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Public Knowledge, Perception and Behaviour towards Social Media-Based Medical Crowdfunding Campaigns in Nigeria

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Abstract

Background: Healthcare financing is becoming increasingly expensive, and the associated burden of out-of-pocket medical expenditures continues to give strong impetus to social media-based medical crowdfunding in Nigeria. Regrettably, the successful deployment of online medical crowdfunding is strongly inhibited by the tendency of such campaigns to not only fall below expectations but also depend on several socio-psychological factors. Thus, this study examines the extent of public knowledge, perception, and behaviour towards social media-based medical crowdfunding campaigns in Nigeria.

Method: The study adopted the survey research method and used an online questionnaire to collect data from 1,035 social media users in Nigeria recruited through the snowball sampling technique. The collected data were analysed using descriptive statistics of Mean (\bar{X}) and Standard Deviation (SD).

Results: The respondents demonstrated a considerably high level of knowledge of medical crowdfunding, especially the visual and narrative strategies of such campaigns ($\bar{X} = 3.32$; SD = 1.03). Also, the respondents demonstrated a favourable perception ($\bar{X} = 3.88$; SD = 0.98) and behaviour towards social media-based medical crowdfunding campaigns ($\bar{X} = 3.57$; SD = 0.93), although many of them are worried about the potential activities of fraudulent campaign initiators and promoters.

Conclusion: Social media users in Nigeria are becoming increasingly knowledgeable about medical crowdfunding and more receptive to the initiative.

Keywords: crowdfunding, healthcare financing, online donation, public health, social media, unmet needs



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Introduction

Over the years, social media technologies have evolved from their novel experimental status to a critical aspect of modern life. Interactive platforms like Facebook, X, Instagram, TikTok, WhatsApp, and LinkedIn have revolutionised communication, information access, human relationships, and self-perception.¹ As of May 17, 2024, approximately five billion people worldwide used social media for various purposes, with Nigeria alone recording approximately 36.75 million active social media users as of January 2024.² These high users' indices indicate the pervasive growth of social media technologies in the personal, professional, and public life of users. Notably, the global appeal of social media lies in their unparalleled ability to connect geographically disconnected individuals, enable real-time communication, and foster relationships in the virtual space.^{3,4}

The pervasive influence of social media extends to public health, where these tools are being continuously deployed to transform health communication and education efforts, enhance health information dissemination, and promote healthier behaviours.⁵ Globally, health is considered one of the most important indices of human existence; hence, many developed countries allocate a significant share of their annual national budget to healthcare and categorise access to quality healthcare services as a fundamental human right. Regrettably, the situation seems to be different in many developing countries, including Nigeria, where affordable quality healthcare remains a luxury and the general healthcare system is inundated with dire funding challenges, forcing the majority of healthcare seekers to rely on out-of-pocket expenditures.^{6,7}

Evidence show that Nigeria's annual health budget is less than the 15% benchmark recommended by the World Health Organisation, the Nigeria Health Insurance Scheme established to promote affordable healthcare still struggles to cover less than 10% of the country's total population and about 76.4% of healthcare expenditures in Nigeria are funded through direct payments by patients or their supporters.^{8,9} The growing financial burden emanating from health-related expenditures has encouraged the popularity of social media-based medical crowdfunding as an alternative healthcare financing window among Nigerians.¹⁰ Conceptually, social media-based medical crowdfunding refers to the practice of leveraging social media tools to

solicit financial support from a large audience, usually social media users within and/or outside a fund seeker's network, to support medical treatments with prohibitive costs.¹¹ This phenomenon has gained wide popularity as an alternative solution to rising healthcare costs, especially in countries with inadequate health insurance coverage.¹⁰ However, previous studies suggest that many crowdfunding campaigns fail to meet their funding targets, with success rates depending on several factors like donors' knowledge, perception, and overall behaviour towards charity donations.¹²⁻¹⁷ Besides, previous research indicates that medical crowdfunding is widely present on social media in Nigeria¹, but limited research has investigated the extent of public knowledge, perception, and behaviour towards the practice; hence, the need for this study.

