

Comparison of Online Prescription Services Between Good Doctor and Halodoc at Nizam Farma Pharmacy

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ABSTRACT: Pharmaceutical services play a pivotal role in healthcare delivery and have increasingly evolved through the integration of digital technologies, particularly online prescription services. This study compared the characteristics of online prescription services provided through Good Doctor and Halodoc at Nizam Farma Pharmacy between January and March 2025. A quantitative descriptive study was conducted using archived electronic prescription records obtained from both platforms. The data were analyzed based on prescription volume, physician specialty, medication categories, and medication access outcomes. The results indicated that Halodoc generated the highest proportion of prescriptions (61.6%), predominantly issued by general practitioners (76.5%), with symptomatic medications and antibiotics representing the most frequently prescribed drug categories. Conversely, prescriptions received through Good Doctor were primarily issued by specialist physicians (73.6%) and were largely intended for the management of mild conditions, including allergic disorders and upper respiratory tract illnesses. Overall, the findings indicate that online prescription platforms have the potential to improve medication access and support pharmaceutical services in community pharmacy practice.

KEYWORDS: Drug access; Good Doctor; Halodoc; online prescription; pharmacy.

1. INTRODUCTION

Pharmaceutical services are a core component of healthcare delivery, with the primary objective of optimizing therapeutic outcomes and improving patients' quality of life through the safe, effective, and rational use of medicines [1]. Advances in digital technology have significantly transformed healthcare services, particularly through the adoption of online prescription systems that enable remote consultations between patients and healthcare professionals while facilitating the electronic transmission of prescriptions to community pharmacies [2]. As an integral part of telemedicine, online prescribing supports the provision of healthcare services over a distance using information and communication technologies, thereby improving the accessibility and continuity of patient care [3]. In Indonesia, telemedicine practice is regulated under the Minister of Health Regulation No. 20 of 2019 concerning the Organization of Telemedicine Among Healthcare Facilities, which provides a legal framework for expanding healthcare access and improving service efficiency, especially in geographically underserved areas [4]. Previous studies have demonstrated that digital healthcare systems reduce consultation time and operational costs, enhance patient satisfaction, and promote safer medication management by supporting the principles of rational drug use and pharmaceutical care [5].

In addition to improving healthcare accessibility, digital prescribing systems contribute to enhanced medication safety by reducing dispensing errors and minimizing the risk of misinterpretation associated with handwritten prescriptions [6]. The integration of digital health technologies into pharmacy practice can be observed at Nizam Farma Pharmacy, which has collaborated with online prescription platforms since early 2023. Through platforms such as Good Doctor and Halodoc, patients, physicians, and community pharmacies are connected within an integrated digital healthcare network, enabling more efficient coordination of pharmaceutical services [7]. Moreover, electronic prescribing (e-prescribing) systems can be integrated with electronic medical records, allowing physicians and pharmacists to access patients' medication histories in real time. This integration supports clinical decision-making by reducing the likelihood of duplicate therapy,

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medication errors, and inappropriate prescribing, thereby promoting safer and more effective pharmacotherapy [2]. The availability of online prescription services also minimizes the need for face-to-face healthcare visits, encouraging greater patient engagement in medication management while improving access to pharmaceutical care and potentially enhancing therapeutic outcomes [7].

Although both Good Doctor and Halodoc provide telemedicine and electronic prescription services, they differ in their service models, physician networks, and partnerships with healthcare facilities and pharmacies. These differences may influence prescribing patterns, the types of medications prescribed, and patients' access to medicines through partner pharmacies. However, studies directly comparing the characteristics of online prescription services between these two platforms within the same pharmacy setting remain limited. Therefore, comparing Good Doctor and Halodoc is important to provide evidence regarding their respective contributions to pharmaceutical service delivery and to support pharmacies in optimizing the implementation of online prescription services.

Nizam Farma Pharmacy is a community pharmacy located in Jagakarsa, South Jakarta, that has collaborated with both Good Doctor and Halodoc since 2023 to provide online prescription dispensing services. In addition to serving walk-in patients, the pharmacy receives electronic prescriptions from both platforms and provides medication delivery through various logistics partners. The high volume of online prescription transactions makes Nizam Farma Pharmacy an appropriate setting for evaluating the implementation of digital prescription services and comparing the characteristics of prescriptions generated through different telemedicine platforms.

Against this background, this study aimed to compare the characteristics of online prescription services provided through Good Doctor and Halodoc based on prescription volume, physician category, medication profiles, and patients' access to medicines at Nizam Farma Pharmacy. The findings are expected to provide evidence regarding the contribution of digital prescription services to improving the quality, accessibility, and efficiency of pharmaceutical care in community pharmacy practice [8].

