# Full Length Research

# The Impacts of Social Media Use on Health Service Delivery among Patients and Health Care Providers amidst COVID-19 in Military Hospital, Port Harcourt, Rivers State, Nigeria

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## **Abstract**

Health care providers working in most hospitals in the world and, particularly in Nigeria often communicate with patients through direct physical contact. This medium of healthcare providers' patient interaction seems to be challenging for quality healthcare management actualization even in the evolving COVID-19 pandemic era. Hence, the study examined the impacts of social media use on health service delivery among patients, and healthcare providers in Military Hospital Port Harcourt, Rivers State, Nigeria. A survey research design was adopted. The population of the study consists of 120 health providers and 137 outpatients. The sample size of 84 healthcare providers and 95 patients was determined using Krejcie and Morgan (1990) sample size determination table. The questionnaire items were structured into Likert four rating scale. The data collected were analyzed using descriptive statistics tools like frequency and percentage tables. The Findings revealed that health care providers perceived that social media use enables their participation in networking and content showing- strongly agreed 18(60%); reduces rowdiness of patients in Military Hospital- agreed 12(40%); improves specialty cares- agreed 21(70%), and enhances patients-healthcare providers' relationships- strongly agreed 12(40%) and agreed 10(33%). In conclusively, the delivery of quality health services cannot be carried out effectively and efficiently without the use of social media by patients and providers in any hospital. Therefore, The Military Hospital Port Harcourt and Rivers State Government should adopt and implement electronic health information management in healthcare facilities for easy patients' medical information dissemination/transmission for follow-up or referral care management during and after the COVID-19 era.

**Keywords:** Health Service Delivery, Impacts, Military Hospital, Patients, Providers, Social Media Use.

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# INTRODUCTION

Health service delivery in any nation is a conglomerate of health practitioners, agencies, and organizations that operate more or less independently in the mission sharing of health care delivery (Cockreham & Hinote 2008). Health service delivery involves integrated primary health care services providing a continuum of care through functional referral systems. Health care delivery has been dominated traditionally by hierarchical organizations such as hospitals and health care systems. However, as competitive pressures and the demands of managing care under limited resources have increased over the past decade, a wide variety of new organizational forms have emerged. These range from managed care organizations, and physician practice management companies, to diagnose specific control with specialized providers, such as home health care.

Social media used by patients can also be an aid to health care professionals by providing a means to strengthen the organization's market position and stimulating conversation for brand building and improved service delivery. In fact, social media may have effects on both patients and the wider health care system. In particular, it allows patients to receive support and to complement offline information which may lead to enhancing the empowerment of patients. Nielson (2017) postulated that internet users continue to spend more time on social media sites than any other types of site from content contributors. The benefits of participating in social media have gone beyond simply social sharing to building a reputation and bringing in career opportunities and monitoring income.

Oyegoke (2013) posited that patients are always on queue and wait longer than expected during health service delivery due to the problem of fewer health care providers to larger patients' population rate. But, with a good system that imbibes in social media use in place, the health care providers can work effectively and efficiently to ease patients' longer time wait for care to the barest minimum. Ventola (2014) stated that social media can provide considerable benefits in patient care, education, and health programs. More so, social media can contribute to improving the quality of care and emergency management, taking into account some risks such as privacy and accuracy of information. However, despite the benefit of social media use, some hospitals in most countries of the world including Nigeria have not really explored it in health care delivery. It is from the above presumption that this study seeks to investigate the impacts of social media use on health service delivery in the Military Hospital Port Harcourt, Rivers State, Nigeria.

Social media are websites and application that enables users to create and share content or to participate in social networking. Social media could as well be seen as computer-based technology that facilitates the sharing of ideas, thoughts, and information through the building of virtual networks and communities. Similarly, social media are webbased services that allow individuals, communities, and organizations to collaborate, connect, interact, and build a community which enables them to create, co-create, modify, share, engage with user-generated content that is accessible (McCay-Peet & Quan-Haase, 2016). Kaplan and Haenlein (2010) opined social media as a group of internet-based applications that build on the ideological and technological foundations of web 2.0 and allow the creation and exchange of user-generated content. Burgess and Poell (2017) posited social media technologies as those digital platforms, services, and apps built around the convergence of content sharing, public communication, and interpersonal connection. Social media allows individuals to keep in touch with friends and extended family.

Some people use various social media applications to network and find career opportunities, connect with people across the globe with like-minded interests, and share their own thoughts, feelings, and insight online. According to Abelman (2007), the use of information and communication technology in health care is not merely about technology but a means to solve the critical communication challenges in health care organizations, especially in developing countries. Ruxwano (2010) stated that since the development of the computer, the evolution of the internet information technology (IT) has had a positive impact of transformation on health care delivery systems worldwide, particularly in the area of disease control, diagnoses, accurate data capture, patient management, teaching and retraining of health care providers, storage and retrieval of medical information.