Method

Study Design and Population

The study adopted the cross-sectional research design and utilised the online survey research method. While the survey method is commonly used in social and behavioural research for understanding individuals' knowledge, perception, and behaviour, online surveys are particularly considered advantageous in terms of cost, respondents' inclusivity, and reach.^{1,18} The study population consisted of active social media users in Nigeria, estimated at 36.75 million as of January 2024.²

Sample Size and Sampling Procedure

To obtain a representative sample of the Nigerian population, we used the G*power statistical tool to conduct a priori power analysis with 0.9 power ($1-\beta$), 0.2 effect size (f^2), and 0.05 probability value (α), yielding a minimum required sample size of 207. However, considering the heterogeneous nature of the study population, we multiplied the obtained sample size by five (5) to increase its extent of representativeness.^{1,18} Therefore, the final sample size was 1,035.

The study utilised the snowball sampling technique to select eligible respondents. With this technique, the researchers recruited the initial respondents (seeds) through public social media announcements posted on the researchers' social media feeds. These initial respondents were briefed on the nature of the study and the desired elements. Thereafter, the seeds were asked to recruit additional eligible participants within their social network by sharing the link

(<https://forms.gle/u5XCNvdBEZ/ZXSyxC7>) to the research instrument across their social network. The process continued until we obtained the required number of responses. The major inclusion criteria were being a Nigerian, active social media usage, and being 18 years old or above. The data collection exercise lasted for approximately two weeks, beginning on January 14th, 2025 and ending on January 29th, 2025.

Data Collection and Analysis

A structured questionnaire, developed via Google Forms, was used to collect the data. The instrument was designed using a Likert scale format with responses ranging from Strongly Disagree (1) to Strongly Agree (5). The content validity technique was used to gauge the match between test questions and the study objectives.¹⁸ In doing this, the research instrument was evaluated by experts for clarity, appropriateness, and logicity. Furthermore, a pre-test of the instrument was conducted using 55 social media users (5% of the sample). Thereafter, the Statistical Package for Social Sciences (SPSS) was used to analyse the responses, and the outcome showed that the instrument had a good measure of internal consistency. Specifically, there was no negative item in the inter-item correlation matrix in the measured scales, all the values in the corrected item-total correlation were greater than 0.4 (indicating that the items measured the same construct), and the Cronbach's Alpha coefficient for each scale was above the minimum 0.7 acceptable threshold. Overall, the instrument had excellent psychometric properties; hence, it was considered reliable for the collection of data for the study. For the final data analyses, SPSS was used to determine the Mean (\bar{X}) and Standard Deviation (SD) values of each scale to ascertain the respondents' extent of agreement/disagreement with the items on each scale and the level of dispersion of their responses, respectively.

Ethical Approval

The study followed the ethical guidelines for the use of human subjects in research. In line with the confidentiality principle, the research instrument contained no identifying questions, and appropriate information regarding the purpose of the research was made available to the participants. Ethical approval for the study was granted by the Department of Journalism and Media Studies Research Ethics and Publication Committee at Delta State University, Abraka, with

approval number DELSU/JMS/JMSRPC/08012025. The approval was granted on January 8th, 2025.

Results

Respondents' socio-demographic characteristics

A total of 1,096 responses were recorded as of the time the data collection exercise was concluded, but 67 responses were unusable either because the respondents failed to grant consent for participating in the survey or reported to be less than 18 years at the time of the data collection. Therefore, the final analyses were based on 1,029 (99.4%) responses, which met the inclusion-exclusion criteria of the study. By demographic stratification, the data presented in Table 1 show that the respondents were resident in various states across the six geopolitical zones of Nigeria, 55.7% of them were males, the modal age range was 25-34 years (38.3%), 51.1% of them were single, and they all reported to have received some levels of formal education

