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Innovative healthcare marketing promotion, social marketing and outpatients' satisfaction in selected private hospitals in Lagos Metropolis

[1]Ismail Tubosun Arebi & [2]Samson Adewumi

Abstract

There is hardly any study that has investigated healthcare promotion and social marketing in understanding hospital outpatient satisfaction in Lagos Metropolis. This study interrogate how innovative healthcare promotion and social marketing can be used to understand hospital outpatient satisfaction in Lagos metropolis. The research design supports the assumption of the cross-sectional-survey where data were collected from many samples at a single and short point in time. A total of 371 participants were recruited through stratified sampling from 18 modern care hospitals in 10 Local Government Areas considered as metropolitan areas. A researcher-designed Likert-scale questionnaire with reliable coefficient. SPSS (29 Version) software was used to analyse the data including the mean, standard deviation and multiple regression analysis. Innovative healthcare promotion including personal selling ($\beta = 0.573$, $t=5.658$, $p<0.05$) and direct marketing ($\beta = 0.436$, $t=4.459$, $p<0.05$) significantly predicted outpatient satisfaction, while advertising ($\beta = -0.059$, $t=-1.171$, $p>0.05$ at 0.242) was insignificant and weak with negative influence ($\beta = -0.059$). Social marketing including community engagement ($\beta = 0.396$, $t=5.595$, $p<0.05$) and healthcare matchmaking ($\beta = 0.512$, $t=10.235$, $p<0.05$) significantly predicted outpatient satisfaction, while social media management ($\beta = 0.070$, $t=1.233$, $p>0.05$ at 0.218) was insignificant ($\beta = 0.070$). The study concluded that social marketing in healthcare is critical for improving outpatient satisfaction. Healthcare organisations must look beyond traditional marketing strategies while employing innovative healthcare marketing strategies to reach different target audiences. Although there is an emphasis on the health benefits that trigger a quality-based product strategy to sell itself, the healthcare organisation is recommended to strengthen the quality of its innovative healthcare goods and services for outpatient improved satisfaction.

Keywords: *innovative healthcare, marketing promotion, social marketing, satisfaction, Lagos*

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About the authors:
[1]PhD, University of Lagos, Nigeria. Email: arebiismail@gmail.com
[2]Corresponding author. PhD, Walter Sisulu University, Komani, South Africa. Email: sadewumi@wsu.ac.za

1. Introduction

Access to quality healthcare services and outpatient satisfaction have become crucial components of the global community's roadmap for healthy living and increasing wellbeing of consumers of all ages. Healthcare is one of the most prominent sectors across the globe with practitioners working wholly independently within their medical field to meet health needs in the entire service to humanity (Hofert, 2023). The drive towards achieving outpatient satisfaction through integrative innovative technologies with healthcare system for consumers is attracting more attention worldwide. Currently, the healthcare industry is experiencing a transformative technological shift driven by innovations for outpatient satisfaction. Yu et al., (2016) describe outpatient satisfaction as reflective of patients' perceptions and quality delivery of innovative healthcare.

Satisfaction starts when the outpatient first gains access to the health facility until they stop using the facility. White (2018) claim that most potential consumers who utilise innovative healthcare goods and services are mainly outpatients. This is because the outpatients are outside the close shade of healthcare practitioners, perhaps with close monitoring to ensure feedback on their wellness and wellbeing. Outpatients have ultimately become the principal focus of innovative healthcare vendors whose efforts are directed at increasing sales and improving the efficacy of healthcare organisations. Innovation in this context is the development of an entirely new healthcare service process that represents a significant technological advancement over the past and current ones. It contextually includes the introduction and application of new healthcare supporting tools into the healthcare service system such as wearable health devices, mobile health, remote patient monitoring systems, and personalized medicine or genetic testing tools.

Innovative healthcare has introduced new technologies such as telehealth, mobile health, e-pharmacy, among other self-service methods on screening, diagnostics and treatment with adequate management capable of enhancing service optimisation (Arora & Sagar, 2020). Although, notions on minimal regulations would embolden the participations of healthcare providers, non-governmental organisations and other concerned stakeholders, however, the innovative healthcare system in Nigeria is currently experiencing inefficient regulatory policy. The implications by extension will expose patients to severe health risks such as standard for healthcare marketing activities, data protection and consumer protection from high-cost medical payments and unethical prescriptions (Iheme, 2023). The consequence of these

problems would jeopardize the quality, value and development of Nigeria's healthcare system, which would render the system obsolete in the twenty-first-century economy. The interference of marketing strategies has huge potential to drive improvement to the development of innovative healthcare system in Nigeria. This includes the adoption of marketing promotion and social marketing strategies to sensitise people on healthcare innovation. Community health volunteers use mobile phones to report emerging diseases, influenced by social marketing for behavioral modification.

The limited adoption and utility of innovative marketing promotions and social marketing techniques in the advancement of healthcare service has impacted the satisfaction of hospital outpatients (Elekwachi, 2019). For instance, the increasing disappointing role of the Nigerian government in digitalizing the economy has implications on the acceptance of innovative marketing by the Nigerian health sector for effective hospital outpatients' satisfaction .The growing population and congestion of Lagos State in recent times, with 25 million estimated population (National Bureau of Statistics, 2024), has further complicated the adoption and acceptance of innovative marketing strategies for efficient and effective hospital outpatient satisfaction. For instance, the growing demand for outpatient hospital service are not in tandem with the available innovative marketing healthcare services for positive customer experience. Where the services are available, the culture of acceptance by many Nigerians also captures another component of the challenges of innovative healthcare marketing strategies for outpatient satisfaction (Ejeikwu & Folashade, 2019).

Lagos state case as a context for this study is justified in several ways. For instance, aside the viable economic and human capital presence, the state boost as one of the Nigerian states with qualitative private and public healthcare services. The State also host hospitals with thriving culture of innovative technology in the delivery and dispensation of healthcare services. However, what remains unclear is the effectiveness of innovative healthcare marketing strategies (marketing promotion and social marketing) in the dispensation of healthcare services, and the implication on outpatient hospital satisfaction. This forms the nub of this study.

