Social Media Marketing Activity in Healthcare Services: A Systematic Literature Review

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Abstract

Purpose: This research is aimed at exploring the role of social media as a strategic capability and how this influences marketing performance in healthcare services

Methodology: Through a systematic literature review approach, this research will explore and synthesize the latest relevant literature, forming a strong knowledge base regarding the concept of social media use for marketing in healthcare services.

Results: Descriptive analysis based on the Scopus database reveals research trends using keywords (social AND media AND marketing AND healthcare) reached its peak in 2024 with the United States dominating the area of research. Several new viewpoints emerged, including engagement, brand equity, consumer behavior, and other elements.

Applications: This research found and filled existing knowledge gaps, especially in the aspect of social media marketing by healthcare services and its impact on consumers and to provide a basis for further research.

Introduction

Social media marketing activity has become a crucial strategy for hospitals and medical practices to build their brand, engage with patients, and enhance their reputation. It is believed that digital marketing allows hospitals to connect more effectively with internet users compared to traditional marketing methods. Hospital marketing aims to research and understand the needs and desires of potential patients in order to meet those needs at the highest level (Mustikasari et al., 2024).

Several empirical studies state that the use of the internet and social media is more cost-effective than direct marketing, offering opportunities to reach virtual customers, overcome distance barriers, and raise awareness of services anytime and anywhere (Jayawardena et al., 2024). The rapid expansion of digital information has contributed to the emergence of more efficient, transparent, faster, and affordable healthcare (Schulte, 2018). An additional advantage is the targeting capabilities of electronic media, which has encouraged healthcare marketing managers to adopt it as a promotional tool in developing marketing strategies (Viniya et al., 2019).

This research aims to conduct a comprehensive investigation into the impact of social media marketing activity by healthcare services using a systematic literature approach. In addition, this research will analyze research developments over the last 10 years, identify important articles through evaluating the highest citation rates, and identify shared keywords.

Another goal of this research is to evaluate the distribution of research areas to understand the variability of topics that have been explored and determine areas that require further understanding.

Apart from that, this research also aims to critically assess the impact of social media marketing by healthcare services on consumers by considering elements such as engagement, brand equity, consumer behavior and others that emerge from the literature. This research will also find and fill existing knowledge gaps, especially in the aspect of social media marketing by healthcare services and its impact on consumers and to provide a basis for further research.

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Method

In response to the ever-changing dynamics in the era of digital transformation, this research is aimed at exploring the role of social media as a strategic capability and how this influences marketing performance in healthcare services. Through a systematic literature review approach, this research will explore and synthesize the latest relevant literature, forming a strong knowledge base regarding the concept of social media use for marketing in healthcare services.

The initial step in this approach was the selection of the Scopus database, which was carried out on November 23, 2024. Scopus was chosen as the main database to ensure access to the latest and most relevant scientific literature in the field of social media marketing activity by healthcare services.

Furthermore, the process of determining inclusion and exclusion criteria is carried out. Inclusion criteria include research works that explicitly discuss social media marketing by healthcare services. Conversely, literature that does not meet these criteria, is of poor quality, or does not match the research focus will be excluded.

After determining the criteria, a literature identification and selection process is carried out. A literature search was carried out using predetermined keywords in the Scopus database. The selection was carried out carefully to ensure that the selected literature provided strong support for an in-depth analysis of social media marketing activity by healthcare services. In the identification stage, data collection was carried out on November 23, 2024, by conducting a literature search using the keyword "social media marketing healthcare" (social AND media AND marketing AND healthcare) in the Scopus database. The results showed that there were 396 articles in the bibliometric data that were relevant to the focus this research. Next, to focus the analysis on the most relevant literature, a filter was carried out based on year of publication. In the 2014-2024 time period, 329 articles were found which were the main focus of the research. The reason for limiting this time range is to ensure that the literature used is the most relevant to current situations. The next filter is carried out based on subject area, where the articles must be in the categories "Business, Management and Accounting", "Economics, Econometrics and Finance" and "Health Professions". From these three subject areas, 80 articles were found. The reason behind The use of this filter is to ensure that the literature accessed has direct relevance to aspects of health service management and business in the context of social media marketing. The next selection process involves a document type filter, by determining that only original articles ("articles") will be included in the analysis The result is 47 articles meets these criteria. The reason behind this filter is to focus research on literature that is more in-depth and makes a significant contribution in the context of social media marketing in health services.