Table 1: Socio-Demographic Characteristics of the Respondents

Demographic Variables	Frequency	Percentage
State of Residence		
North-East	50	4.9
North-West	89	8.7
North-Central	166	16.1
South-East	193	18.8
South-West	293	28.5
South-South	213	20.7
Abuja	25	2.4
Sex		
Male	573	55.7
Female	456	44.3
Age		
18-24 years	186	18.1
25-34 years	394	38.3
35-44 years	148	14.4
45-54 years	109	10.6
55-64 years	138	13.4
61 years and above	54	5.2
Education		
No formal education	---	---
Primary education	121	11.8
Secondary education	208	20.2
Technical/Vocational education	374	36.3
Tertiary education	326	31.7
Marital Status		



Demographic Variables	Frequency	Percentage
Single	526	51.1
Married	439	42.7
Separated/divorced/widowed	64	6.2
Occupation		
Trader/Businessman/Businnesswoman	204	19.8
Public/Private Sector Employee	318	30.9
Artisan	196	19.1
Student	287	27.9
Unemployed	24	2.3
Total	1,029	100

Exposure to social media-based medical crowdfunding campaigns among Nigerians

The data presented in Table 2 suggest that medical crowdfunding campaigns are visible on social media, although they do not dominate users' experiences, given that they are often encountered sporadically (mainly biweekly) rather than daily. Specifically, the data show that the majority of respondents (N = 502, 48.4%) encountered such campaigns biweekly, just as monthly exposure was reported by 16.3% (N = 168) of

respondents, indicating that these campaigns are fairly common but not overwhelmingly frequent.

Table 2: Respondents' Frequency of Encountering Medical Crowdfunding Campaigns on Social Media

Duration	Frequency	Percentage
Daily	93	9.0
Weekly	165	16.0
Biweekly	502	48.8
Monthly	168	16.3
Irregular	95	9.2
Never	06	0.6
Total	1,029	100

Knowledge of social media-based medical crowdfunding campaigns among Nigerians

Table 3 indicates that the respondents had a moderate to high level of knowledge on social media-based medical crowdfunding campaigns in Nigeria (Grand mean = 3.32; SD = 1.03). As shown in the data, the respondents were knowledgeable in terms of the visual and narrative strategies employed in crowdfunding campaigns, but had low knowledge on certain administrative, financial, and ethical issues related to medical crowdfunding

Table 3: Respondents' Knowledge of Social Media-Based Medical Crowdfunding

Items	\bar{X}	SD
I am familiar with the concept of medical crowdfunding	3.97	0.86
I can easily identify a medical crowdfunding campaign when I see one on social media	3.65	1.22
I am knowledgeable about the different platforms (e.g., GoFundMe, JustGiving) used for medical crowdfunding	3.83	1.06
I know how to donate to medical crowdfunding campaigns using social media platforms	4.02	0.81
I know that some medical crowdfunding campaigns might be fraudulent or misleading	3.51	1.29
I know how to report a suspicious or fraudulent medical crowdfunding campaign on social media	2.86	1.03
I understand that medical crowdfunding campaigns may have administrative fees or platform charges deducted from donations	2.91	0.99
I know that medical crowdfunding campaigns can include photos, videos, and personal stories to engage potential donors	4.12	0.79
I know that some medical crowdfunding campaigns may collaborate with non-profit organisations to enhance credibility	4.32	0.78
I am familiar with the steps needed to withdraw funds raised through medical crowdfunding campaigns on social media	2.89	1.02
Grand Total	3.32	1.03

Perception towards social media-based medical crowdfunding campaigns

Table 4 shows that the respondents' perception of social media-based medical crowdfunding campaigns was predominantly favourable. Specifically, the results showed that the respondents largely perceive crowdfunding as a way of highlighting healthcare challenges and fostering community support for a common cause. However, there were considerable concerns about the potential for exploitation of social media-based medical crowdfunding campaigns by dishonest users, exposure of potential donors to internet fraudsters, and difficulty in curbing corrupt practices, indicating a need for regulatory oversight.

