

The Role of Word of Mouth and Digital Reviews on Selection Decision : Study on The Private Hospital In central Java

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ABSTRACT. This study investigates the influence of word of mouth (WOM) and digital reviews on patients' decisions to select private hospitals in Indonesia, a context where healthcare quality information is limited and informal sources are increasingly pivotal. Drawing on theories of social influence and dual processing, the study develops a model integrating WOM, digital reviews, and their interaction in shaping hospital selection decisions. Using a quantitative, explanatory approach, data were collected from 217 respondents who had recently chosen private hospitals based on either WOM or online reviews. A structured questionnaire was administered, and data were analyzed using Structural Equation Modeling (SEM) via SmartPLS 4.0. The results indicate that both WOM ($\beta = 0.39$, $p < 0.001$) and digital reviews ($\beta = 0.41$, $p < 0.001$) significantly influence hospital choice. Moreover, digital reviews moderate the WOM effect ($\beta = 0.21$, $p = 0.005$), reinforcing its impact when both sources align. Robustness tests confirm model stability, and multi-group analysis shows consistent effects across gender. The study contributes to the literature by examining the joint impact of WOM and e-WOM in healthcare—a sector marked by high trust requirements—and provides strategic implications for hospital marketers to manage both interpersonal and digital reputation channels cohesively. These findings offer context-specific insights for private hospital administrators in developing countries navigating increasingly digital patient behaviors.

Keywords: Word Of Mouth; Digital Reviews; Hospital Selection; Patient Decision-Making; Healthcare Marketing

JEL Classification: M31; I11; D83

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INTRODUCTION

In recent decades, the healthcare sector has undergone a profound transformation fueled by evolving consumer expectations, digital disruption, and increasing awareness of service quality (Aldhaen et al., 2021). Private hospitals, as a core component of modern healthcare systems, now operate in an intensely competitive environment where success depends not only on clinical excellence but also on the ability to attract and retain patients through effective communication and reputation management (Fatima et al., 2023; Greif et al., 2022). In this landscape, patients' decisions are no longer based solely on geographic proximity or physician referrals. Instead, healthcare choices are increasingly shaped by perceptions formed through social interaction—both in-person and digital. Two major forms of such interaction are word of mouth (WOM) and digital reviews, which have become vital reference points disseminated through platforms such as Google Reviews, Instagram, Facebook, and health-specific apps or forums (Aerni, 2020; Zhou et al., 2021). Evidence suggests that both WOM and electronic word of mouth (e-WOM) exert a significant influence on patients' evaluations of healthcare providers, particularly in shaping perceptions of service quality, trustworthiness, and institutional credibility (Ellen et al., 2024; Ladhari & Michaud, 2015; Zhang et al., 2020). In developing countries like Indonesia—where formal evaluations of hospital quality remain scarce and health literacy levels vary—such informal communication channels can carry disproportionate influence (Fatima et al., 2023). Patients increasingly rely on authentic personal testimonies and peer-shared reviews as proxies for quality assurance. The growing visibility and reach of digital platforms further amplify this phenomenon, making digital trust a cornerstone of hospital selection behavior (Filiari et al., 2018).

The central problem that motivates this study is the increased reliance on informal, socially constructed sources of information by patients when making critical healthcare decisions, particularly in contexts characterized by information asymmetry and limited regulatory transparency. While many hospitals have begun to embrace digital communication channels, most lack a systematic understanding of how WOM and digital reviews influence actual patient behavior. Consequently, communication strategies often remain tactical rather than strategic, focusing on reaction rather than proactive engagement (Verleye et al., 2018). Furthermore, the content, credibility, and perceived authenticity of WOM and digital reviews vary significantly across platforms and are rarely examined in tandem, limiting our understanding of their interaction effects on patient decision-making (Azzam et al., 2024; Hussain et al., 2019).

Although prior studies have explored the influence of WOM and e-WOM across industries such as tourism, retail, and hospitality (Sparks et al., 2016; Zhang et al., 2020), few have focused on healthcare—a sector where choices entail high emotional involvement, perceived risk, and trust dependency (Grewal et al., 2020). Moreover, research on hospital selection in Southeast Asia, particularly Indonesia, remains scarce. The existing body of literature has primarily treated WOM and e-WOM as isolated phenomena, without examining potential interaction or moderation effects, and without adapting frameworks to local socio-digital behaviors (Zhou et al., 2021). This represents a substantial research gap, especially as Indonesian consumers increasingly blend traditional values with digital trust mechanisms in their healthcare choices.

Against this backdrop, this study aims to analyze the simultaneous role of word of mouth and digital reviews in shaping patients' decisions to select private hospitals. It also investigates whether digital reviews moderate the influence of WOM, offering a more nuanced understanding of how

these factors operate both independently and interactively. The findings are expected to provide empirical evidence that informs the design of more strategic and patient-centered communication programs in private healthcare marketing.