2. MATERIALS AND METHODS

2.1. Material

The study utilized archived electronic prescription records obtained from the Good Doctor and Halodoc platforms. The dataset included information on the prescribing physician category (general practitioner or specialist), the most frequently prescribed medications, prescription utilization patterns, and patient medication access through online prescription services [8].

2.2. Procedure

2.2.1 Research Design

A quantitative descriptive study was conducted to evaluate online prescription services provided through the Good Doctor and Halodoc platforms at Nizam Farma Pharmacy. The study focused on comparing physician prescribing patterns and patient access to medications based on electronic prescription records generated during the study period [10].

2.2.2 Data Collection

Data were retrospectively collected from archived electronic prescription records received by Nizam Farma Pharmacy through the Good Doctor and Halodoc platforms between January 1 and March 31, 2025. The collected variables included physician specialty, prescribed medications, prescription frequency, and medication access through online prescription services [11].

2.2.3. Data Analysis

The prescription data were analyzed using descriptive quantitative methods to summarize the characteristics of the dataset through frequency distributions and percentage values across predefined categories [12]. The analysis evaluated: (a) the total number and monthly distribution of prescriptions received from Good Doctor and Halodoc; (b) the distribution of prescriptions according to physician type (general practitioners and specialists); (c) the most frequently prescribed medication categories; and (d) patient

medication access through delivery services. The percentage of each variable was calculated using the following formula [12]:

$$P = (x/n) \times 100\%$$

Where P represents the percentage, x denotes the number of data entries in a specific category, and n represents the total number of data entries [12].

3. RESULTS

3.1 Prescription Volume on the Good Doctor and Halodoc Platforms

Table 1. Monthly prescription volumes received by platform.

Months	Good Doctor	Halodoc
Jan 2025	87	170
Feb 2025	100	175
March 2025	122	151
Total	309 (38.4%)	496 (61.6%)

Analysis of prescription data received at Nizam Farma Pharmacy through the Good Doctor and Halodoc platforms revealed consistent monthly trends throughout the study period. Halodoc contributed a substantially higher prescription volume compared to Good Doctor, with a total of 496 prescriptions versus 309 prescriptions during the January to March 2025 period. The higher prescription volume observed on Halodoc may be attributable to its comparatively more comprehensive feature set, which encompasses not only medical consultation and medication procurement but also supplementary health services such as laboratory test scheduling, vaccination, and home care arrangements. This integration of multidimensional healthcare services into a single application renders the platform more appealing to users, thereby driving higher patient preference and utilization [13, 14].

3.2. Physician Type Distribution on Good Doctor and Halodoc Platforms

Table 2. Distribution of prescribing physician types by platform.

Platform	General Practitioner	Specialist
Good Doctor	133 (23.5%)	176 (73.6%)
Halodoc	433 (76.5%)	63 (26.4%)
Total	566	239

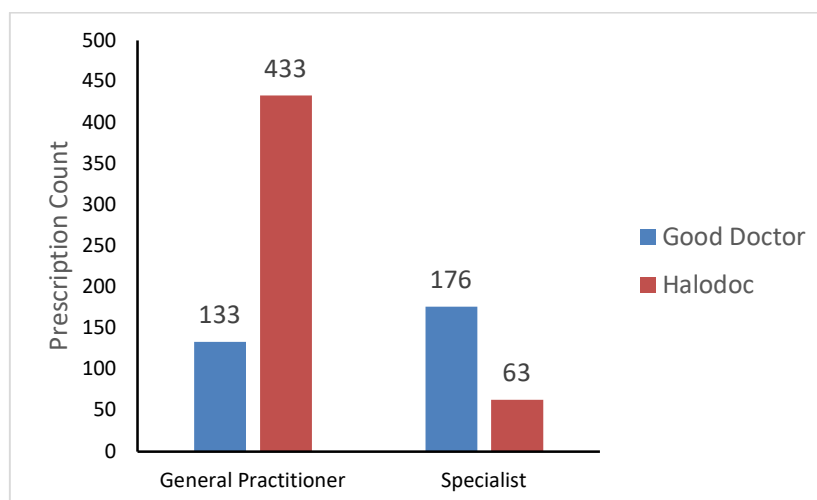


Figure 1. Physician Type Distribution on Good Doctor and Halodoc Platforms.

The distribution of prescribing physician types across the two platforms demonstrated a marked divergence. On the Good Doctor platform, prescriptions from specialist physicians (176 prescriptions) exceeded those from general practitioners (133 prescriptions). Conversely, on the Halodoc platform, general practitioners were the predominant prescribers, contributing 433 prescriptions compared to only 63 prescriptions from specialists [15].

