Model of Using E-Prescription Technology to Improve Patient Waiting Time Efficiency at The Outpatient Pharmacy of RSUD Dr. H. Jusuf SK of Tarakan City

Muhadir¹, Bayu Wahyudi², Wahyuddin Bagenda³

- ¹ Universitas Adhirajasa Reswara Sanjaya, Bandung; Indonesia; muhadir10@gmail.com
- ² Universitas Adhirajasa Reswara Sanjaya, Bandung; Indonesia; drbayuwahyudi@yahoo.com
- ³ Universitas Adhirajasa Reswara Sanjaya, Bandung; Indonesia; wahyuddinb@gmail.com

ARTICLE INFO

Keywords:

E-Prescription;

Efficiency;

Waiting Time;

Pharmacy Service;

Hospital

Article history:

Received 2025-04-22 Revised 2025-05-20 Accepted 2025-07-25

ABSTRACT

This study aims to assess the utilization of e-prescription technology in improving the efficiency of patient waiting times at the outpatient pharmacy of RSUD Dr. H. Jusuf SK, Tarakan City. Using a quantitative approach with a cross-sectional design, this research analyzes the relationship between the use of eprescription systems and the efficiency of patient waiting times. Data were collected at a specific point in time from the outpatient pharmacy installation, involving a sample of 98 patients selected using the Slovin formula and purposive sampling technique. Inclusion criteria included patients receiving prescriptions at the outpatient pharmacy, who had used or were using the eprescription/manual system, were willing to participate, and aged between 18-65 years. Data collection methods included direct observation, document review, and questionnaires using a Likert scale. The results showed that the implementation of eprescriptions significantly improved patient waiting time efficiency, with an average reduction of approximately 30 minutes for both compounded and non-compounded prescriptions compared to manual prescriptions. However, despite the significant reduction, the waiting times for compounded drugs (average 90 minutes) and ready-made drugs (average 82 minutes) still did not meet the minimum service standards set by the Indonesian Ministry of Health Regulation No. 79/Menkes/2016 (i.e., 30 minutes for ready-made drugs and 60 minutes for compounded drugs). As many as 84% of prescriptions did not yet meet these minimum standards. Identified inhibiting factors included prescription accumulation during peak patient hours, the habit of printing e-prescriptions onto paper before processing, the verification process within the BPJS application system, and occasional errors in the e-prescription system.

This is an open access article under the <u>CC BY</u> license.



Corresponding Author:

Yeni Ratnawati

Universitas Adhirajasa Reswara Sanjaya, Bandung; Indonesia; yeniratnawati79@gmail.com

1. INTRODUCTION

Health is a basic need of every individual, as explained in Health Law No. 17 of 2023 and strengthened by Government Regulation No. 28 of 2024, which states that health must be safe, effective, and accessible to all levels of society. The hospital is one of the main health service facilities that provides promotive, preventive, curative, rehabilitative, and palliative services, including pharmaceutical services that play an important role in ensuring the availability and use of drugs safely and rationally.

In an effort to improve the quality of pharmaceutical services, the service paradigm has shifted from *drug oriented* to *patient oriented* through the application of *pharmaceutical care*. One of the innovative breakthroughs that supports this service is the use of the e-prescription system. According to Yudistira (2019), e-prescriptions provide benefits such as reducing prescription writing errors, efficiency of service time, and accuracy of drug dosage. The implementation of e-prescriptions is also in line with the mandate of PMK No. 24 of 2022, which requires all health care facilities, including hospitals, to use electronic medical records, including electronic prescriptions, no later than December 31, 2023.

Pharmaceutical services are an important indicator in assessing the quality of hospitals, especially through the fulfillment of the Minimum Service Standards (SPM). Based on Permenkes No. 6 of 2024, the standard waiting time for pharmaceutical services is a maximum of 30 minutes for finished drugs and 60 minutes for concocted drugs. Services that exceed these standards can lower patient satisfaction levels and signal system inefficiency.

dr. H. Jusuf SK Tarakan Hospital is a referral hospital in North Kalimantan that is adopting an e-prescription system to improve the quality of pharmaceutical services. Previously, the use of manual prescriptions often caused various obstacles, such as delays in administering medications due to manual verification processes and prescription writing errors. Based on secondary data, the average waiting time for concocted drugs is 122.93 minutes and finished drugs is 113.59 minutes, both of which are still far from the minimum service standard.