Social media has changed the way that people interact with each other online. It gives people the ability to discover what is happening in the world in real-time, to connect with each other, and stay in touch with long-distance friends. It also enables someone to get access to endless amounts of information at one fingertip. In many senses social media has helped many individuals from the common ground with others online, making the world seem more approachable. In the health sector, social media provides health care providers with the tools to share information among themselves, patients, and other stakeholders in planning and decision-making towards improving the quality of health service delivery within hospital settings and the larger society. Social media brings a new dimension to health care for patients, providers, and their support networks. Increasing evidence demonstrates that patients who are more actively involved in their healthcare experience have better health outcomes and incur lower costs (Bornkessel, Furberg & Lefebvre, 2014).

Health care providers do often used social media to potentially improve performers and efficiency in health issue solving. Among the various ways in which Social media use improves the quality of health service delivery in the health sector includes:

- 1. Patient Education: Social media has improved patients' access to health and allied health care information and other educational resources through virtual communication methods, asynchronous and synchronic message dissemination mediums.
- 2. Public Health Programs: According to George, Rovniak, and Kraschnewski, (2013), social media is a potent tool for public education and advocacy concerning public health issues. Social media use creates immense worldwide networks that speedily spread information which enable mobilization of a large number of people in making possible greater advancement toward public health objectives.
- 3. Organization Promotion: Social media are being used as a medium of communication for many purposes by different organizations of health including hospitals, professional societies, patient advocacy groups, and pharmacy and other subsidiaries of the health system.
- 4. Patient Care: Some health care providers find it difficult to use social media for direct patient care in some hospitals. More so, in the health settings too, the real impact of social networks is beyond what is written in some most recent literature. Hence, the use of these virtual platforms allows sharing procedures in real-time, scientific dissemination, and virtual communication of a scientific nature, in which experiences are shared that may have significant impacts on a diverse population of healthcare seekers (Espino-Gaucin, Rodríguez, Ávila, Soto, Ruge & Wagner, 2020).

### Statement of the Problem

Though many health care providers have been working assiduously to effectively utilize social media to engage patients, clients, and other stakeholders through effective communication and promoting approaches the impacts of social media use in the delivery of health services seem not to be widely known. In developed countries, some health organizations have been able to move away from traditional advertising techniques to the use of the internet to connect with clients, patients, and caregivers in the health care field. In the same vein, a number of patients also have the propensity to seek information via social media in order to select doctors, specialists, and hospitals to make informed decisions on the best practices to get health care needs.

Similarly, in developed countries, some patients do rely on information found online and use the internet to gather health care information and connect with other patients to garner support and learn about related conditions to improve on their personal health care management, yet receiving accurate and prompt information for quality health service delivery still remains a challenge. Health care service provisions have always been characterized by the trust in the competence and independence of information obtained by the patient from various sources, primarily from physicians and other health care professionals (IMS Institute for Health Care Informative, 2004). Therefore, it is indispensable for health care providers to be active in using social media to provide accurate information, connect with readers and implement proactive techniques that will harness health services in tandem with patients' perceptions and satisfactions (Smailhodzic, Hooijsma, Boonstra & Langley, 2016).

Fox and Duggan (2013) posit that the health care information that patients look for on social media and on the internet differs, thus, the majority of those seeking health care information on the internet are trying to fulfill their desires, be it for information or emotional supports. Hence, the evolving nature of social media use due to the increasing access rate to the internet, the existence of affordable mobile devices, and the ease of communication at all times in proffering solutions to problems of mankind have not gotten sufficient documentation on its impacts on quality health service delivery (Eckler, Worsowicz & Rayburn, 2010). It is based on the observations and personal experiences of the researchers that this study investigated the impacts of social media use on health service delivery in Military Hospital Port Harcourt, Rivers State, Nigeria.

# **Objective of the Study**

The main objective of this study is to investigate the impact of social media use on health service delivery amidst COVID-19 in Military Hospital Port Harcourt, Rivers State, Nigeria. Its specific objectives include:

- 1. To identify the challenges of social media use in the delivery of health service amidst COVID-19 in Military Hospital Port Harcourt, Rivers State, Nigeria.
- 2. To find out how social media use can improve the quality of health care use amidst COVID-19 in Military Hospital Port Harcourt, Rivers State, Nigeria.