The literature on telemedicine, health communication strategies, mass media and emerging technologies roles in the healthcare service delivery include emerging technologies and analytics for a new era of value cantered marketing in healthcare (Agarwal et al., 2020), health communication for behaviour change: evolution for a marketing framework (Arora &

Sagar, 2020) and effectiveness of e-detailing as an innovative pharmaceutical marketing tool in emerging economies (Banerjee & Dash, 2011). In Nigeria, available studies include telemedicine system: services adoption and implementation issues in Nigeria (Adenuga et al., 2020), utilizing social robot to reduce workload of healthcare professional in psychiatric hospital (Ikeuchi et al., 2018), and artificial intelligence-based medical devise technologies implementation strategies in the Nigerian healthcare industry (Iheme, 2023). With the collection of these studies, hardly has any study attempt an interrogation of innovative healthcare promotion and social marketing as strategies to understand hospital outpatient satisfaction in Lagos metropolis. This study aims to investigate these variables as a contribution to the extant literature on innovative healthcare marketing and hospital outpatient satisfaction. After an overview of innovative healthcare marketing promotion, the paper turned to explain social marketing in healthcare service. Next was the operationalization of the Disruptive Innovative Theory as the theoretical lens of the study followed by methodology and analysis.

2. Literature Review

2.1 Innovative Healthcare Marketing Promotion

Innovative healthcare marketing promotion refers to the use of creative and novel approaches to promote healthcare products, services, or facilities to patients, healthcare providers, and other stakeholders (Melles et al., 2021). This type of marketing focuses on using new technologies to craft digital channels such as interactive content, or using video marketing and other modern communication channels to create compelling campaigns that engage audiences and drive desired behaviours. According to Eisenberg and Price (2017), innovative healthcare marketing promotion is a strategy used to create interest in healthcare products and services. It involves the use of new approaches to spread awareness of the benefits of a particular healthcare service or product, while also engaging and informing customers (Greenway & Ross, 2017). In this study, innovative healthcare marketing promotion is the process of creating and delivering messages, products and services to increase the knowledge, attitude and behaviour of individuals and communities towards health and wellness. The goal of innovative healthcare marketing promotion is to reach potential customers quickly and effectively.

The promotion of healthcare services has continued to be challenging, particularly, when considering the adaptation of traditional marketing approach to fit into today's digital world. The pattern and the system of the traditional marketing promotion is completely different when considering innovative healthcare marketing (Haimowitz, 2011). For instance, advertisement through billboards and TVs in traditional promotional mix has become obsolete in today's digital environment where healthcare campaigns are gaining increasing attractions from millions of consumers from different countries on social media (Kucuk, 2023). The interest and loyalty of patients and non-patients in healthcare industry are now being gained by healthcare organisations through the application of digital platforms.

The choice of healthcare marketing promotion in this digitalize era is critical for the success of healthcare organisations and business sustainable growth (Kucuk, 2023). Thomas (2020) define promotion as the techniques used to communicate with customers and potential customers for the purpose of promoting an idea, an organisation or a product. For many people in healthcare industry, promotion has been interchangeably used for advertising while the adoption of advertising has been referred to as marketing (Lee & Cho, 2020). This mix-up has weighed a contradictory measure on promotion as a marketing strategy with various mix elements (Brownell et al., 2010). According to Gupta et al. (2013), there is no single doubt about the possibility of healthcare product and services selling itself, however, the choice of consumer that is outlays over various options demand the intervention of advertising. This form of healthcare promotion would help the healthcare organisations to showcase it product and services to its target audience.

There are several forms of healthcare marketing promotion techniques utilized for the promotion of healthcare services including advertising, personal selling and direct marketing. The essence of advertising in this highly turbulent digital world is beyond awareness creation rather for constant reminder and persuasion of existing and prospective customers respectively. This would boost the intensity and tendency for increasing product use (Percy, 2023). The advertising plan does not end at sales closing or patronage rather it designs long term relationship with the consumer towards building their loyalty (Kotler et al., 2006). The role of advertising, particularly, when targeting millennials via social media platforms such as YouTube ads, Instagram ads and Facebook ads *inter alia* would help to gain the awareness of patient and non-patient customers (Silvia, 2019).

Personal selling is a promotional tool that embrace strategic conversation between a marketer or salesperson and prospective purchaser for the purpose of generating sales (Thomas, 2020). The primary objective of personal selling is to convert a prospective buyer of a product to an engaged customer for repeat purchase. The salespeople covering this responsibility are usually trained particularly on the function and characteristics of the rand (Johnston & Marshall, 2013). They are empowered with strategies to search for prospect, convince them and keep them as existing customers for repeat purchase (Kumar & Gupta, 2016). Direct marketing is defined as an interactive system that uses one or more advertising media to affect a measurable response or transition from consumers (Thomas, 2020). Unlike personal selling, direct marketing also initiates sales with pre-selected customer under a specific condition and supply method (Kehrer, 2019). The marketing tools in direct marketing of healthcare goods and services, particularly in digitalized era are quite unique with innovative system features. These includes direct mail, direct response advertising, mail order, telemarketing, internet marketing and home-shopping television (Thomas 2020). Where the direct mail target specific consumers with advertising materials sent to them for promotion, the direct response advertising transmit an electronic media to connect the consumers to a health organisation on a toll-free line for conversation (Lancaster & Massingham, 2017).

