



THE INFLUENCE OF DIGITAL MARKETING STRATEGY SEARCH ENGINE OPTIMIZATION, WORD OF MOUTH AND SERVICE QUALITY ON PATIENTS' DECISIONS TO SEEK TREATMENT AT PUTRI HIJAU HOSPITAL MEDAN

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Abstract

Health is a fundamental need for every individual in society. The rise in social status has led to increased demands for quality healthcare services. This situation encourages healthcare providers to continuously improve the quality of services provided. Patients' decisions regarding treatment are not only determined by personal factors but also influenced by external factors such as technological developments and changes in consumer behavior. One technique widely used to increase the visibility of healthcare services is Search Engine Optimization (SEO), which functions to increase website rankings in search engines. With the proper implementation of SEO, hospitals can be more easily found by potential patients seeking healthcare services. Furthermore, satisfied consumers are more likely to provide direct recommendations through word of mouth. This study aims to determine the influence of digital marketing strategies through SEO, word of mouth, and service quality on the decision to seek healthcare. The study used a descriptive analytical method with a cross-sectional design, meaning observations or measurements of variables were conducted at a specific point in time. The analysis results showed a significant influence of SEO on the decision to seek healthcare ($p = 0.019$), a significant influence of word of mouth on the decision to seek healthcare ($p = 0.031$), and a significant influence of service quality on the decision to seek healthcare ($p = 0.006$). Simultaneously, SEO, word of mouth, and service quality were proven to have a significant influence on patients' decisions to choose treatment ($p < 0.005$).

Keywords: search engine optimization, word of mouth, quality of service, decision to choose a place to get treatment

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INTRODUCTION

Healthcare is a vital need for society. The rise in social status has led to increasing public demand for quality healthcare services. This requires healthcare providers to continually improve their services (Kristianawati dan Sulistyani, 2023). Patient treatment decisions are influenced not only by individual factors but also by external factors, including technological developments and changing consumer trends. This phenomenon significantly impacts how consumers make treatment decisions, including their return visits (Pramono, 2024).

Digital marketing is a technology used to market products and services that require digital media. Successful implementation of digital marketing will positively impact product or service marketing and ultimately, the decision to visit. Digital marketing messages play an important role as a medium for delivering stimuli in the form of information, which enhances the quality of communication and ultimately affects patients' decisions to visit (Kristianawati dan Sulistyani, 2023).

Currently, most potential patients use search engines, such as Google, to find hospitals, doctors, and other health-related information. Therefore, an online presence and visibility in search engines are crucial for hospitals to attract and retain new patients. Search Engine Optimization (SEO) refers to a strategy designed to enhance a website's position within search engine result pages. With the right SEO strategy, hospitals can increase their online visibility, making them more easily found by potential patients seeking healthcare services. The primary goal is to provide quality service that satisfies customers. Satisfied customers will provide word-of-mouth recommendations. The more consumers who verify these recommendations, the more widespread the word-of-mouth promotion will be, impacting their decision to seek treatment. The decision to seek treatment is a process that is part of the consumer's behavior that truly desires to use the services offered by the hospital (Pramono, 2024).

Kaban and Fitriyani's 2024 study revealed a significant correlation between digital marketing strategies—such as SEO, word of mouth, and service quality—and patients' decisions to seek care at Royal Prima Medan Hospital (Fitriyani, 2024). Similarly, Subramaniam et al. demonstrated that digital marketing positively contributes to medical tourism by strengthening brand image, thereby shaping patient choices in Dubai (Subramaniam, 2020). Research conducted by Fatkhurrohman R. et al. further highlighted that electronic word of mouth plays a crucial role in influencing patients' decision-making when selecting Muhammadiyah Hospital Bandung (Rozzaki dan Ratih, 2023). In addition, Purwanto et al. (2022) found that service quality has a

significant effect on outpatients' interest in receiving treatment at Dr. Dody Sardjoto General Hospital (Purwanto *et al.*, 2022).

Central and regional government general hospitals are classified into types A, B, C, and D. Putri Hijau Level II Hospital is classified as type B, where type B hospitals are reviewed based on their capabilities, namely being able to provide limited specialist and subspecialist medical services, with a capacity of 218 beds. The available service facilities are: 24-hour Emergency Room, Dental Clinic and Dental Laboratory, HIV/AIDS Clinic, and Specialist Clinics consisting of Internal Medicine Clinic, General Surgery Clinic, Digestive Surgery Clinic, Orthopedic Clinic, Neurosurgery Clinic, Obstetrics & Gynecology Clinic, Pediatric Clinic, Lung Clinic, Ear, Nose, and Throat (ENT) Clinic, Eye Clinic, Neurology Clinic, Dermatology and Venereology Clinic, Mental Health Clinic, and Heart Clinic (Sari, 2022).