The next step involves analysis and synthesis of the selected literature. A systematic analysis process was applied to identify patterns, themes and research gaps from each literature. Information taken from the literature is used to create a comprehensive and in-depth synthesis. This step is the basis for developing a holistic framework for understanding the role of social media marketing in healthcare services. After researchers carried out article screening procedures based on quality criteria, a total of 47 articles were selected for the literature review stage. This research combines PRISMA and bibliometric methods, involving the use of the VOSviewer Version 1.6.20 tool for analysis. The integration of this method enriches the research approach by utilizing systematic procedures and bibliometric analysis to gain deeper and more measurable insights related to the literature on social media marketing by healthcare services.
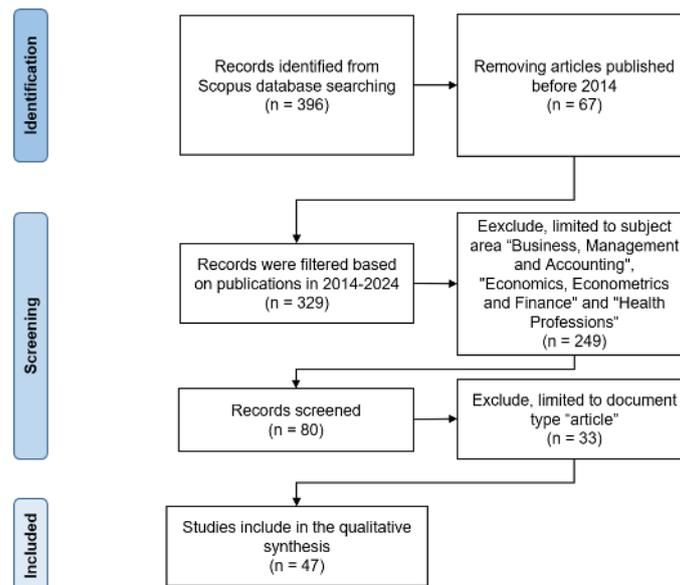
Figure 1. Sorting research articles procedure

Results and Discussion

Descriptive statistics

Descriptive analysis based on the Scopus database reveals research trends using keywords (social AND media AND marketing AND healthcare). It can be seen that research interest was not much in 2015, decreased in 2017, and increased again in 2021, then decreased slightly in 2023, and reached its peak in 2024 as depicted in Fig. 2. The increase in interest in 2021 may be triggered by changes in marketing trends digitally or via social media. The decline in 2023 could be caused by external factors such as the pandemic situation or a shift in global research priorities. The increase in 2024 may reflect the need to understand the latest developments in social media marketing in healthcare services or confirm previous findings.
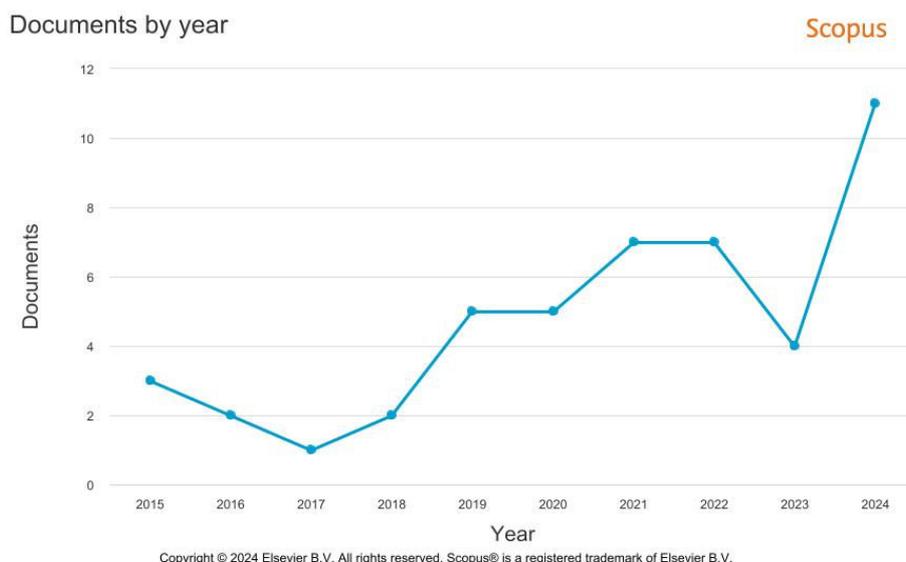
Figure 2. Number of publications in 2014-2024