Hi: Innovative health care promotion (advertising, personal selling and direct marketing) has significant influence on outpatient satisfaction in Lagos State, Nigeria

2.2 Social Marketing in Healthcare Service

Social marketing is the application of marketing principles and techniques to create positive social and behaviourial change (Lee & Kotler, 2015). It aims at promoting socially desirable behaviours and discourage harmful or unhealthy ones, by leveraging the power of marketing to influence individuals, communities, and organizations (Fry, 2014). The concept of social marketing from the healthcare service context is define as the application of commercial marketing techniques to influence the attitudes, knowledge and behaviour of target audiences related to the improvement of individual and community health status (Thomas, 2020). Social marketing campaigns are designed to address social issues such as public health, environmental protection, poverty, education, and human rights (White, 2018). Examples of social marketing campaigns include anti-smoking campaigns, campaigns to encourage people to use seat belts or wear helmets, campaigns to promote healthy eating and exercise, and

campaigns to encourage people to conserve energy and reduce their carbon footprint (Donovan & Henley, 2010).

Social marketing techniques employed in healthcare service include community engagement, social media management, and healthcare matchmaking (Fry, 2014). Community engagement is a branch of social marketing that strengthen the relationship between healthcare organisations and their customers. World Health Organization (2020) categorized community engagement in innovative healthcare service under four approaches. The first is community-oriented approach which create avenue to inform the consumers. The second is community-based approach which ensure that key members of the community are consulted and involved in initiative and decisions. The third is community-managed approach which help to strengthen the collaboration between the community leaders and the healthcare organisations. Lastly, the fourth is community owned approach which establish relationship used to mobilise empowerment initiatives for the benefits of the community. The participation and involvement of the community in the civil society activities is crucial to achieving the sustainable development goals (henceforth, SDGs), particularly, healthcare and wellbeing perspectives (United Nation Development Programme, 2023).

The goal of social media is to get potential customers interested in healthcare product or service, while social marketing gets individuals to change their ways for the greater good of society (Lee & Kotler, 2011). For instance, Thomas (2020) discovered that social media usage is high among internet users with 74 percent actively participating, and while 80 percent of those people are seeking for health-related information online, almost half are looking for details on a particular medical practitioner. Therefore, social marketing relies on public relations and word-of-mouth to bring in customers, under a leverage of social media communities to spread information about a product or service pertaining to the marketplace. As opposed to traditional marketing, the management of social media accounts (i.e. Facebook, Twitter, YouTube, Instagram, Pinterest, LinkedIn, etc.) spreads its message to a wide audience using a generalized caption on a specific market segment. The market segment of specific healthcare customers for behavioural change on a particular health policy is the primary intention of social marketing in healthcare.

Healthcare matchmaking in innovative healthcare marketing can help healthcare organisations reach and engage with their target audience more effectively. Healthcare matchmaking refers to the process of connecting healthcare organisations with potential

customers or patients who may be interested in their services or products (Chowdhury et al., 2019). This can be achieved through various means such as targeted advertising, influencer marketing, and referral programs. By leveraging these strategies, healthcare organizations can reach out to their ideal audience and create a more personalized and meaningful connection with them (Neuhauser & Kreps, 2010). This healthcare practice has denied many consumers access to their physicians even when under chronic conditions outside emergency (Nordgren, 2009). Despite many strategies to manage this situation by many hospitals, there has been low development in relation to aid progress in healthcare industry.

Hi: Social marketing in healthcare service (community engagement, social media management, and healthcare matchmaking) has significant influence on outpatient satisfaction in Lagos state, Nigeria.

2.3. Theroretical Framework

Disruptive Innovation Theory (DIT) was developed by Clayton Christensen in 1997 (Liang, 2013). Originally, DIT was first used in architecture by Christensen (1997) in his book titled "the innovator dilemma" before it began to gain popularity across other disciplines. The theory raised assumption on new inventions that may disrupt an established market or industry because it offers new levels of simplicity, ease, accessibility, and affordability in places where complexity and high cost were previously the norm (Martínez-Vergara & Valls-Pasola, 2021). DIT often begin in a niche market that may seem uninteresting or insignificant to established players in the industry, but which ultimately leads to a complete rethinking of the whole sector (Guttentag, 2015). A perceived reduction in the general performance of firms operating in an existing industry is a common outcome of disruptive technologies and developments (Gans, 2016). However, failure of existing firms in this industry to adapt to a disruptive system would result into inefficiency or ineffectiveness which weigh higher threat on business sustainable growth (Frederick, 2016).

Disruptive innovations compete at the bottom of an existing market or create whole new ones by appealing to previously untapped demographics (Chan et al., 2019; Carayannis et al., 2003). For instance, Kshetri (2008) laid practical emphasis on the low adoption of innovative software in developing countries to transform the traditional work method to an automation system based on the absence of technical sensitisation and inability to access computers. DIT play major role in the newly invented technologies to disrupt the traditional

system in the healthcare industry while innovating the healthcare goods and services at the benefit of the consumers. While the operating system in the healthcare industry is quite different from other industries (Dubé et al., 2014), yet the weight at which a new or existing firm would disrupt other industries with the introduction of innovative technologies to transform work process and delivery might be completely different in the healthcare industry.

An innovative plan to disrupt the healthcare system would summon an extensive plan considering the existing policy or mission to break existing legal barrier by convincing the government for adoption and acceptance (Kohlbacher & Hang, 2011). It is norm and ethical for the regulatory bodies in the healthcare industry to master the general procedures for human studies whenever there are disruptive innovations, especially, when the pioneers are new to the industry (World Health Organization, 2017). DIT emphasized the dynamic face of global business competitiveness under the existing and capable tons of disruptive technology across various markets or industries. Also, DIT addresses the sustainable role of existing business to apply adaptive measure to its goals and business in the best interest of its stakeholders (He et al., 2020).