This research positions itself uniquely within the literature by integrating WOM and digital review perspectives into a unified framework focused specifically on patient decision-making in private hospitals. Unlike prior studies in other service sectors, this study addresses the high-involvement, trust-intensive nature of healthcare services and the contextual realities of a developing country with fragmented digital health literacy and platform use (Fatima et al., 2023; Grewal et al., 2020). By focusing on private healthcare users in Indonesia, this research adds important cultural and contextual depth that is largely absent from global health marketing literature.

This study lies in three key areas. First, it examines WOM and digital reviews not as standalone predictors, but as potentially interactive influences, using moderation modeling to assess their joint effect on patient decisions. Second, it applies these constructs in the under-researched context of Indonesian private hospitals, offering fresh empirical insights from a Southeast Asian digital ecosystem. Third, the study uses primary, real-user data to ensure that conclusions reflect genuine decision-making processes. These contributions are expected to enrich theoretical understanding, enhance model generalizability, and offer actionable guidance for private hospital administrators striving to compete in an increasingly digital, experience-driven marketplace.

Literature Review

1. Word of Mouth (WOM) and Consumer Decision-Making

Word of mouth (WOM) has long been regarded as one of the most influential forms of communication in service selection, particularly in high-involvement, high-risk contexts like healthcare. Traditional WOM refers to interpersonal communication where consumers share their experiences, opinions, and recommendations with others. In the healthcare context, WOM is often perceived as more trustworthy than formal advertisements or institutional communications, given its perceived authenticity and lack of commercial bias. This is especially significant in markets with information asymmetry, where patients may lack the medical literacy or access to standardized service quality data, making peer recommendations a critical decision input.

Empirical research has reinforced the significance of WOM in shaping healthcare choices. A recent study by Ellen et al., (2024) found that patient satisfaction directly correlates with WOM behaviors in the private healthcare setting, where positive experiences lead patients to recommend their provider to others. Additionally, Greif et al., (2022) confirmed that WOM outweighs social media influence in determining patient preference for physicians, especially in specialties requiring personal trust such as orthopedics and rehabilitation. These findings suggest that WOM is not just a communication tool, but a behavioral outcome rooted in the perceived value of care, interpersonal service encounters, and the emotional outcomes of healthcare.

In the context of private hospitals in developing countries like Indonesia, WOM becomes even more crucial due to the scarcity of formal institutional quality ratings and inconsistent regulatory oversight. Patients often rely on anecdotal experiences shared by trusted family or community members. This informal information exchange helps reduce uncertainty, improve perceived hospital credibility, and encourage action.

2. Digital Reviews and Patient Selection Behavior

With the rise of digital platforms and online health communities, digital reviews—often framed as electronic word of mouth (e-WOM)—have emerged as powerful determinants of consumer

decision-making in healthcare. Unlike traditional WOM, digital reviews are asynchronous, publicly archived, and scalable, allowing patients to access a broad range of experiences and opinions. As patients increasingly research providers before seeking treatment, platforms such as Google Reviews, health-specific forums, and hospital websites have become essential sources of decision support.

Recent findings underscore the growing reliance on digital reviews. Nearly half of prospective patients consult online reviews before booking appointments, with providers rated below 4.0 stars frequently excluded from consideration. Similarly, (Zhou et al., 2021) observed that review volume, valence, and perceived authenticity significantly affect healthcare provider selection in emerging economies. These findings are supported by Azzam et al., (2024), which showed that digital reviews' credibility, interactivity, and ease of access explained 76% of the variance in treatment destination choice. In this light, digital reviews provide not only reputational feedback but also act as an informal quality assurance mechanism in environments with limited transparency.

Moreover, digital reviews can serve both as a trust builder and a filtering mechanism. Positive reviews signal high satisfaction, professionalism, and clinical competence, while negative reviews may highlight issues related to waiting times, empathy, or facility hygiene. For patients with limited medical knowledge, such reviews serve as cognitive shortcuts that reduce the complexity of hospital choice.

3. Integrated Influence of WOM and Digital Reviews on Hospital Selection

While both WOM and digital reviews independently shape hospital selection behavior, emerging research suggests that their interplay may have a compound effect. In today's omnichannel information environment, patients rarely rely on a single source of information. Instead, they integrate multiple inputs—personal recommendations, social media cues, and online review content—to arrive at a confident decision. Thus, the effectiveness of WOM may be contingent on the presence and tone of digital reviews, either reinforcing or undermining the original message.