While Figure. 3 shows the distribution of research by area, with the United States dominating the area, followed by Australia and India in second and third positions. The United States may dominate because of the significant size

and growth of social media users in healthcare services. It is important to remember that this analysis is interpretive and requires direct access to research data as well as further context for deeper understanding.
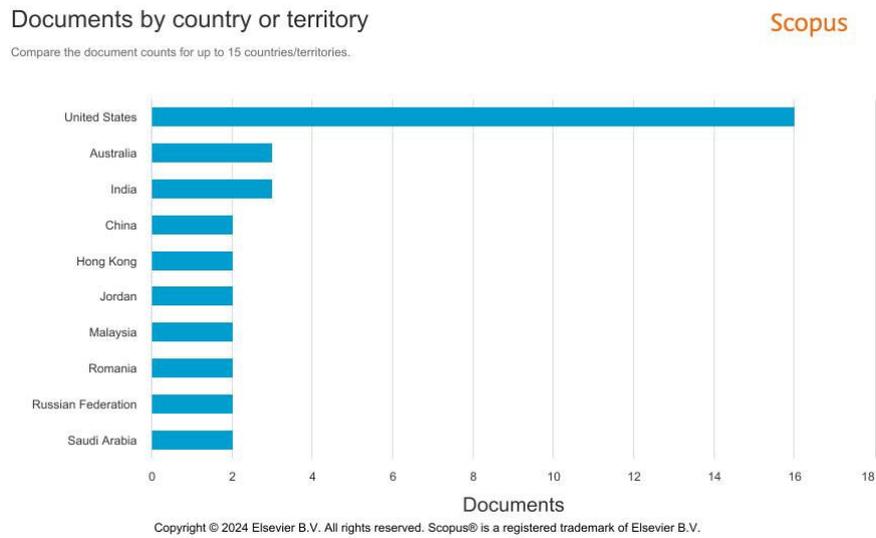