DIT is criticized for its failure to address certain measures for consideration when disrupting law-bounded industry such as healthcare where stringent and natural policy and regulations are designed to prevent (defensive strategy) or enhance and optimized (offensive strategy) such disruptive technology. A sustainable innovation takes gradual process for development, however, a disruptive innovation either favourable or unfavourable is an unforeseen invention that derange the procedure of an existing system (Volberda et al., 2021). The interference of such disruptive technology would always demand serious scrutiny by policy and regulations before gaining entrant for implementation in the healthcare industry (Terry, 2017). DIT is also criticized for its failure to address the first-hand target of its disruptive inventions (Piehlmaier, 2022). This placed doubt in the literature on either the consumers or businesses as the utmost buyer of this new technology. The target outcome from the two perspectives would certainly be different which is the main reason DIT should have defined its views appropriately. For instance, the sales of medical devices or telemedicine software to healthcare organisations could open wave for the industry competition for innovation and adaptation.

3. Methodology

3.1 Philosophical Foundation and Research Design

The philosophical approach of this study is guided by the positivist research philosophy. The positivist research assumptions support the generalization of research findings drawn from a large sample of participants (Sekeran & Bougie, 2016). This assumption supports the methodological direction of this study where a large sample of participants were surveyed, and generalization inferred from the results. The study design is built on the cross-sectional-survey design involving the collection of data from a broad sample at a single and short point in time, providing a snapshot of the phenomenon of interest (Singh & Vellakkal, 2021; Saunders et al., 2009). The combination of these two quantitative approaches enables an extensive understanding of the research problem from multiple perspectives and provide a reliable basis for generalization.

3.2 Study Population and Samples size

The population comprised of 35,833 outpatients from 18 modern care hospitals under 10 Local Government in the metropolitan areas of Lagos State, Nigeria (Lagos Bureau of Statistics, 2022*)*. There are twenty (20) Local Government Areas (LGAs) in Lagos State categorized into metropolitan and outside metropolitan areas based on their population density, economic activity, infrastructural development and social engagement. Among these twenty (20) LGAs in Lagos State, sixteen (16) are under metropolitan while 4 are categorized outside metropolitan areas. The sixteen (16) areas include Agege, Ajeromi-Ifelodun, Alimosho, Amuwo-odofin, Apapa, Eti-Osa, Ifako-Ijaye, Ikeja, Kosofe, Lagos Island, Lagos Mainland, Mushin, Ojo, Oshodi-Isolo, Shomolu and Surulere. While the other four (4) LGAs under the category outside metropolitan areas include Epe, Ibeju-Lekki, Ikorodu and Badagry.

According to Lagos Bureau of Statistics (2022), of all the sixteen (16) metropolitan areas in Lagos State, only ten (10) encompass modern care hospitals. These ten (10) areas include Ikeja, Surulere, Lagos Mainland, Agege, Amuwo-Odofin, Eti-Osa, Ajeromi-Ifelodun, Oshodi-Isolo, Lagos Island and Apapa. The research involves a finite population of 35,833 outpatients from 18 modern care hospitals under 10 Local Government in the metropolitan areas of Lagos State, Nigeria (Lagos bureau of Statistics, 2022). The population data was retrieved from Lagos State Ministry of Health to represent the aggregated outpatients for the year 2022 across the modern healthcare hospitals in Lagos State. Eti-Osa LGA comprises five

(5) modern healthcare hospitals (i.e. Reddington Hospital, Premier Specialist Medical Centre, Olive Multi-Specialist Hospitals, First Cardiology Consultants and Medison Hospital) with a total of 7,179 outpatients. Lagos Island LGA comprises two (2) modern healthcare hospitals (i.e. First Consultant Hospital and St. Nicholas Hospital) with a total of 7,694 outpatients. Ikeja LGA comprises four (4) modern healthcare hospitals (i.e. Eko Hospitals, The Bridge Clinic, St. Ives and Gold Cross Hospital) with a total of 6,976 outpatients. Lagoon Hospital in Apapa LGA with 3,523 outpatients, Me Cure Healthcare Limited in Oshodi-Isolo LGA with 1,369 outpatients, Randle Hospital in Surulere LGA with a total of 6,245 outpatients, Wellvis Health in Agege LGA with a total of 355 outpatients, Eko TeleMed in Lagos Mainland LGA with a total of 3,523 outpatients, Evercare Hospital in Amuwo-Odofin with a total of 1,024 outpatients, and Retreat Healthcare in Ajeremi-Ifelodun with a total of 906 outpatients.

This study area represents the healthcare organisation prioritising integrating contemporary healthcare technologies, techniques and wearable gadgets to improve patient care. The data summary for the study population was presented in the table 1.

Table 1

Distribution of the study population

Metropolitan LGAs	Modern Care Hospitals in Lagos State	Outpatients Population
Eti-Osa	Reddington Hospital	2,325
	Premier Specialist Medical Centre	1,032
	Olive Multi-Specialist Hospitals	812
	First Cardiology Consultants	646
	Medison Hospital	2,364
Lagos Island	First Consultant Hospital	2,171
	St. Nicholas Hospital	5,523
Ikeja	Eko Hospitals	3,764
	The Bridge Clinic	957
	St. Ives	1,147
	Gold Cross Hospital	1,108
Apapa	Lagoon Hospitals	3,523
Oshodi-Isolo	Me Cure Healthcare Limited	1,369
Surulere	Randle hospital	6,245
Agege	Wellvis Health	355
Lagos Mainland	Eko TeleMed	562
Amuwo-Odofin	Evercare Hospital	1,024
Ajeromi-Ifelodun	The Retreat Healthcare	906
10	**18**	**35,833**