Table 4: Respondents' Perception of Social Media-Based Medical Crowdfunding

ITEMS	\bar{X}	SD
I believe that a social media-based medical crowdfunding campaign is a trustworthy way to raise funds for medical expenses	3.58	1.04
Medical crowdfunding on social media is a suitable alternative to out-of-pocket medical expenditures	3.50	1.07
I think medical crowdfunding on social media is cost and time-effective	4.08	0.94
Despite the benefits of medical crowdfunding, the phenomenon can be exploited by dishonest social media users to defraud people	4.28	0.85
It is difficult to curb corrupt practices arising from medical crowdfunding posts on social media	4.05	0.95
Participating in medical crowdfunding activities on social media may expose me to internet fraudsters	3.68	1.01
If the need arises, I might encourage people to utilise medical crowdfunding as an alternative to their out-of-pocket medical expenditures.	3.62	1.03
If I have the financial means, I am willing to make donations towards medical crowdfunding initiatives that provide detailed information	4.38	0.81
I think that social media-based medical crowdfunding helps to highlight the healthcare challenges people face	4.20	0.86
I think that medical crowdfunding campaigns on social media can bring communities together to support a common cause	4.15	0.90
Grand Total	3.88	0.98

Behaviour towards social media-based medical crowdfunding campaigns

Table 5 indicates a moderate positive behaviour towards social media-based medical crowdfunding campaigns. Specifically, the data show that the respondents feel a strong sense of responsibility to contribute towards crowdfunding campaigns and would likely donate to medical crowdfunding campaigns they come across on social media. However, there is still the reluctance to trust crowdfunding campaigns outright, indicating that while respondents may feel morally compelled to contribute to social media-based medical crowdfunding in different capacities, perceived trust in crowdfunding campaigns may pose a critical barrier.

Table 5: Respondents' Behaviour towards Social Media-Based Medical Crowdfunding

ITEMS	\bar{X}	SD
I actively engage with medical crowdfunding campaigns by liking, sharing, or commenting to increase visibility.	3.93	0.81
I am likely to donate to medical crowdfunding campaigns I come across on social media.	3.82	0.94
When I see a medical crowdfunding campaign on social media, I usually read through the details before deciding to act.	4.02	0.74
I frequently encourage others to contribute to medical crowdfunding campaigns on social media.	3.75	0.90
I feel a sense of responsibility to contribute when I see a medical crowdfunding campaign on social media.	4.12	0.71
I generally do not trust medical crowdfunding campaigns on social media and, therefore, do not participate in them.	3.02	1.31
Grand Total	3.57	0.93

Discussion

Analysing data collected from social media users in Nigeria, this study offers a nuanced empirical insight into public knowledge, perception, and behaviour towards social media-based medical crowdfunding campaigns in Nigeria. On the fore, the findings show that a significant proportion of the respondents have been exposed to social media-based medical crowdfunding campaigns. Specifically, the findings showed that although medical crowdfunding campaigns may not yet dominate social media users' experiences, given that the campaigns are often encountered sporadically rather than daily, such campaigns are relatively visible on social media and constitute a significant part of users' online experience. Hence, the study aligns with previous research, which found that the popularity of web platform-based crowdfunding campaigns is steadily on the rise and distorting the way people raise funds for various needs.^{1,3,4} Perhaps this visibility might have been made possible by the unique features of social media, which enable users to create, share, and reshare content in their virtual communities with little restrictions.