Figure 3. Research areas distribution

Co-occurance analysis

VOSviewer has succeeded in reading the RIS reference manager data from the Scopus data base which was accessed on November 23 2024 through several stages, namely co-occurrence analysis type, unit of analysis based on keywords, counting method using binary counting. Minimum number of occurences of a keyword is 4. Of the 1840 terms, 81 meet the threshold. For each of the 81 thresholds, the total strength of the co-occurrence links with other thresholds will be calculated. The thresholds with the greatest total link strength will be selected. Number of thresholds to be selected is 45. Based on the display of Bibliometric analysis results on the VOSviewer version 1.6.20 screen with bibliographic data, it produces Network visualization (Figure. 4) and Overlay Visualization (Figure. 5). Visualization results of network analysis for the keywords "social AND media AND marketing AND healthcare" using color to distinguish thematic groups.
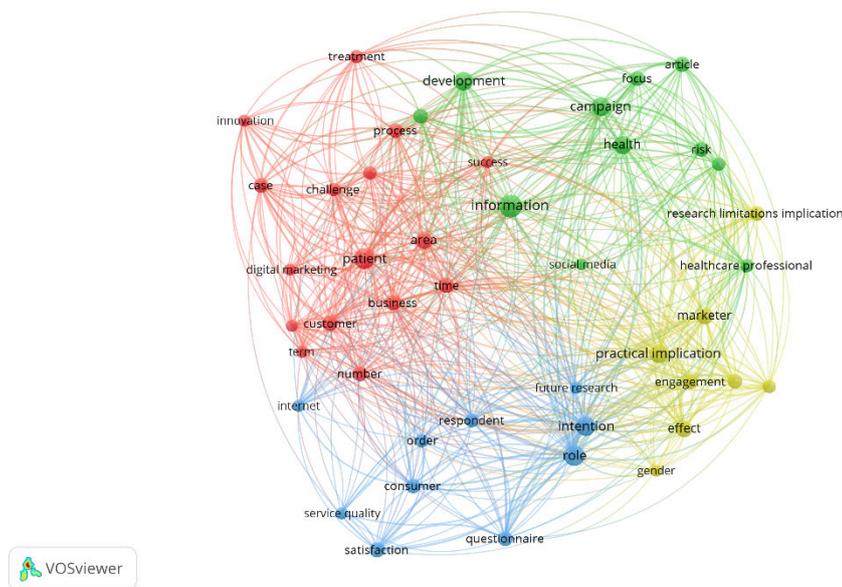

Figure 4. Network visualization

The size of the nodes reflects how frequently themes appear, while the thickness of the edges highlights the strength of the connections between themes. Of the 45 items grouped into 4 clusters, 599 links and total link strengths 985. The first cluster is filled with 11 items, namely area, business, case, challenge, customer, digital marketing, doctor, innovation, number, patient, process, student, success, terms, time, treatment. The second cluster consists of 11 items, namely article, campaign, covid, development, focus, health, healthcare professional, information, risk, social media, topic. In the third cluster, there are 10 items, namely consumer, future research, intention, internet, questionnaire, respondent, role, satisfaction, service quality. Meanwhile, the fourth cluster consists of 8 items, namely effect, engagement, gender, marketer, practical implications, research limitation implications, social media marketing, social media platform.
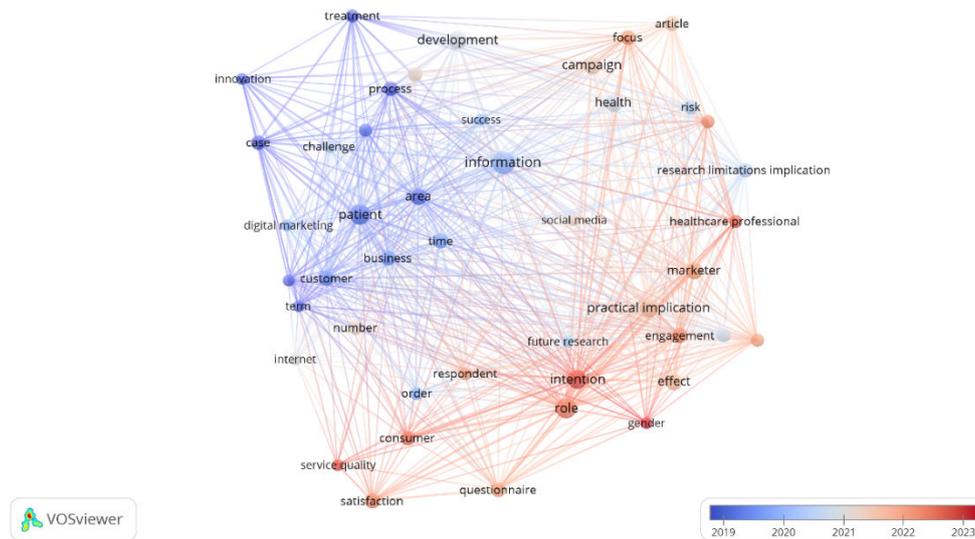