In line with the increasing need for health care for the community, Putri Hijau Level II Hospital provides health services for ASKES for Civil Servants (PNS) and Private Employees⁸. Putri Hijau Hospital Medan has a vision to become the ideal hospital for Indonesian National Armed Forces (TNI) personnel and the community in the Western Region of the Republic of Indonesia. Its mission is to provide appropriate, fast, and accurate healthcare support and services to serve patients in a professional manner and to contribute to improving public health by providing beneficial and optimal health education services (Muchti, 2016).

From the explanation above, the researcher intends to carry out an observation on the impact of digital marketing strategies on search engine optimization (SEO).

METHOD

This study employs a descriptive analytical method with a cross-sectional design to examine the impact of digital marketing strategies SEO, word of mouth (WOM), and service quality on patients' decisions to seek treatment at Level II Putri Hijau Hospital, Military Region I/Bukit Barisan, Medan City. The research sample was 72 samples with a sampling technique that is purposive sampling based on the Slovin formula with the research population including all patients who received treatment at the Putri Hijau Hospital, Military Region I/Bukit Barisan, Medan City. The type of data used is primary data, namely data sources obtained directly consisting of organizational structure, hospital history and patient visits for treatment at the Hospital. In this study, primary data comes from patients who come for treatment and secondary data in the form of literature, journals, and relevant previous research.

Data collection was conducted through questionnaires, documentation, and literature studies. The research instruments were

questionnaire sheets, stationery, and other supporting devices. The research procedure was carried out in three stages, namely preparation (problem identification, literature study, observation, and research permit), implementation (collection of cost data and service activities), and data processing. Data analysis was conducted using the Chi-Square statistical test with $\alpha = 0.05$ and a 95% confidence level, and using a computer as a data processing tool. The reason for using Chi-Square is that the data scale used is nominal and ordinal.

RESULT AND DISCUSSION

Table 1. Frequency and Percentage based on SEO Digital Marketing Strategy

Strategy Digital Marketing <i>SEO</i>	Frequency	Presentation (%)
Good	39	54.2
Not enough Good	33	45.8
Total	72	100.0

That the most SEO digital marketing strategies were good, as many as 39 people (54.2%) and the SEO marketing strategies were less good, as many as 33 people (45.8%).

Table 2. Frequency and Percentage based on WOM Marketing Strategy

WOM Marketing Strategy	Frequency	Presentation (%)
Good	24	33.3
Not good	48	66.7
Total	72	100.0

Based on Table 2, it was found that 24 people (33.3%) had good WOM marketing strategies and marketing strategies There were 48 people (66.7%) who were poor in WOM .

Table 3. Frequency and Percentage based on Service Quality

Quality of Service	Frequency	Presentation (%)
Good	43	40.3
Not good	29	59.7
Total	72	100.0

Based on Table 3, the most common service quality was good service quality with a frequency of 43 people (40.3%) and poor service quality with a frequency of 29 people (59.7%).

Table 4. Frequency and Percentage based on Treatment Decision

Decision to Seek Treatment	Frequency	Presentation (%)
Choose	55	76.4
No Vote	17	23.6
Total	72	100.0

Based on Table 4, the number of respondents with the highest number of treatment decisions was the decision to choose with a frequency of 55 people (76.4%) and those who did not choose with a frequency of 17 people (23.6%).

Table 5. The Influence of Digital Marketing *SEO* Strategy on Medical Treatment Decisions

Digital Marketing <i>SEO</i>	Decision to seek treatment		<i>P</i>
	Choose	No Vote	
Good	34 (87.2%)	5 (12.8%)	0.019*
Not good	21 (63.6%)	12 (36.4%)	
Total	55 (76.4%)	17 (23.6%)	

* Significant

Based on table 5, of the 39 patients with the use of Good Digital marketing search engine optimization strategies, 34 (87.2%) decided to seek treatment and 5 people (12.8%) decided not to seek treatment. Of the 33 people with the use of less Good Digital marketing SEO strategies , 21 (63.6%) decided to seek treatment and 12 people (36.4%) decided not to seek treatment. The results of the Chi-square test analysis obtained a Sig value = 0.019 (p = <0.05) which means there is a significant influence between the use of digital marketing SEO strategies and patient treatment decisions where the better the use of Digital marketing SEO strategies , the greater the decision to seek treatment in patients at the Putri Hijau Level II Hospital, Military Region I/Bukit Barisan, Medan City.