3.3. Most Frequently Prescribed Medications on Good Doctor and Halodoc Platforms

Table 3. Top five most frequently prescribed medications by platform.

Platform	Prescription Count	Medication Name
Good Doctor	78	Rhinos SR
	69	Sumagesic 600 mg
	51	Biogesic 500 mg
	48	Methylprednisolone 8 mg
	46	Vectrine 300 mg
Halodoc	312	Sumagesic 600 mg
	126	Cefixime 200 mg
	105	Rhinos SR
	69	Imboost Force
	64	Prednicort 4 mg

The analysis of frequently prescribed medications revealed notable differences between the two platforms. On Good Doctor, the most commonly prescribed agents included Rhinos SR (78 prescriptions), Sumagesic 600 mg (69 prescriptions), Biogesic 500 mg (51 prescriptions), Methylprednisolone 8 mg (48 prescriptions), and Vectrine 300 mg (46 prescriptions). These medications are primarily indicated for the symptomatic management of mild complaints including fever, myalgia, allergic reactions, and mild respiratory conditions, which are typically resolved within a single consultation without the need for laboratory investigations or antibiotic therapy [16].

In contrast, Halodoc exhibited a substantially higher overall prescription volume, most notably for Sumagesic 600 mg (312 prescriptions), followed by Cefixime 200 mg (126 prescriptions), a broad-spectrum

antibiotic, and Imboost Force (69 prescriptions), an immunostimulant preparation. These findings suggest that Halodoc users are more likely to seek consultations for acute and diverse complaints, including infectious conditions requiring antibiotic intervention, which is consistent with the platform's primary care orientation and predominant use by general practitioners [20].

3.4. Patient Access to Medications on Good Doctor and Halodoc Platforms

Table 4. Medication delivery outcomes on the Good Doctor platform.

Month	Delivered	Abandoned
January	312	4
February	344	2
March	424	2
Total	1,080 (99.3%)	8 (0.7%)

Medication delivery performance on the Good Doctor platform demonstrated an exceptionally high success rate, with a total of 1,080 prescriptions successfully delivered and only 8 prescriptions recorded as abandoned, representing a delivery success rate of 99.3% [18].

Table 5. Medication delivery outcomes on the Halodoc platform.

Month	Delivered	Abandoned
January	652	85
February	663	54
March	606	58
Total	1,921 (90.7%)	197 (9.3%)

Delivery performance on the Halodoc platform also yielded satisfactory results overall, with 1,921 prescriptions successfully delivered; however, a total of 197 prescriptions were classified as abandoned. The occurrence of prescription abandonment may be attributed to several contributing factors, including limited medication stock availability, incomplete transaction processing by patients, or modifications to purchasing decisions such as brand substitution or complete order cancellation [19].

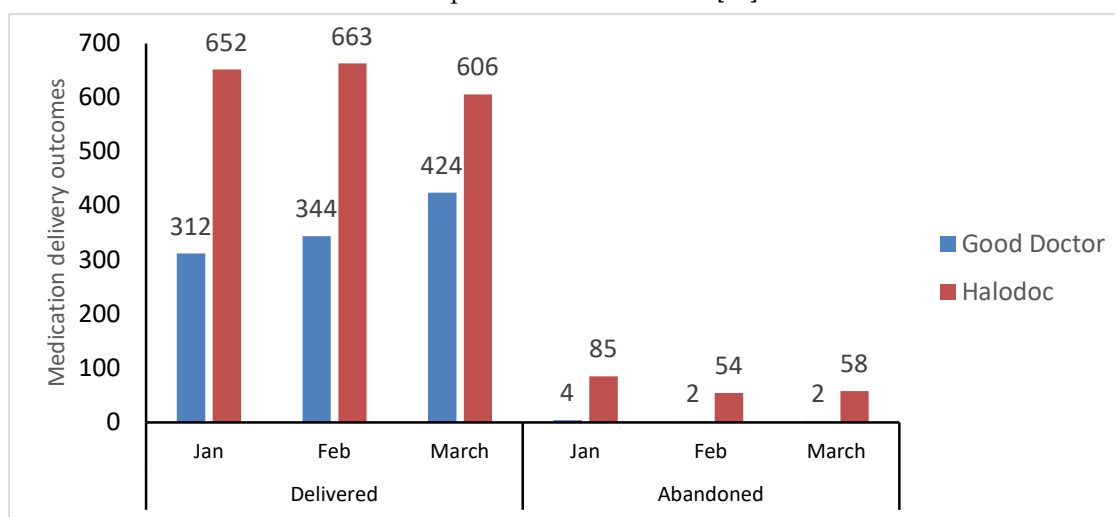


Figure 2. Medication delivery outcomes.