Source: Lagos Bureau of Statistics, 2022

The sample size was determined by Singh and Masuku (2014) sample size determination as follows:

$$n = \frac{n_0}{[1+\frac{n_0}{N} 1] \text{ x } (\frac{Z^2 .p.q)}{d^2}}$$

where: confidence level (Z): 95% (corresponds to a Z-score of 1.96 for a 95% confidence level); margin of error (d): 5% (or 0.05); population size (N): 35,833. p and q are the estimated proportions of the population. It was based on a conservative estimate of 0.5 (50%), as it represents the maximum variability or uncertainty in the estimate and will result in the largest sample size required to achieve a given level of precision. However, it was required in the first process to calculate the value of n_0, which was the sample size without considering the finite population size, as indicated:

$$n_0 = Z^2 \text{ x } \frac{p.q}{d^2}$$

$$n_0 = 1.96^2 \text{ x } \frac{0.5 \text{ x } 0.5}{0.5^2}$$

$$n_0 = 384.16$$

Also, it was required in the second process to calculate the values of n_0 and N into the formula where $n = n_0 / [1 + \{(n_0 – 1) / N\}]$ to determine the sample size with the consideration of the finite population size:

$$n = \frac{n_0}{1 + \frac{n_0}{N} 1}$$

$$n = \frac{384.16}{1 + \frac{384.16}{35.833}}$$

$$n \approx 379.99 \text{ (approximate to } \underline{380})$$

3.3 Sampling Techniques

The stratified sampling technique was employed to recruit participants. All the eighteen (18) modern care hospitals were divided into heterogenous group based on the number of outpatients to arrive at 380 samples. This group enabled outpatients from each modern care

hospital to be sufficiently represented in the sample. It was essential to approximate the closest whole number to determine the suggested sample size for a finite population of 35,833 with a 95% confidence level and a 5% margin of error, which in this case was estimated to be 380. The sample size was determined to accurately represent the outpatient and a stratified random sampling technique was employed to divide this population into 18 homogenous groups in accordance with the representative LGAs in Lagos metropolitan.

To ensure that the sample accurately reflects the appropriate hospitals regardless of their population size, the study adopted the proportional allocation formula proposed by Pandey and Verma (2008) to distribute the sample into distinct strata for data collection (see table 2). The Pandey and Verma (2008) proportional allocation formula and table was given as:

$$n_i = nN_i / N$$

Where: n_i = Number of units allocated to each stratum

n = Total sample size (i.e. 380)

N_i = Number of items in each stratum in the population

N = Total population (i.e. 35,833).

Table 2

Proportional allocation of the sample

Metropolitan LGAs	Modern Care Hospitals in Lagos State	Outpatients Population	nN_i /N	Sample (Units)
Eti-Osa	Reddington Hospital	2,325	380 x 2,325 / 35,833	25
	Premier Specialist Medical Centre	1,032	380 x 1,032 / 35,833	11
	Olive Multi-Specialist Hospitals	812	380 x 812 / 35,833	9
	First Cardiology Consultants	646	380 x 646 / 35,833	7
	Medison Hospital	2,364	380 x 2,364 / 35,833	25
Lagos Island	First Consultant Hospital	2,171	380 x 2,171 / 35,833	22
	St. Nicholas Hospital	5,523	380 x 5,523 / 35,833	59
Ikeja	Eko Hospitals	3,764	380 x 3,764 / 35,833	40
	The Bridge Clinic	957	380 x 957 / 35,833	10
	St. Ives	1,147	380 x 1,147 / 35,833	12
	Gold Cross Hospital	1,108	380 x 1,108 / 35,833	12
Apapa	Lagoon Hospitals	3,523	380 x 3,523 / 35,833	37
Oshodi-Isolo	Me Cure Healthcare Limited	1,369	380 x 1,369 / 35,833	14
Surulere	Randle hospital	6,245	380 x 6,245 / 35,833	66
Agege	Wellvis Health	355	380 x 355 / 35,833	4
Lagos Mainland	Eko TeleMed	562	380 x 562 / 35,833	6
Amuwo-Odofin	Evercare Hospital	1,024	380 x 1,024 / 35,833	11
Ajeromi-Ifelodun	The Retreat Healthcare	906	380 x 906 / 35,833	10
10	**18**	**35,833**		**380**

Source: Lagos State Ministry of Health, 2022

3.4. Instrumentation and Data Gathering Process

The questionnaire was carefully designed to capture the necessary and coherent information in line with the study variables. The Likert scales was adopted in the design of the questionnaire. The two variables tested in this study (innovative marketing promotion and social marketing) consists of 9 items each. These scales allow participants to rate their level of agreement with a statement. A total of 371 questionnaires were found usable after the fled work representing 98 percent of the total sample size. The content validity was ascertained by to ensure consistency between the research objectives and the items contained in the questionnaire (Aithal & Aithal, 2020). For this study, the content validity of the questionnaire was ascertained by experts in the field of marketing. Three experts were approached to determine if the items in the questionnaire captured the aims of the research. Thereafter, experts feedback was given revealing that the opinion of the items was related, and it was concluded that the items were valid and reflects the overall aim of the study. The measurement of reliability test for the instrument was assessed using Cronbach's alpha to ensure that the data collected from the participants were consistent and reliable. This study employed the Cronbach alpha coefficient to assess internal consistency. Reliability co-efficient above 0.70 was considered higher and reliable (Taber, 2018). Table 3 shows the reliability results.

Table 3

Reliability test results

Variables and Sub-Variables	N	Items	Cronbach Alpha
Advertising	28	3	.929
Personal Selling	28	3	.908
Direct Marketing	28	3	.763
Overall Cronbach Alpha coefficient for Innovative Healthcare marketing promotion		9	.887
Community Engagement	28	3	.783
Social Media Management	28	3	.808
Healthcare Matchmaking	28	3	.935
Overall Cronbach Alpha coefficient for Social Marketing		9	.921

Innovative healthcare marketing promotion and its sub-variables such as advertising, personal selling and direct marketing provides a total number of nine (9) items which reveals a result of Cronbach alpha coefficient of 0.887. Social marketing and its sub-variables such as

community engagement, social media management and healthcare matchmaking provides a total number of nine (9) items which reveals a result of Cronbach alpha coefficient of 0. 921.

3.5 Data Analysis

The Statistical Package for the Social Sciences (SPSS, 29 Version 1.0.0.1406) software was used to analyse the data including the mean, standard deviation and multiple regression analysis.