Expectedly, the high-level exposure appears to have culminated in a moderately high level of knowledge on social media-based medical crowdfunding campaigns among the respondents, consistent with previous studies, which concluded that when exposure is guaranteed, a dramatic increase in knowledge is often achievable.¹⁹ Specifically, the findings indicate that the respondents are knowledgeable in terms of the visual and narrative strategies employed in crowdfunding campaigns, but demonstrated a relatively low level of knowledge on the financial and ethical aspects of medical crowdfunding. Scholars aver that individuals who are well informed about crowdfunding are more likely to participate in such campaigns, either by donating or sharing them within their social networks.⁷ This is partly because a high-level awareness and knowledge of crowdfunding campaigns not only increases the likelihood of contribution but also enhances the perceived legitimacy of the campaigns and the corresponding public support.¹³

On the respondents' perception towards social media-based medical crowdfunding campaigns, the results indicated that the majority of respondents had a favourable perception towards the campaigns, citing them as innovative and effective solutions to address

pressing medical needs. Specifically, the respondents expressed the belief that crowdfunding highlights healthcare challenges and fosters community support for a common cause, just as the funding phenomenon was also perceived as cost and time effective. Despite these positive perceptions, however, there were considerable concerns about the potential for exploitation of social media-based medical crowdfunding by dishonest users, exposure of potential donors to internet fraudsters, and difficulty in curbing corrupt practices, indicating a need for regulatory oversight. Judged as a whole, these findings corroborate the conclusion of other studies, which indicated that medical crowdfunding is positively perceived by social media users in Nigeria.¹

Finally, the study evaluated the behaviour of Nigerians towards social media-based medical crowdfunding campaigns. The findings showed a spectrum of behavioural responses, with a significant proportion of the respondents indicating active engagement in social media-based medical crowdfunding campaigns, including actively liking, sharing, or commenting to increase visibility of such campaigns across their social networks, frequently encouraging others to contribute to medical crowdfunding campaigns on social media, and expressing willingness to donate funds to such campaigns if available. The finding is consistent with a previous study, which found that 47% of respondents included in a study expressed willingness to support crowdfunding initiatives in the future, compared to the 9% who said they would be unlikely to participate in such campaigns in the future, either as a donor or fund seeker.¹²

Perhaps the overall positive disposition of the respondents towards social media-based medical crowdfunding might have been influenced by the regular posting and/or sharing of such campaigns by people within their social network, some of whom act as significant others (celebrities/social media influencers) to the respondents. Thus, as espoused by the social influence theory,¹⁷ social media users may be influenced by the behaviours and attitudes of their peers towards medical crowdfunding campaigns, leading them to support such campaigns in diverse ways.

Conclusion

Based on the findings, the study concludes that while there is a growing level of knowledge of medical

crowdfunding campaigns among social media users in Nigeria, especially in terms of the visual and narrative strategies employed in crowdfunding campaigns, a sizeable number of social media users in Nigeria are still ignorant on certain crowdfunding-related issues, such as the financial and ethical aspects of social media-based medical crowdfunding campaigns. Also, the study concludes that social media users have a favourable perception and behaviour towards social media-based medical crowdfunding campaigns, with a significant proportion of them exhibiting active engagement in such campaigns through various means; however, many of them have considerable concerns about the potential for exploitation and fraud by dishonest campaign initiators and promoters.

At this juncture, it is important to observe that the methodological drawbacks inherent in the survey research method may limit the extent of generalisation of our findings, given the propensity of survey respondents to either under-recall or over-recall their experiences. Nevertheless, our study outcome underscores the need for social media platforms, crowdfunding campaign initiators, and campaign promoters to encourage positive perception and behaviour towards crowdfunding campaigns by introducing features like verification badges or rewards for users who actively engage with or promote verified campaigns and develop algorithms that prioritise or automatically promote campaigns with verified needs. The findings also imply the need for policymakers to establish legal frameworks that protect donors and ensure ethical fundraising practices, such as creating tax incentives for verified donations and introducing penalties for fraudulent campaign practices.

Declarations

Authors' Contribution: EJA and OEU contributed to the conception and study design, OVC and NM contributed to the data acquisition and analysis, OEU supervised and validated the data analysis, and EJA and NM drafted the manuscript. All authors critically revised and approved the final version of the manuscript for publication.

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