Figure 5. Overlay visualization

Social media marketing has a significant impact on healthcare services, influencing various aspects from patient engagement to financial performance. Social media platforms enable healthcare services to interact directly towards their customer, providing educational content, patient point of views and stories, and the latest health news. This interaction fosters a sense of community and trust between patients and healthcare providers (Liu et al., 2016). Social media also used to disseminate health information, promote healthy behaviors, and educate patients about new services and medical developments. This helps patients make informed decisions about their health (Sharma & Kaur, 2017). Effective social media marketing, particularly through educational posts and patient stories, enhances brand awareness and loyalty. This leads to higher perceived brand equity for hospitals and healthcare providers (Al-Hasan, 2024). Increased brand equity from social media efforts translates into better financial performance for healthcare organizations. Engaging content that resonates with patients can lead to higher patient volumes and revenue (Gomes et al., 2023). Social media ratings and reviews significantly influence consumer demand for healthcare services. Positive reviews on platforms like Yelp can lead to increased patient admissions and higher net incomes for healthcare facilities (Li et al., 2020). Social media marketing efforts, including electronic word of mouth (EWOM), entertainment, and interactive content, positively impact patients' intentions to visit healthcare facilities (Gomes et al., 2023).

Table 1. Ten journals that have the highest number of citations.

Rank	Author	Journal	Citations	Quartile
1	(Yigitcanlar et al., 2020)	Journal of Open Innovation: Technology, Market, and Complexity	120	Q1
2	(T.-H. Cham et al., 2022)	International Journal of Tourism Research	60	Q1
3	(Cheung et al., 2021)	Asia Pacific Journal of Marketing and Logistics	57	Q1
4	(T. H. Cham et al., 2021)	European Business Review	51	Q1

5	(Grandhi et al., 2021)	EuroMed Journal of Business	46	Q1
6	(Li et al., 2020)	BMJ Health and Care Informatics	37	Q2
7	(Priestman et al., 2019)	BMJ Health and Care Informatics	36	Q2
8	(Cuomo et al., 2020)	Psychology and Marketing	24	Q1
9	(Wei, 2024)	Journal of Hospitality and Tourism Insights	23	Q2
10	(Mason et al., 2019)	Journal of Hospitality and Tourism Insights	19	Q2

The data in table 1 shows the ranking of ten studies in the field of marketing by detailing the name of the authors, the journal in which it was published, the number of citations, and the journal quartile. The research that was ranked first was a study conducted by Yigitcanlar et al in 2020, which was published in the Journal of Open Innovation: Technology, Market, and Complexity and has been cited 120 times, with a quartile position of Q1. In second place, there is research by Cham et al in 2022 published in the International Journal of Tourism Research, with 60 citations and Q1 quartile position. Cheung et al (2021) ranked third with their research published in the Asia Pacific Journal of Marketing and Logistics, achieving 57 citations and Q1 quartile position. Apart from that, other research that is also in quarile Q1 includes Cham et al (2021) published in the European Business Review and Cuomo et al (2020) published in Psychology and Marketing. In the last position is research by Mason et al in 2019 which was published in the Journal of Hospitality and Tourism Insights with a total of 19 citations and is in position Q2. Most of the research on this list was published in well-known journals with high quartiles. These studies provide valuable insight into the application of social media marketing to healthcare services.

Table 2. Ten journals that have the highest relevances.

No.	Author	Research Contents
1	(Atsbeha & Wodaje, 2024)	The study in Gondar Town provides good insights into factors that influencing social media adoption for marketing among healthcare professionals. Healthcare providers can enhance their marketing strategies and improve patient communication and engagement through social media by addressing the identified determinants and challenges.
2	(Vujadinovic, 2020)	Healthcare organizations need to build strategic consistency among all messages received by stakeholders by integrating various components of marketing communications, crisis management, and addressing ethics and social responsibility issues
3	(Suggala et al., 2023)	Awareness and perception of digital healthcare services significantly influence customer engagement and relationship building. Customer's perceptions of the quality and reliability of these services are bery crucial for building trust and long-term relationships. Individual user characteristics, such as demographics and personal preferences, play a crucial role in determining how customers interact with digital healthcare platforms. These characteristics can influence their behavioral intentions and satisfaction levels.
4	(Thomas & Duffett, 2024)	Social media platforms offer a cost-effective way for Non Profit Organizations to reach a broad audience without spending high costs associated with traditional media. Social media can significantly boost fundraising by facilitating direct communication with potential donors and showcasing the impact of donations
5	(Elhajjar & Ouaida, 2022)	The results of this investigation shows a great disparity between Lebanese and American hospitals concerning the frequency and the number of posts.
6	(Santos, 2024)	Digital marketing plays a significant and great role in shaping students' attitudes towards healthcare professions. This influence is primarily driven by the exposure to targeted advertising campaigns and engaging social media content, which can positively change student's perceptions and interest in healthcare careers