3.6 Research Ethics

Ethical clearance was obtained from the Nigerian Institute of Medical Research (NIMR) to validate the ethical integrity of the study with reference number IRB/23/065. In addition, administrative and social approval was the Lagos State Ministry of Health with reference number LS/C.350/S. I/V/878. Prior to commencing the research, explicit consent was granted participants, who were informed of the purpose of the research and the University's requirement for the award of a doctoral degree (PhD) in Marketing. Respondent were informed of their right not to participate or seize to participate even as the study progresses. To protect the confidentiality and privacy of the data provided, stringent measures were employed. All data were treated with utmost discretion and stored securely, whilst any personal information that could identify participants or participants was kept anonymous, and only aggregated data was used for analysis. Overall, ethical considerations were rigorously addressed throughout the entire research process to ensure that the rights and welfare of participants were respected and that the study was conducted in an ethical and responsible manner

4. Findings and Discussion

Table 4 reveals the outpatient perception of innovative marketing promotion in Lagos State, Nigeria. The participants agreed that they have seen adverts that promote advanced health technologies in terms of; communicating the benefits of innovative healthcare goods or services; promoting and positively influencing their perception of modern healthcare solutions; sales representatives clearly explaining the benefits of innovative healthcare goods or services; direct response materials communicate the benefits of innovative healthcare goods or services; and direct response materials positively influenced their perception of modern healthcare solutions. These results are justified based on the high mean scores of 3.80, 3.77, 3.74, 3.59,

3.62 and 3.53, with corresponding standard deviations of 0.97, 0.97, 0.90, 0.95, 0.84 and 0.89, respectively.

Table 4

Mean and standard deviations on innovative healthcare marketing promotion and outpatient satisfaction

Views	N	Mean	Std. Deviation
I have seen adverts that promote advanced health technologies.	371	3.7978	.96959
The adverts communicate the benefits of innovative healthcare goods or services.	371	3.7655	.96786
The adverts positively influence my perception of modern healthcare solutions.	371	3.7439	.89544
I have once been approached by a sales representative for modern healthcare offerings.	371	3.3288	1.11486
Sales representatives clearly explain the benefits of innovative healthcare goods or services.	371	3.5876	.95281
Sales representatives influence my trust and credibility for modern healthcare solutions.	371	3.4501	.98066
I have once received direct response materials (e.g., emails, mailers, texts) on self-service health technologies.	371	3.2210	1.14121
Direct response materials communicate the benefits of innovative healthcare goods or services.	371	3.6199	.84055
Direct response materials positively influenced my perception of modern healthcare solutions.	371	3.5337	.89492

Contrarily, the participants agreed on the view towards sales representatives' approaches to modern healthcare offerings, sales representatives' influence on their trust and credibility of modern healthcare solutions, and perception towards direct response materials (e.g., emails, mailers, texts) on self-service health technologies. These results are justified based on the mean scores of 3.33, 3.45 and 3.22, with corresponding standard deviations of 1.11, 0.98 and 1.14, respectively. However, the findings show an overall positive influence of innovative healthcare marketing promotion on outpatient satisfaction in Lagos state.

Table 5 reveals the outpatient perception of social marketing in healthcare service in Lagos State, Nigeria. The participants agreed that healthcare brand or organisation provides opportunities for feedback or suggestions from members; community events or activities positively influence their perception of innovative healthcare goods or services; they engaged

in posts and conversations on modern healthcare solutions through social media (e.g., Facebook, Instagram, Twitter, LinkedIn, etc.); they have seen stories or testimonies from using advanced health technologies on social media; their social media experience has positively influenced their perception of innovative healthcare goods or services. These results are justified based on the high mean scores of 3.58, 3.63, 3.46, 3.66 and 3.66, corresponding standard deviations of 0.90, 0.83, 0.99, 0.95 and 0.87, respectively.

Table 5

Mean and standard deviations on social marketing in healthcare service and outpatient satisfaction

Views	N	Mean	Std. Deviation
I engaged with the healthcare brand or organization through community events or activities on modern healthcare solutions.	371	3.3046	.98993
The healthcare brand or organization provides opportunities for feedback or suggestions from members.	371	3.5768	.90129
Community events or activities positively influence my perception of innovative healthcare goods or services.	371	3.6253	.82678
I engaged in posts and conversations on modern healthcare solutions through social media (e.g., Facebook, Instagram, Twitter, LinkedIn, etc.).	371	3.4582	.98927
I have seen stories or testimonies from using advanced health technologies on social media.	371	3.6577	.95227
My social media experience has positively influenced my perception of innovative healthcare goods or services.	371	3.6631	.86818
I was once assigned to a healthcare provider for online appointment booking on referral or personal preference.	371	2.9677	1.12179
Physician-patient matchmaking has helped me find the right healthcare provider or service.	371	3.2022	1.02646
Matchmaking in healthcare has positively influenced my perception of new-age health innovations.	371	3.2345	1.01155

Participants fairly agreed on the view that they engaged with the healthcare brand or organisation through community events or activities on modern healthcare solutions; neither they have once been assigned to a healthcare provider for online appointment booking on referral or personal preference; neither the physician-patient matchmaking has helped them find the right healthcare provider or service; neither matchmaking practices in healthcare has positively influenced their perception of new-age health innovations. These results are justified

based on the mean scores of 3.30, 2.97, 3.20 and 3.23, corresponding standard deviations of 0.99, 1.12, 1.03 and 1.01, respectively. However, the findings show an overall positive influence of social marketing in healthcare service on outpatient satisfaction in Lagos State.

Table 6

Summary of regression analysis on innovative healthcare marketing promotion and outpatient satisfaction

Model 1	B	βeta	t-value	p-value	R	R^2	F-Stat	Adj R^2	F-sig
(Constant)	1.282		23.323	.000	0.950	0.903	1136.4	0.902	0.000
Advertising	-046	-059	-1.171	.242					
Personal selling	.412	.573	5.658	.000					
Direct marketing	.342	.436	4.459	.000					

Model 1: Predictors (Constant), Advertising, Personal selling, Direct marketing

Dependent variable: Outpatients satisfaction.