Table 6. The Influence of WOM Marketing Strategy on decision seek medical treatment

Digital Marketing <i>SEO</i>	Decision to seek treatment	Decision to seek treatment	<i>P</i>
	Choose	Choose	
Good	22 (91.7%)	2 (8.3%)	0.031
Not good	33 (68.8%)	15 (31.3%)	
Total	55 (76.4%)	17 (23.6%)	

* Significant

Based on table 6, of the 24 patients with the use of Good WOM marketing strategies , 22 people (91.7%) decided to seek treatment and 2 people

(8.3%) decided not to seek treatment. Of the 48 people with the use of less Good *WOM marketing strategies*, 33 people (68.8%) decided to seek treatment and 15 people (31.3%) decided not to seek treatment. The results of the *Chi-square test analysis* obtained a Sig value = 0.031 ($p = <0.05$) which means there is a significant influence between the use of *WOM marketing strategies* and patient treatment decisions at the Putri Hijau Level II Hospital, Military Region I/Bukit Barisan, Medan City.

Table 7. The Influence of Service Quality on Treatment Decisions

Digital Marketing	Decision to seek treatment	Decision to seek treatment	p
SEO	Choose	Choose	
Quality Good Service	28 (65.1%)	15 (34.9%)	0.006
Not good	27 (93.1%)	2 (6.9%)	
Total	55 (76.4%)	17 (23.6%)	

* Significant

Based on Table 7, of 43 patients with quality Good service is obtained as many as 24 people (65.1%) with decision choose seeking treatment and 15 people (34.9%) with decision No choose treatment. Of the 29 people with quality poor service received as many as 27 (93.1%) with decision choose seeking treatment and 2 people (6.9%) with decision No choose treatment The results of the *Chi-square test analysis* obtained Sig value = 0.006 ($p=<0.05$) which means there is influence significant between quality service with decision seek medical treatment patient Where the more Good quality service , then the more big decision choose receiving treatment for patients at the Putri Hijau Level II Hospital, Military Region I/Bukit Barisan, Medan City

Discussion

In research this, done analysis the influence of digital marketing strategies SEO, WOM and quality service to decision receiving treatment for patients at the Putri Hijau Level II Hospital, Military Region I/Bukit Barisan, Medan City. Digital marketing concerns activities that use various types of web - based media, such as blogs, websites, e-mail, AdWords or network social For branding goals . Research This using digital marketing search engine optimization which Table 4.1 shows that the SEO digital marketing strategy for patients at the Putri Hijau Level II Hospital, Military Region I/Bukit Barisan, Medan City has a good strategy with percentage by 54.2%. Good SEO implementation can help increase position something site pages against keywords specific to the results machine seeker (Asrigo,

2023). Research previously show that SEO is component important of effective digital marketing strategies. Hospitals that implement SEO techniques in effective can in a way significant increase Then across websites, which in turn contribute to the improvement sales and profits. SEO does not only important in increase visibility brand, but also in build credibility and trust consumers. Using relevant keywords and creating content quality considered as factor key in influence ranking web page generated search, which is direct influence decision purchase consumer (Usmany *et al.*, 2024)). Besides digital marketing with SEO, other marketing strategies namely WOM or promotion from mouth to mouth potential For disseminate information through dialogue (Irawan, 2023). Circulate table 4.2 is obtained that the word of mouth marketing strategy for patients at the Putri Hijau Level II Hospital, Bukit Barisan Military Region I/Medan City Health is not enough Good with percentage by 66.7%. WOM does not need such a cost big, but can get enormous effectiveness (Irawan, 2023). Through WOM, patients pushed For talk about experience consumption, which is No direct has promote, even consumer in a way voluntary recommend Hospital to others (Buchori, 2021). The results of the study in Table 4.3 show that some patients considered the quality of service at the Putri Hijau Level II Hospital, Military Region I/Bukit Barisan, Medan City to be still poor. This finding differs from previous research which stated that the quality of hospital service at the Outpatient Unit of "M" Hospital, Jakarta was considered good (Armyta *et al.*, 2023). Service quality has become an important strategy for healthcare organizations, because to survive in a competitive environment, it is essential to provide services that meet or even exceed the expectations of service recipients (Ul Haq dan Awan, 2020). Decision to seek treatment in study This the concept is choose decide use services to patients seeking treatment to the Putri Hijau Level II Hospital, Military Region I/Bukit Barisan, Medan City in May 2025, which is a process consisting of from introduction needs, search information , evaluation alternative needs, make decision purchase until behavior after do purchase the (Indriani *et al.*, 2023). Based on results research in Table 4.4 contains as many as 76.4% of patients decide For selecting the Putri Hijau Level II Hospital of the I/Bukit Barisan Military Region Health Center, Medan City as facility service health For medical treatment, while patient yag No choose only 23.6%. The decision to choose is various stages carried out by the patient in effort choose One between a number of choice Hospital before treatment. Every Hospital must try maximum in marketing with fulfil need consumers so that patients decide For choose it (Buchori, 2021).

