusual behaviour. On the other hand, the lowest mean score (WMS = 2.18) indicated the use of drugs in improving focus during examinations, showing that the majority of the students neither accepted nor normalised the behaviour. The standard deviation values, which ranged between 0.89 and 1.29, further reveal that opinions were not uniform. A wider deviation on some items, like drug use for academic performance, indicate stronger disagreements or mixed beliefs, while smaller deviations on others suggest more shared opinions among students.

The above varying beliefs align with the Health Belief Model (HBM), which argues that people's health behaviours depend on how they perceive risks, benefits, and social influences. Students may not view drug use at social events as harmful if they do not see immediate consequences or if it seems socially acceptable in their groups. On the other hand, the stronger rejection of drug use for academic focus may stem from greater awareness of the risks involved or stronger moral or institutional disapproval. This finding mirrors what Eka *et al.*, (2020) discovered in their study on youth drug perception, where young people justified occasional recreational drug use but were less supportive of its use for academic or professional gain. In summary, the main finding of this study is that students were more accepting of drug use in social and stress-related contexts but largely rejected it in academic settings. This highlights how the perceived purpose and setting can shape whether students view drug use as normal or acceptable.

### **RESEARCH QUESTION 3: To what extent do digital health communication campaigns influence students' attitudes toward drug use?**

The data in Table 4.3 above answer this research question. The findings from Table 4.3 reveal that digital health communication campaigns had a moderate influence on students' attitudes toward drug use. The weighted mean scores range from 2.44 to 2.89, showing that most students agreed the campaigns had some impact on how they saw drug use. The highest mean score (WMS = 2.89) was linked to how students' friends now talk about drugs, suggesting that these campaigns may be shaping social conversations and peer influence. This is important because peer discussions can often set the tone for what is seen as acceptable. The lowest mean score (WMS = 2.44) related to understanding the dangers

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of drug use, which shows that while the campaigns are helping in some areas, they may not be fully effective in changing deeper knowledge or awareness for all students. Standard deviation values between 0.88 and 1.07 also pointed to a variety of opinions, but not extremely different from each other. The highest spread (1.07) on the peer conversation item shows that while some students see a big shift, others may not have noticed much change.

The Health Belief Model offers a useful way to explain these findings. According to the model, people are more likely to adopt healthier behaviours when they feel personally at risk and believe that change will lead to real benefits. In this case, digital health messages may have served as a 'cue to action', helping students reflect more on drug use and its effects. The visible shift in peer conversations, as shown by the highest mean score, could also strengthen social norms that discourage drug use. This aligns with findings by Johnson et al., (2017), who reported that health campaigns on social media significantly influenced young people's attitudes by sparking honest discussions and changing group perceptions. The main finding of this study is that digital health campaigns have played a moderate but important role in shaping students' views on drug use; especially in how they talk about it with friends and how they perceive its risks. This suggests that such campaigns can be a useful tool in student-centred drug prevention efforts.

## **CONCLUSION**

This study examined student involvement in various digital health communication campaigns in tertiary institutions across Akwa Ibom State and their influence on the students' opinions on drug use. The result showed that many students participated in these health campaigns by liking posts, sharing health-related contents, or joining health discussions online. However, not all students were fully engaged; some hardly believed that their friends helped disseminate digital health information. This shows that digital health campaigns touch some students, thus there is still room for awareness needed to engage others.

The study also showed that students had ambivalent attitudes toward drug use. Some argued that it is normal for youth to try drugs, mostly at parties or in times of stress. However, most students would not condone the use of drugs for schoolwork or taking exams. This meant that peer influence and the social context significantly contribute to what students think is okay or not about drug use.

Ultimately, this study concluded that digital health campaigns had effect on students' perceptions of drug use. Some students reported that health messages provided through the Internet made them think differently and feel heightened anxiety about drug use and abuse. Others reported that their friends also began to discuss drugs in a serious manner. This showed that digital health campaigns can have an influence on the way students think, thereby promoting healthier attitudes; with the support of appropriate messages and platforms.

## **RECOMMENDATIONS**

The study recommends that:

- i. tertiary institutions and health organisations should create more engaging and student-friendly digital health campaigns. Since not all students were fully involved in sharing or taking part in online health content, it is important for schools and

health groups to use fun, easy-to-understand messages on platforms like WhatsApp, Facebook, and Instagram. This will help more students notice and join the campaigns

- ii. educators, counsellors, and student leaders should talk more with students about what is right or wrong when it comes to drug use. The study showed that some students thought trying drugs at parties or to reduce stress was normal. So, those in charge should speak openly with students in clubs, classrooms, and group chats to help change wrong ideas about drugs.
- iii. health campaign organisers should continue and improve digital messages that explain the dangers of drug use. Since the campaigns already helped some students see drug use as more harmful, these organisers should make more short videos, posts, and stories that talk about real-life dangers of drug abuse. This will help more students change how they see drugs and talk about them with their friends.