Table 6 shows the summary of the regression analysis adopted to examine the influence of innovative healthcare marketing promotion on outpatient satisfaction in Lagos state, Nigeria. Advertising, personal selling and direct marketing were the independent variable to test the outcome of outpatient satisfaction as the dependent variable. The coefficient of determination R^2 value of 0.903 indicates that the dimensions of innovative healthcare marketing promotion contribute to a 90.3 percent variation in outpatient satisfaction. The adjusted R^2 value of 0.902 indicates no significant difference with R^2. The model accounts for a high level of fitness and the actual independent variables that predict the dependent variable. However, the R-value of 0.950 indicates a solid and positive relationship between the variables. Based on the standardized coefficient (β), it was found that personal selling ($\beta = 0.573$, $t=5.658$, $p<0.05$) and direct marketing ($\beta = 0.436$, $t=4.459$, $p<0.05$) significantly predicted outpatient satisfaction. On the other hand, advertising ($\beta = -0.059$, $t=-1.171$, $p>0.05$ at 0.242) was insignificant and weak with negative influence based on the evidence from the standardized coefficient at $\beta = -0.059$.The advertisement sub-constructs could be insignificant and weak to outpatients' satisfaction in a few ways. One of such reasons could be explained by the poor culture of innovative advertisement that has characterized the Nigeria healthcare industry. This is a contrary to available evidence in other parts of the developing world where advertisement has become one of the drivers of innovative healthcare promotion. Again, the

Nigeria factor of poor acceptability of innovative advertisement of healthcare product and services could also be used to explain this outcome.

The constant (1.282) is the predicted value of outpatient satisfaction when all independent variables (x_1, x_2, and x_3) equal zero. In this context, it represents the baseline level of outpatient satisfaction without advertising, personal selling, or direct marketing efforts. The coefficient for advertising ($\beta_1 x_1$ = -0.059) suggests that for each unit increase in advertising spending, outpatient satisfaction is expected to decrease by 0.059 units, holding all other factors constant. This implies that increased advertising expenditure may have a slight negative impact on outpatient satisfaction. The coefficient for personal selling ($\beta_2 x_2$ = 0.573) indicates that for each unit increase in personal selling efforts, outpatient satisfaction is expected to increase by 0.573 units, assuming other factors remain constant. This suggests that more extensive personal selling efforts are associated with higher levels of outpatient satisfaction.

The coefficient for direct marketing ($\beta_3 x_3$ = 0.436) implies that outpatient satisfaction is expected to increase by 0.436 units for each unit increase in direct marketing activities, while other factors remain constant. This suggests that increased direct marketing efforts positively correlate with higher outpatient satisfaction. Meanwhile, the F-sig., P-value (.000) < 0.05 indicates that all three variables identified as innovative healthcare marketing promotion components (i.e. advertising, personal selling and direct marketing) were found to have a statistically significant positive influence on outpatient satisfaction. Since two of the three components of innovative healthcare marketing sub variables significantly influence outpatient satisfaction, hypothesize statement that innovative healthcare marketing promotion has significant influence on outpatient satisfaction in Lagos state Nigeria is thus maintained.

Table 7

Summary of regression analysis on social marketing in healthcare and outpatient satisfaction

Model 1	B	βeta	t-value	p-value	R	R^2	F-Stat	Adj R^2	F-sig
(Constant)	1.282		23.323	.000	0.967	0.936	1790.5	0.936	0.000
Comm. Engagement	.338	.396	5.595	.000					
Social media mgt.	.057	.070	1.233	.218					
Healthcare matchmaking	.348	.512	10.235	.000					

Model 1: Predictors (Constant), Community engagement, social media management, Healthcare matchmaking

Dependent variable: Outpatients satisfaction

Table 7 summarizes the regression analysis adopted to identify the influence of social marketing in healthcare service on outpatient satisfaction in Lagos state, Nigeria. Community engagement, social media management and healthcare matchmaking were used as components that represent social marketing in the context of healthcare service as the independent variable used to test the outcome of outpatient satisfaction as the dependent variable. Thus, the coefficient of determination R^2 value of 0.936 indicates that the dimensions of social marketing in the context of healthcare service contribute 93.6 percent variation in outpatient satisfaction.

The adjusted R^2 value of 0.936 indicates no difference with R^2. In other words, the model accounts for a high level of fitness and the actual independent variables that predict the dependent variable. However, the R-value of 0.967 indicates a solid and positive relationship between the variables. Based on the standardized coefficient (β), it was found that community engagement ($\beta = 0.396$, $t=5.595$, $p<0.05$) and healthcare matchmaking ($\beta = 0.512$, $t=10.235$, $p<0.05$) significantly predicted outpatient satisfaction. On the other hand, social media management ($\beta = 0.070$, $t=1.233$, $p>0.05$ at 0.218) was insignificant despite having a positive influence based on the evidence from the standardized coefficient at $\beta = 0.070$.

The constant (1.238) is the predicted value of outpatient satisfaction when all independent variables (x_1, x_2, and x_3) equal zero. In this context, it represents the baseline level of outpatient satisfaction without community engagement, social media management, or healthcare matchmaking efforts. The coefficient for community engagement ($\beta_1 x_1 = 0.396$) indicates that for each unit increase in community engagement efforts, outpatient satisfaction is expected to increase by 0.396 units, assuming other factors remain constant. This suggests that more extensive community engagement efforts are associated with higher levels of outpatient satisfaction. The coefficient for social media management ($\beta_2 x_2 = 0.070$) implies that outpatient satisfaction is expected to increase by 0.070 units for each unit increase in social media activities, while other factors remain constant.