Bivariate testing in this study used the chi-square statistical test. Based on Table 4.5, there is a significant effect between the use of SEO digital marketing strategies and patient treatment decisions ($p=0.019$; $p<0.05$). The better the use of SEO digital marketing strategies, the greater the likelihood of patients choosing to seek treatment at Putri Hijau Level II Hospital, Military Region I/Bukit Barisan, Medan City. These results align with previous research comparing various marketing strategies for orthopedic clinics in the United States in the Philadelphia, Pennsylvania, and New Jersey areas. The study surveyed 300 new patients regarding how they found the orthopedic clinic during their first visit. The study found that digital marketing through websites, search engine optimization (SEO), and social media influenced 27 participants, or 9% of the total, to seek treatment at the clinic. This finding is supported by other research demonstrating that search engine optimization influences consumer interest (Alwi *et al.*, 2022). Digital marketing is need for Hospital For promotion, education and delivery information related service medical so that Can expand business. Strategies that can done that is interesting patient new and old for offer service medical quality and affordable as well as convincing satisfaction related services that will be accepted (Mardianti dan Achadi, 2022).

The results of the study in Table 4.6 indicate a significant influence between the use of word-of-mouth (WOM) marketing strategies and patients' treatment decisions at the Putri Hijau Level II Hospital, Military Region I/Bukit Barisan, Medan City ($p=0.031$; $p<0.05$). These results align with previous research that found word-of-mouth had a significant influence on the decision to seek treatment in 201 patients visiting the Hasanuddin University Teaching Hospital in Makassar City ($p=0.000$; $p<0.05$) (Indriani *et al.*, 2023). Another study found a statistically significant correlation between word-of-mouth and decision-making (Maknuna dan Novita, 2022). WOM is the most important factor for patients in making treatment decisions. Patients often trust information from others more than from advertising or other promotions. The greater the WOM, the greater the decision to choose. The better the implementation of WOM, the more consumers seek treatment (Buchori, 2021).

Based on Table 4.7 of the results of the Chi square statistical test are stated that there is influence significant between quality service with decision seek medical treatment patient Where the more Good quality service, then the more big decision choose treatment in patients at the Putri Hijau Level II Hospital, Military Region I/Bukit Barisan, Medan City ($p=0.006$; $p<0.05$). Research previously mention that service quality has an effect in a way significant and positive to intensity visits to patients at the "M" Hospital Jakarta (Armyta *et al.*, 2023). Other research indicates that service quality

(tangibles, reliability, and empathy) has a positive and significant effect on patients' decisions to reuse healthcare services (Asrigo *et al.*, 2022). When done continuous improvement and consistency in quality service, then will increase decision received treatment at the Putri Hijau Level II Hospital, Military Region I/Bukit Barisan, Medan City. Perception quality service will help provider service health For detect gap in services and processes that require repair. Provider feel that satisfying patient can save time and money spent For finish complaint future patients (Armyta *et al.*, 2023).

CONCLUSION

Based on results analysis research entitled the influence of digital marketing strategies SEO, WOM, quality service to decision treatment for patients at Putri Hijau Hospital Medan is available significant influence between SEO and decision seek medical treatment with p value = 0.019, there is significant influence between WOM and decision seek medical treatment with p value = 0.031 and there is influence significant between Quality Service with the Decision to Choose Get medical treatment with p value = 0.006. With thus there is influence significant between Search Engine Optimization, Word of Mouth, Service Quality, Decision to Choose Get medical treatment with p value <0.005 .

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