#### **Research Question**

- 1. What are the challenges faced in the use of social media on health service delivery amidst COVID-19 in Military Hospital Port Harcourt, Rivers State, Nigeria?
- 2. In what ways can social media use improve health service delivery amidst COVID-19 in military hospital Port Harcourt Rivers State, Nigeria?

#### **METHODOLOGY**

A survey research design was adopted for this study. The population of this study comprises of one hundred and thirty-three (120) health workers and one hundred and fifty (137) outpatients receiving health services in the hospital. A multistage sampling technique was used for the study. To determine the sample size, the researchers adopted Krejcie and Morgan (1990) sample size determination table to select a sample size of ninety-seven (84) health care providers and a sample size of one hundred and eight (95) patients from the population of 137 and 120 patients and health care providers respectively for the study. The convenience sampling technique was used by the researchers to administer the research instrument to respondents at the Military Hospitals Port Harcourt, Rivers State, Nigeria. A self-structured and scrutinized questionnaire titled the impacts of social media use and health service delivery in Military Hospital Port Harcourt, Rivers State, Nigeria.

#### **Data Presentation and Analysis**

RESEARCH QUESTION 1: What are the Challenges Faced by Patients in the use of social media on health service delivery in Military Hospital Port Harcourt, River State, Nigeria.

Table 1. Patients' Responses based on Challenges faced by Patients in the Use of Social Media on

S/N	Challenges of SOCIAL media	SA	%	Α	%	D	%	SD	%
-		4		3		2		1	
1.	Lack of privacy and confidentiality contributes to inadequate use of social media for health service delivery in Military Hospital Port Harcourt, Rivers State, Nigeria.	29	53	14	25	10	18	2	4
2.	Lack of good knowledge on how to use social media app always hinders timely Health service delivery in Military Hospital Port Harcourt, Rivers State, Nigeria.	17	31	31	56	7	13	-	-
3.	Poor network causes delays in delivery of quality health services in Military Hospital Port Harcourt, Rivers State, Nigeria.	30	55	8	15	10	18	7	12
4.	The inability to use the different types of social media effectively by patients impedes their proper care management by healthcare providers in Military Hospital Port Harcourt, Rivers State, Nigeria.	15	27	20	36	12	22	8	15

Table 1 shows that 29(53%) of patients strongly agreed and 14(25%) agreed that lack of privacy and confidentiality contributes to inadequate use of social media in Military Hospital Port Harcourt, while 10(18%) disagreed and 2(4%) strongly disagreed; 17(31%) of patients strongly agreed and 31(56%) agreed that lack of good knowledge on how to use social media apps always hinders timely health service delivery in Military Hospital Port Harcourt, Rivers State, Nigeria., while 7(13%) disagreed. Similarly, 30(55%) of patients strongly agreed and 8(15%) agreed that poor network causes delays in delivery of quality health service in the hospital, but 10(18%) disagreed, and 7(12%) strongly disagreed. In conclusion, 15(27%) of patients strongly agreed and 20(36%) agreed that the inability to use the different types of social media effectively is one of the major challenges faced in Military Hospital Port Harcourt, Rivers State, while 12(22%) disagreed and 8(15%) strongly disagreed to it.

RESEARCH QUESTION 2: In what ways can social media use improve health service delivery in military hospital Port Harcourt, River State, Nigeria?

Table 2. Patients' Responses based on ways Social Media Use can improve Health Service Delivery in

Military Hospital Port Harcourt, River State, Nigeria.

S/N	Ways Social Media Can Improve Health	SA	%	Α	%	D	%	SD	%
3/11	Services Render To Patients	4	70	3	70	2	70	1	70
1.	Social media use enables patients to take responsibility for their personal health management through the acquisition of reliable health tips in Military Hospital Port Harcourt, Rivers State, Nigeria.	30	55	10	18	8	15	7	12
2.	Social media use enables the patient to receive synchronic and asynchronous information that always gives them the opportunity to involve in decision-making in improving their health status in Military Hospital Port Harcourt, Rivers State, Nigeria.	20	36	12	22	8	15	15	27
3.	Social media use enhances patient health care providers' relationships in Military Hospital Port Harcourt, Rivers State, Nigeria.	31	56	17	31	7	13	-	-
4.	Social media use reduces the frequent physical presence of the patient in Military Hospital Port Harcourt, Rivers State, Nigeria.	30	55	10	18	7	12	8	15

Table 2. shows that 30(55%) of patients strongly agreed and 10(18%) agreed that social media used to enable them to take responsibility for their personal health management through the acquisition of reliable health tips in Military Hospital, while 8(15%) disagreed and 7(12%) strongly disagreed correspondingly. More so, 20(36%) of patients strongly agreed and 12(22%) agreed that social media use enables them to receive synchronic and asynchronous information, but 8(15%) disagreed and 15(27) strongly disagreed with the statement. In addition, 31(56%) of patients strongly agreed and 17(31%) agreed that social media use enables patients-health care providers' relationship in Military Hospital, while 7(13%) disagreed. Lastly, 30(55%) strongly agreed and 10(18%) of patients agreed that social media use reduces their frequent physical present in the hospital, while 7(12%) disagreed and 8(15%) strongly disagreed with the statement.