Based on this background, the purpose of this study is to analyze the effectiveness of e-prescription implementation in reducing waiting time and increasing patient satisfaction in the pharmacy installation of dr. H. Jusuf SK Tarakan Hospital. This study refers to the thoughts of Yudistira (2019) and the regulations listed in Permenkes No. 6 of 2024 and Permenkes No. 24 of 2022.

2. METHOD

This study uses quantitative methods with descriptive and analytical approaches to analyze the relationship between the use of e-prescription technology and patient wait time efficiency. The design used is cross sectional, which is data collection is carried out at a certain point in time. The sample in this study amounted to 98 respondents consisting of pharmacists and patients at dr. H. Jusuf SK Tarakan Hospital.

Data collection techniques include direct observation of waiting times at outpatient pharmacies, interviews with pharmacy officers regarding the implementation of e-prescriptions, and documentation of waiting time data before and after the use of e-prescriptions. The researcher also used a questionnaire measured on a Likert scale to explore respondents' perceptions of the efficiency of pharmaceutical services. According to Sugiyono (2022), the Likert scale is used to measure attitudes, opinions, and perceptions of social phenomena.

Data processing is carried out through several stages, namely data checking (editing), coding, and entering the data into a computer for analysis. After that, data cleaning is carried out to ensure the accuracy of the data to be analyzed. The goal of this stage is to produce clean and processed data using statistical software. The hypothesis test is carried out after all the data is collected and grouped by

variable. According to Sugiyono (2022), the analysis stages include data grouping, tabulation, presentation, and statistical calculation to answer problem formulations and test hypotheses.

Normality tests are used to see if the residual data is normally distributed using a normal probability plot. If the residual data follows a diagonal line, then the distribution is normal (Ghozali, 2021). Furthermore, simple linear regression is used to see the effect between independent variables (e-prescriptions) on dependent variables (wait times), and to predict how much e-prescriptions affect service efficiency.

3. FINDINGS AND DISCUSSION

Result

Frequency Test

Frequency Distribution of Prescription Types Using Manual Prescriptions in the Outpatient Pharmacy Installation of Dr. Jusuf SK Hospital 2022

Table 1. Frequency Distribution of Prescription Types Using Manual Prescriptions in the Outpatient Pharmacy Installation of Dr. Jusuf SK Hospital 2022

No	Recipe Type	Number of Recipes	Average Wait Time (minutes)							
1	Racikan	362	122,93							
2	Medicine is finished	4024	113,59							
3	Total Recipes	4386	100%							

Based on the distribution of type frequencies in the outpatient pharmacy installation of Dr. H. Jusuf Sk Tarakan Priode Hospital before the use of e-prescriptions, it can be seen that the highest percentage is 4024 finished drugs with an average percentage of 113.59 minutes. Meanwhile, the lowest percentage is 362 prescription concocted drugs with an average waiting time of 122.93 minutes.

Distribution of Frequency Percentage of Waiting Time for Compounded Drugs at the Outpatient Pharmacy Installation of Dr. Jusuf SK Hospital April 2025

Table 2. Distribution of Frequency Percentage of Waiting Time for Compounded Drugs at the Outpatient Pharmacy Installation of Dr. Jusuf SK Hospital April 2025

Recipe Type	Frequency (n)	Percentage	Average waiting time
		%	(minutes)
Finished Medicine	15	15%	90
Concocted Drugs	83	85%	82
Total	98	100%	

Based on the table of the frequency of waiting times for concocted drugs above the outpatient pharmacy installation of dr. H. Jusuf SK Tarakan Priode Hospital in April 2025, it can be seen that the

highest percentage of 83 finished drugs with an average waiting time of 82 minutes while concocted drugs from 15 prescriptions the average waiting time is 90 minutes.