4. DISCUSSION

The greater prescription volume recorded on the Halodoc platform compared with Good Doctor may be explained by its more comprehensive range of healthcare services. In addition to online medical consultations and medication purchasing, Halodoc offers complementary services, including laboratory testing, vaccination appointments, and home healthcare, thereby providing a more integrated digital healthcare ecosystem. The availability of multiple healthcare services within a single platform enhances user convenience and may contribute to higher patient acceptance and utilization of the application [13], [14].

The marked differences in physician distribution between the two platforms appear to reflect their distinct service models and target populations. Good Doctor has established collaborations with more than 65 insurance providers, 3,500 corporate clients, and eight Third-Party Administrator (TPA) partners, allowing beneficiaries to obtain specialist consultations through employer-sponsored or insurance-based healthcare programs [20]. In contrast, Halodoc primarily focuses on primary healthcare services delivered by general practitioners, making the platform more accessible to the broader population seeking initial medical consultation [15].

These observations suggest that Good Doctor and Halodoc perform complementary roles within Indonesia's digital healthcare ecosystem. Good Doctor is more frequently utilized for specialist consultations and the management of specific clinical conditions, whereas Halodoc predominantly supports primary healthcare delivery through general practitioner services [8]. Moreover, prescriptions dispensed through these platforms are not exclusively generated from online consultations but may also originate from conventional face-to-face medical encounters, with prescriptions subsequently transmitted through digital platforms for medication dispensing. This integration further improves patients' access to pharmaceutical services and medicines [21].

The predominance of symptomatic medications prescribed through Good Doctor is consistent with the characteristics of consultations conducted on the platform, which commonly involve mild and self-limiting conditions that can be managed conservatively. Despite the higher proportion of specialist consultations, antibiotics were not among the most frequently prescribed medications, suggesting that specialist physicians tend to adopt more selective prescribing practices based on comprehensive clinical assessment and disease-specific therapeutic considerations [16].

Conversely, antibiotics, particularly cefixime, were prescribed more frequently through Halodoc, likely reflecting the platform's emphasis on primary care, where general practitioners commonly manage acute infectious diseases. Although antibiotic prescribing through telemedicine may be clinically appropriate, high antibiotic utilization warrants careful monitoring to ensure adherence to antimicrobial stewardship principles. Appropriate prescribing based on clinical indications, correct dosage, treatment duration, and patient adherence is essential to minimize the risk of antimicrobial resistance (AMR). Therefore, evidence-based prescribing guidelines and close collaboration between physicians and pharmacists remain crucial for maintaining the quality and safety of digital healthcare services [20].

Prescription abandonment rates also represent an important indicator for evaluating the performance of online prescription services. The successful delivery of pharmaceutical care depends not only on appropriate prescribing but also on medication availability at the pharmacy and patients' completion of the dispensing process and subsequent medication use [19]. A high proportion of abandoned prescriptions may indicate limitations in medicine availability, disruptions within the medication supply chain, or insufficient patient engagement during the purchasing process, thereby highlighting opportunities for quality improvement. Furthermore, Halodoc's implementation of sanctions, including temporary suspension of pharmacy partners involved in dispensing errors, emphasizes the importance of strict dispensing standards and continuous quality assurance to maintain patient safety and service reliability within digital pharmacy practice [18]. Overall, these findings demonstrate that Good Doctor and Halodoc serve complementary roles in digital pharmaceutical care, with each platform supporting different patient needs and prescribing patterns.

This study has several limitations, including its single-center setting, relatively short study period, and descriptive design, which may limit the generalizability of the findings and preclude causal inference or direct comparisons of platform effectiveness. In addition, the analysis was based solely on prescription records and did not include patient demographic characteristics, clinical outcomes, or patient satisfaction. Future multicenter studies with longer observation periods and more comprehensive data are recommended to provide a more robust evaluation of online prescription services.

5. CONCLUSION

This study demonstrated that online prescription services delivered through Good Doctor and Halodoc supported medication access and pharmaceutical service delivery in community pharmacy practice. Halodoc generated a higher prescription volume, predominantly from general practitioners, and was more frequently used for managing common acute conditions requiring symptomatic therapy and, in some cases, antibiotic treatment. In contrast, Good Doctor was more commonly utilized by specialist physicians, with prescriptions largely intended for mild and condition-specific disorders requiring supportive pharmacotherapy. Both platforms achieved high medication delivery success rates, indicating that digital prescription services can facilitate timely medicine dispensing and improve patient access to treatment. Overall, the findings suggest that online prescription platforms have the potential to improve medication access and support pharmaceutical service delivery in community pharmacy practice.

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