# **Discussion of Findings**

Findings from Table 1 shows that strongly agreed 30(55%), 20(36%), 31(56%), and 30(55%); and agreed 10(18%), 12(22%), 17(31%), and 10(18%) respectively. This implies that social media use enables patients to take responsibility for their personal health management through the acquisition of reliable health tips; enable patients to receive valuable health information through synchronic and asynchronous methods; enhances patients-providers' relationship; and reduces frequent physical present of the patient thereby eliminating covid-19 contact at military hospital Port Harcourt, Rivers State, Nigeria. Similarly, Table 3.4 reveals strongly agreed 12(40%), 18(60%), 3(10%), and 12(40%); and 10(33%), 9(30%), 21(70%), and 12(40%) agreed of health care providers correspondingly indicated that social media use creates an effective communication link between them and patients/caregivers; provides healthcare providers with tools to share information to patients; enable in the delivery of timely health services and enhances prompt responses of healthcare providers to patients' plights. The findings corroborate Arhete (2016) study that posited that good medium of communication raises health workforce productivity through higher workload and lower absenteeism and its encourages health care providers to be more responsive which positively impacts the quality of care perceived by patient. findings also align with Househ, Borycki and Kushniuk (2014) study which stated that there are various benefits and challenges for patient when using social media for health. In addition, the findings support Alshakhs and Alanzi (2018) study which revealed that the use of this technology in the provision of health services often improve healthcare providers' professional knowledge, and therefore, it is a suitable tool for patient education and public health awareness

Findings from table 2. shows patients strongly agreed 29(53%) and 14(25%) agreed that lack of privacy and confidentiality contributes to inadequate use of social media in Military Hospital Port Harcourt. The findings further revealed strongly agreed 17(31%), 10(33%), and 12(40%); and agreed 31(56%), 12(40%), and 9(30%) meaning that

poor network causes delaying in delivery of quality health service, and 15(27%) strongly agreed and 20(36%) affirming the inability of patients to use the different types of social media effectively as a challenge in Military Hospital Port Harcourt. In addition, results in Table 3.4 strongly agreed 21(70%), 10(33%), and 12(40%); and agreed 12(40%), 9(30%) reveals that the inability of health care providers to always update the social media Apps hinders prompt delivery of health service to patients; poor network often contributes to untimely and inaccurate use of social media; confidentiality and security threats hinder proper use of social media for health service delivery. On the contrary, findings further revealed that 12(40%) of healthcare providers disagreed that their certain individual interest (attitude) often disrupt frequent use of social media for health service delivery in Military Hospital Port Harcourt, Rivers State, Nigeria. The findings are affirmed Barret-Maitland and Lynch, (2020); and Ventola (2014) studies that emphasized breaches of patient privacy, security and confidentiality, and unethical use of social media by both patients and healthcare providers.

#### CONCLUSION

The delivery of quality health services cannot be carried out effectively and efficiently without the use of some social media like Facebook, Twitter, WhatsApp by both healthcare service beneficiaries and providers in any hospital. Though, certain challenges like poor network, inability to update the apps to the current standard, and unethical practices are always encountered when using social media. Its benefits are enormous in health service delivery, therefore adequate measures for cooperation are key in using social media as tool to share information with patients and to enable healthcare providers to give prompt responses to patients' requests in military hospital Port Harcourt.

#### RECOMMENDATIONS

Based on the findings from the study, the following recommendations were made:

- 1. The management of Military Hospital Port Harcourt collaboration with Rivers State Government should be consistently improved on network coverage, patients-healthcare providers' relationships, and collaboration with other stakeholders to streamline ways of curtailing any lingering challenges in the use of social media that could affect the quality of health services in the state.
- 2. The Military Hospital Port Harcourt and Rivers State Government should adopt and implement electronic health information management in healthcare facilities for easy patients' medical information dissemination/transmission for follow-up or referral care management during and after the COVID-19 era. In addition, ethical practices should always be carried out by every healthcare provider in the delivery of health services to patients to promote real-time and asynchronous information dissemination in Military Hospital Port Harcourt and beyond.

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