This suggests that increased social media management efforts positively correlate with outpatient satisfaction. The corresponding p-value ($p<0.218$) indicates this variable's statistical significance is not as high as the other two. The implication of the weak correlation between social media management and outpatients' satisfaction could be explained by the poor utilization of social media tools for doctors' consultation in this part of the world. Even in urban centers and metropolitan cities in Nigeria, healthcare patients often prefer the use of in-person consultation that the use of social media for doctors' consultation and prescriptions.

However, for the few who employs social media, the wide acceptance is still largely low, thus affecting the overall outpatient satisfaction. The coefficient for healthcare matchmaking ($\beta_3 x_3 = 0.512$) suggests that for each unit increase in healthcare matchmaking, outpatient satisfaction is expected to increase by 0.512 units, holding all other factors constant. This implies that increased healthcare matchmaking efforts are positively associated with higher outpatient satisfaction.

Meanwhile, the F-sig., P-value (.000) < 0.05 indicates that all three variables identified as social marketing in healthcare service components (i.e. community engagement, social media management and healthcare matchmaking) were found to have a statistically significant positive influence on outpatient satisfaction. Consequently, since two of three components of social marketing in healthcare service significantly influence outpatient satisfaction, the hypothesize statement that social marketing in healthcare service has no significant influence on outpatient satisfaction is thus maintained.

The summary of the regression analysis found in the first research question and the hypothesis that innovative healthcare marketing significantly influences outpatient satisfaction is positive and significant. This finding corroborates that of Davenport et al., (2017), who posited that the degree of service rendered to a health patient has a high level of impact on their satisfaction. Although the coefficient for advertising discovers that for each unit increase in advertising spending, outpatient satisfaction is expected to decrease by 4.6% percent. The negative coefficient for advertising shows that cutting back on advertising expenses could be an option since the objective is to increase outpatient satisfaction. This finding was in line with that of Gopinath et al. (2014), who discovered that online content and word of mouth are more effective than paying highly for print and media advertisement that is limited to an environment.

Evaluating how this reduction would generally affect the organization's objectives and financial results is critical. Personal selling positive coefficient draws attention to the advantages of stepping up personal selling efforts. The positive correlation for direct marketing suggests that boosting direct marketing efforts may increase outpatient satisfaction, like personal selling. According to White (2018), personal selling and direct marketing are the two traditional marketing approaches that fit into today's contemporary market. Personal selling and direct marketing are more effective as innovative marketing tools because they represent elements of marketing promotion linked to greater outpatient satisfaction and, therefore,

deserve more resources and focus. This focus includes the sales representative's approach to modern healthcare offerings, sales representatives' influence on trust and credibility for modern healthcare solutions, and perception towards direct response materials (e.g., emails, mailers, texts) on self-service health technologies.

The summary of the regression analysis found in the second research question and the hypothesis that social marketing in healthcare signifyingly influence outpatient satisfaction is significant and positive. Volberda et al. (2021) found social marketing as one of the determinants of patient satisfaction in the healthcare service industry. This focus include engagement with healthcare brands or organisations through community events or activities on modern healthcare solutions, assignment of healthcare provider for online appointment booking on referral or personal preference, physician-patient matchmaking in finding the right healthcare provider or service, and matchmaking practices in healthcare on patient perception of new-age health innovations. This finding support Teece et al. (2022) position which shows high connections between social engagement in the navigation of market strategy, particularly in managing multi-sided platforms, although, the indications from the statistically significant negative coefficient for community participation point to a link between rising community engagement initiatives and falling outpatient satisfaction. It is essential to investigate the reasons behind this association and to speculate on possible solutions to lessen its adverse effects on outpatient satisfaction. According to the findings, increased efforts in healthcare matching are linked to greater outpatient satisfaction, which shows a statistically significant positive coefficient for this relationship.

In summary, community engagement and healthcare matchmaking from the findings are more effective as marking innovation for the promotion of outpatients' satisfaction because they rely on collaborations, partnership, where for instance, collaborations are initiated between clinicians and the community for advancing innovative healthcare, or the matching of clients for other clinical trials for the promotion of innovations and outpatients' satisfaction.

5. Conclusion

The study examines the influence of innovative healthcare marketing strategies on outpatient satisfaction in Lagos state, Nigeria. The finding revealed that innovative healthcare marketing promotion positively and significantly influences outpatient satisfaction in Lagos state, Nigeria. However, the digital presence of marketers in developing innovative healthcare

goods and services is still deficient. Based on the evidence and outcome of this study, it is concluded that innovative healthcare marketing promotion is essential for raising outpatient satisfaction in Lagos state, Nigeria. However, it is worrying that healthcare marketers' digital presence is still significantly low. The finding emphasizes how critical it is for healthcare marketers in Lagos State to adopt digital platforms and techniques to accelerate the creation and marketing of cutting-edge healthcare goods and services. By doing this, they can increase outpatient satisfaction levels and ultimately improve the healthcare system.

The study identifies the influence of social marketing in healthcare service on outpatient satisfaction in Lagos state, Nigeria. The finding revealed that social marketing in healthcare services has a positive and significant influence on outpatient satisfaction. Social marketing campaigns such as social media and community engagement, are insufficient to improve service adoption. Based on the evidence and outcome of this study, it is concluded that social marketing in healthcare is critical for improving outpatient satisfaction. The fact that this initiative's present social marketing strategies, including social media and community participation initiatives, are not successfully promoting service uptake, on the other hand, is worrying.

Considering the low digital presence of marketers in the delivery of innovative healthcare goods and services, the study recommends that healthcare organisations look beyond traditional marketing strategies while employing innovative healthcare marketing strategies to reach different target audiences on social media and other electronic means. Although there is an emphasis on the health benefits that trigger a quality-based product strategy to sell itself, the healthcare organisation is recommended to strengthen the quality of its innovative healthcare goods and services for outpatient improved satisfaction.

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ORCID

Samson Adeoluwa Adewumi - https://orcid.org/0000-0003-4156-0971

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