This moderating effect can be understood through the lens of the elaboration likelihood model (ELM) and dual-processing theory. Personal WOM typically triggers central processing, as it is seen as high-involvement and trustworthy. However, when patients encounter contradicting online reviews—e.g., negative feedback online despite a friend's positive recommendation—they may experience cognitive dissonance, potentially reducing WOM's persuasive power. Conversely, when both sources align (e.g., a positive WOM recommendation is confirmed by glowing online reviews), the patient's confidence in the provider choice increases substantially. Thus, digital reviews can either amplify or attenuate the influence of WOM, depending on their valence and perceived credibility (Filieri et al., 2018; Zhang et al., 2020).

From a managerial perspective, this highlights the importance of consistency in service delivery across both digital and interpersonal domains. Hospitals must not only ensure high-quality care that prompts positive WOM but also proactively manage their digital presence to support that narrative.

Hypotheses Development

Based on the literature above, the following hypotheses are proposed:

- H1: Word of mouth has a significant positive influence on the decision to select a private hospital.
- H2: Digital reviews have a significant positive influence on the decision to select a private hospital.

- H3: Digital reviews moderate the relationship between word of mouth and hospital selection decision, such that the effect of WOM is stronger when digital reviews are also positive.

METHODS

This study employs a quantitative, explanatory research design to investigate the influence of word of mouth (WOM) and digital reviews on patients' decisions to select private hospitals. The target population comprises individuals aged 18 years and above who have used private hospital services in Indonesia within the past year. A purposive sampling technique was applied to recruit respondents who had consulted online reviews or received personal recommendations prior to their hospital selection. A structured questionnaire, adapted from validated instruments in previous literature, was used to collect primary data through both online and offline distribution channels. The constructs—WOM, digital reviews, and hospital selection decision—were measured using Likert-scale items adapted from Filieri et al., (2018, Hussain et al., (2019), and Zhou et al., (2021), respectively. Reliability and validity were ensured through a pilot study ($n = 30$), where Cronbach's alpha coefficients exceeded 0.70 for all constructs. A total of 217 valid responses were analyzed using Structural Equation Modeling (SEM) with SmartPLS 4.0, evaluating both the measurement and structural models, including moderation analysis using interaction terms.

RESULT AND DISCUSSION

The research was conducted on 217 respondents who had selected a private hospital within the last 12 months in Indonesia, based on either personal recommendations or online reviews. The descriptive statistics in Table 1 present the mean and standard deviation of all observed variables. Respondents reported relatively high agreement with WOM, digital review, and hospital selection decision items, with average scores ranging from 4.0 to 4.3 on a 5-point Likert scale. The internal consistency reliability of each construct was acceptable, with Cronbach's alpha coefficients exceeding 0.80 for all variables.

Table 1. Descriptive Statistics and Reliability of Indicators

Variable	Mean	Std. Dev	Cronbach Alpha
WOM1	4.2	0.6	0.82
WOM2	4.1	0.7	0.82
WOM3	4.3	0.5	0.82
eWOM1	4.0	0.8	0.86
eWOM2	4.1	0.7	0.86
eWOM3	4.2	0.6	0.86

Variable	Mean	Std. Dev	Cronbach Alpha
Decision1	4.3	0.5	0.88
Decision2	4.1	0.6	0.88
Decision3	4.2	0.7	0.88

Robustness Tests

To ensure the reliability of the model, several robustness checks were performed. These included model recalibration after outlier removal, bootstrap resampling (5,000 iterations), and comparison of explained variance (R^2) across models. As shown in Table 3, the key indicators— R^2 and Q^2 —remained stable across all model variants, confirming the consistency of the findings.

Table 3. Robustness Test Results

Model Variant	R^2 (Decision)	Adjusted R^2	Q^2 Predictive Relevance
Full Model	0.58	0.56	0.32
After Removing Outliers	0.57	0.55	0.31
Bootstrap Resample (5,000)	0.59	0.57	0.33

7. Multi-Group Analysis (MGA)

To explore potential differences in the structural model across demographic groups, a multi-group analysis was conducted by gender. The results (Table 4) suggest that while minor coefficient differences exist between male and female respondents, none of the differences reached statistical significance based on permutation testing ($p > 0.05$).

Table 4. Multi-Group Analysis by Gender

Path	Male Coefficient (β)	Female Coefficient (β)	Difference (β)	P-Value (Permutation Test)
WOM → Decision	0.36	0.42	0.06	0.172
eWOM → Decision	0.44	0.39	-0.05	0.288

Path	Male Coefficient (β)	Female Coefficient (β)	Difference (β)	P-Value (Permutation Test)
WOM $\times$ eWOM $\rightarrow$ Decision	0.22	0.19	-0.03	0.392

4.2 Hypothesis Testing Results

The structural model was tested using SmartPLS 4.0. The path coefficients, t-statistics, and p-values are summarized in Table 2. The model showed that both word of mouth ($\beta = 0.39$, $p < 0.001$) and digital reviews ($\beta = 0.41$, $p < 0.001$) have significant positive effects on hospital selection decisions. Additionally, the interaction term WOM $\times$ eWOM was also statistically significant ($\beta = 0.21$, $p = 0.005$), confirming that digital reviews moderate the relationship between WOM and hospital selection.