## REFERENCES

- Aabel, B., & Abeywarnna, D. (2018). Digital Cross-Channel Usability Heuristics: Improving the Digital Health Experience. *Journal of Usability Studies*, 13(2) 52 - 72.
- Abernethy, A., Adams, L., Barrett, M., Bechtel, C., Brennan, P., Butte, A., & Valdes, K. (2022). The promise of digital health: then, now, and the future. *NAM perspectives*, 22(1) 1-24
- Adebayo, T. T. (2019). The Role of Health Information Officers in the Prevention and Management of HIV/AIDS in Three Tertiary Health Institutions in South Western Nigeria. *Library Philosophy and Practice (e-journal)*, 42(2) 1 - 53.
- Adjekum, A., Blasimme, A., & Vayena, E. (2018). Elements of trust in digital health systems: scoping review. *Journal of medical Internet research*, 20(12), 11 - 54.
- Aondowase, S., Udoudom, U. I., & Pam, C. (2023). Mass Media and Health Communication Messages: Implications for Rural Development in the 21st Century Nigeria. *International Journal of Education, Management, and Technology*, 1(1), 11-26. <https://doi.org/10.58578/ijemt.v1i1.1885>
- Dutta, M. J. (2024). Decolonising the pedagogy of health communication campaigns: A culture-centered approach. *Communication Education*, 73(4), 405-426.
- Eka, G. J., Onwurah, C. C., Ngozi, O. F., & Emeagui, E. C. (2020). Perception of Drug Use as a Correlate of Human Immune Deficiency Infection among Students of University of Uyo, Akwa Ibom State. *International Journal on Orange Technologies*, 2(7), 1-8.
- Escoto, A., Watkins, S. L., Welter, T., & Beecher, S. (2021). Developing a targeted e-cigarette health communication campaign for college students. *Addictive Behaviours*, 117(4), 237 -246.
- Fitzpatrick P. J. (2023). Improving health literacy using the power of digital communications to achieve better health outcomes for patients and practitioners. *Frontiers in digital health*, 5, 1264780. <https://doi.org/10.3389/fdgth.2023.1264780>
- Florido-Benítez, L. (2024). Digital Channels Improve Promotion and Communication Campaigns. In *Airport Marketing Strategies: Aviation and Tourism Perspectives*. Emerald Publishing Limited. 109-154..

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NICHOLAS EGERE, Ph.D**

- Güzel, Ş., & Arı, A. (2022). The Use Of Digital Communication Channels In Health Tourism In Turkey. *International Journal of Health Management and Tourism*, 7(2), 245-264.
- Hu, Y. (2015). Health communication research in the digital age: A systematic review. *Journal of Communication in Healthcare*, 8(4), 260-288.
- Johnson, O. E., Akpanekpo, E. I., Okonna, E. M., Adeboye, S. E., & Udoh, A. J. (2017). The prevalence and factors affecting psychoactive substance use among undergraduate students in University of Uyo, Nigeria. *Journal of Community Medicine and Primary Health Care*, 29(2), 11-22.
- King, K. M., Della, L. J., Eckler, S. T., & Mullis, L. (2021). Promoting physical activity through health communications campaigns. *ACSM's Health & Fitness Journal*, 25(4), 45-50.
- Kola, L., Abiona, D., Adefolarin, A. O., & Ben-Zeev, D. (2021). Mobile phone use and acceptability for the delivery of mental health information among perinatal adolescents in Nigeria: survey study. *JMIR Mental Health*, 8(1), e20314.
- Kostkova, P. (2015). Grand challenges in digital health. *Frontiers in Public Health*, 3, 134.
- Lyles, C. R., Wachter, R. M., & Sarkar, U. (2021). Focusing on digital health equity. *Jama*, 326(18), 1795-1796.
- Udoudom, U. & Igiri, A. B. (2024). Impact of mobile health apps on students' engagement in digital health communication campaigns at Heritage Polytechnic, Eket. *World Journal of Information Technology*. 2(3): 66-73. DOI: <https://doi.org/10.61784/wjit3012>.
- Udoudom, U. (2025). TikTok Narratology, Health Belief System and Sexual Health Awareness among Students of Akwa Ibom State University. *Journal of Health Science and Medical Therapy*, 3(01), 116–130. <https://doi.org/10.59653/jhsmt.v3i01.1461>