7	(Cangelosi et al., 2021)	Consumers frequently use Facebook and YouTube to obtain preventive health care information. These social media platforms are preferred due to their widespread use and accessibility.
8	(de Assis & Vilela, 2024)	Social media marketing positively influences the perception of value co-creation, which enhances brand equity and consumer engagement. While consumer engagement is crucial, its direct effect on purchase intention in healthcare services was not confirmed in some studies. The frequency of purchases shows the relationship between social media marketing, value co-creation, and purchase intention. Frequent consumers are more likely to be influenced by these factors.
9	(Al-Weshah et al., 2021)	Digital marketing strategies significantly enhance international patient's satisfaction in the Jordanian healthcare industry. Strategies such as search engine optimization, social media networks, and e-mail marketing each have positive effect on patient satisfaction. Among the various digital marketing strategies, social media networks are identified have most impactful in enhancing patient satisfaction.
10	(Obiedzinski, 2018)	The six-step method for healthcare social media storytelling can help healthcare organizations create engaging and relevant content that resonates with their audience. This method can improve patient acquisition and retention, and establish the organization as a thought leader in the healthcare industry.

Table 2 describes a number of key topics in the realm of implementing social media marketing by healthcare services that are most relevant based on the keywords (social AND media AND marketing AND healthcare) in Scopus. For example, awareness and perception of digital healthcare services significantly influence customer engagement and relationship building. Customer's perceptions of the quality and reliability of these services are bery crucial for building trust and long-term relationships. Individual user characteristics, such as demographics and personal preferences, play a crucial role in determining how customers interact with digital healthcare platforms. These characteristics can influence their behavioral intentions and satisfaction levels (Suggala et al., 2023). Study states that there are several steps for healthcare social media storytelling, understanding the target audience's needs, preferences, and informational requirements, set goals for what the storytelling efforts aim to achieve, develop a compelling narrative that is authentic, relatable, and addresses the audience's needs, select appropriate social media platforms where the target audience is most active, produce high-quality content that includes multimedia elements like videos, images, and infographics to enhance the storytelling experience, and the last one is continuously monitor the performance of the storytelling efforts using metrics such as engagement rates, shares, comments, and overall reach (Obiedzinski, 2018). Social media marketing also positively influences the perception of value co-creation by enhances brand equity and consumer engagement. More consumers purchase moderates the relationship between social media marketing, value co-creation, and purchase intention. Frequent purchasers are more likely to be influenced by these factors (de Assis & Vilela, 2024). Digital marketing strategies significantly enhance international patient's satisfaction in the Jordanian healthcare industry. Strategies such as search engine optimization, social media networks, and e-mail marketing each have a notable positive effect on patient satisfaction. Among the various digital marketing strategies, social media networks are identified as the most impactful in enhancing patient satisfaction (Al-Weshah et al., 2021).

Conclusions

This research makes an important contribution in understanding the complexity of social media marketing by healthcare services and its impact on consumers and provides a basis for further research in the context of social media marketing in healthcare services. Social media marketing offers substantial benefits for healthcare services, including enhanced patient engagement, education, and brand awareness. Future research should focus on overcoming social media marketing barriers and exploring innovative ways to integrate social media into healthcare marketing strategies effectively.

Acknowledgement

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