Table 5. Path Coefficients and Significance Levels

Path	Coefficient (β)	T-Statistic	P-Value
WOM $\rightarrow$ Decision	0.39	5.32	0.000
eWOM $\rightarrow$ Decision	0.41	6.14	0.000
WOM $\times$ eWOM $\rightarrow$ Decision	0.21	2.81	0.005

Discussion

This study confirms the significant and positive influence of word of mouth (WOM) and digital reviews on patients' decisions to select private hospitals in Indonesia. WOM emerged as a powerful predictor, reaffirming earlier findings that interpersonal communication—particularly from trusted sources like family and friends—remains a dominant factor in health-related decision-making, especially in high-risk contexts such as healthcare (Ellen et al., 2024; Hussain et al., 2019). WOM allows patients to mitigate uncertainty, particularly when institutional transparency or quality metrics are limited, as is often the case in developing countries (Fatima et al., 2023). This reinforces the theory that WOM operates as a form of social proof in health service selection (Hennig-Thurau et al., 2004).

Simultaneously, digital reviews (e-WOM) were shown to be equally influential. This finding aligns with recent literature on consumer reliance on peer-generated content across decision-making domains, especially when service intangibility is high (Filieri et al., 2018; Zhang et al., 2020). As healthcare becomes increasingly digitized, patients turn to online platforms such as Google Reviews, hospital websites, and health forums not just for service ratings, but also for perceived trustworthiness and experiential narratives (Greif et al., 2022). In this study, digital reviews were found to not only provide independent informational value but also moderate the effect of

WOM—amplifying the credibility of interpersonal recommendations when congruent, or creating decision dissonance when inconsistent. This supports dual-processing models of persuasion, where both central (WOM) and peripheral (online reviews) cues influence choices (Zhou et al., 2021).

The moderation effect of digital reviews on WOM further contributes to the theoretical understanding of cross-channel reputation effects. When patients encounter both positive WOM and favorable digital reviews, they exhibit greater confidence in selecting a hospital. Conversely, inconsistencies between channels may raise doubts, leading to prolonged decision-making or information avoidance (Grewal et al., 2020; Obal & Morgan, 2018). This interaction has practical implications for hospital managers: online review management must be strategically aligned with offline patient satisfaction efforts. Encouraging satisfied patients to leave honest reviews, responding to negative feedback transparently, and highlighting third-party endorsements may significantly influence new patient acquisition (Prentice et al., 2020).

In line with findings from Verleye et al., (2018), this study also highlights that engagement behaviors in healthcare are increasingly networked, with reputation now being co-constructed across traditional and digital ecosystems. In Indonesia, where institutional trust may be less developed and health literacy uneven, the combination of social testimonials and digital trust signals plays a disproportionately important role (Aldhaen et al., 2021). This local context adds nuance to the global understanding of digital health marketing by showing how cultural and infrastructural factors mediate reputation dynamics in healthcare. From a methodological perspective, the robustness of the SEM model and consistency across gender subgroups enhance the credibility and generalizability of the findings.

CONCLUSION

This study investigated the impact of **word of mouth (WOM)** and **digital reviews (eWOM)** on patients' decisions to select private hospitals in Indonesia. Using a structured quantitative approach and SEM analysis, the findings demonstrate that both WOM and eWOM exert significant and positive influences on hospital selection. Furthermore, the moderating role of eWOM suggests that digital reviews amplify the persuasive effect of WOM when the two sources align, offering new empirical support for integrated decision-making frameworks in healthcare consumer behavior.

From a theoretical standpoint, the study enriches the dual-process theory of persuasion by demonstrating how interpersonal and digital information sources interact. While previous literature often treats WOM and eWOM as independent predictors, this study reveals their **synergistic influence**, addressing a notable gap in healthcare marketing research. Methodologically, the inclusion of a moderation effect using SmartPLS provides an advanced modeling approach that can be applied in other behavioral contexts.

Practically, these findings offer strategic insights for healthcare marketers and hospital administrators. To increase patient acquisition, private hospitals must actively manage both offline reputational networks (WOM) and online presence (digital reviews). Hospitals should encourage satisfied patients to leave reviews, respond professionally to online feedback, and ensure consistency between actual service delivery and public sentiment. Marketing campaigns that blend personal testimonial sharing and digital storytelling are likely to be more effective than those relying on either channel alone.

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