Distribution of Frequency of Percentage of Drug Waiting Time Before and After the Use of E-Prescription in the Outpatient Pharmacy Installation of Dr. Jusuf Hospital SK April 2025

Table 3. Distribution of Frequency of Percentage of Drug Waiting Time Before and After the Use of E-Prescription in the Outpatient Pharmacy Installation of Dr. Jusuf Hospital SK April 2025

Time Variables	Before e-prescription	After e- prescription	difference
Wait	Minute	Minute	Minute
Concoction	122,93	90	32,93
Medicine is	113,59	82	
finished	113,39	02	31.59

Based on the table of the frequency of waiting times before and after e-prescription, there is a difference in the waiting time of the concocted drug, there is a reduction in the waiting time of 32 minutes and 93 seconds, while the finished drug has a reduction in waiting time by 31 minutes and 59 seconds.

Frequency Distribution of the Percentage of Utilization of E-Prescription Technology by Health Workers in the Outpatient Pharmacy Installation of Dr. Jusuf SK Hospital April 2025

Table 4. Frequency Distribution of the Percentage of Utilization of E-Prescription Technology by Health Workers in the Outpatient Pharmacy Installation of Dr. Jusuf SK Hospital April 2025

NO	QUESTION	VALUATION				
NO	QUESTION	SS	S	N	TS	STS
1	I have used the e- prescription system regularly in clinical services	16	5	9	0	0
2	The e-prescription system is easy to use.	18	5	7	0	0
3	E-prescriptions shorten the process of prescribing patients.	10	14	6	0	0
4	E-recipes reduce the risk of recipe writing errors	10	8	12	0	0
5	I have received training on the use of e-prescriptions.	16	8	6	0	0
6	E-prescriptions are integrated with the electronic medical record (RME) system	9	12	9	0	0
7	The e-prescription system facilitates comprehensive access to patient data.	16	7	7	0	0

8	Patient prescription data can be accessed by pharmacies in real-time	17	8	5	0	0
9	There is no disruption in the flow of communication between the poly and the pharmacy.	15	9	6	0	0

Based on the table above, the highest percentage with very satisfied answers is that the e-prescription system is easy to use, the percentage of satisfied e-prescription system shortens the process of prescribing patients, for the highest percentage for the normal category of e-prescription reduces the risk of medication administration errors. Meanwhile, the category of dissatisfied and very dissatisfied does not provide value.

Frequency Distribution of Percentage of Waiting Time Efficiency and Patient Satisfaction in the Outpatient Pharmacy Installation of Dr. Jusuf Hospital SK April 2025

Table 5. Frequency Distribution of Percentage of Waiting Time Efficiency and Patient Satisfaction in the Outpatient Pharmacy Installation of Dr. Jusuf Hospital SK April 2025

	QUESTION	VALUATION				
NO		SS	S	N	TS	STS
1	I found out that my recipes are processed quickly with electronic recipes (e-recipes	21	16	27	18	14
2	The process of taking medication has become faster since using e-prescriptions	27	50	20	1	0
3	Information about prescriptions and medicines is easier for me to understand with the eprescription system	23	57	17	1	0
4	I am satisfied with the waiting time for the medication to be taken at the pharmacy	26	53	16	3	0
5	Pharmacy officer services become faster and more efficient.	28	49	18	3	0
6	E-prescribing system reduces medication administration errors	21	57	19	1	0
7	In general, I am satisfied with the prescription service at the current hospital pharmacy	31	54	12	1	0

Based on the table of the percentage of wait time efficiency and patient satisfaction with the highest percentage is in general, I am satisfied with the prescription service at the current hospital pharmacy with 31 respondents strongly agreeing, while the highest percentage with a satisfaction score is the e-prescription system reducing medication administration errors and drug information about prescriptions and drugs is easier to understand with the e-prescription system with a total of 57 respondents saying satisfied, For the neutral score with the highest percentage, i.e. I know that my recipe is electronically processed, 27 respondents said neutral. For the highest percentage with a score of agree and disagree is that I know that my recipe is processed electronically, the number of respondents disagrees is 18 while the most disagree is 14 respondents.

Normality Test

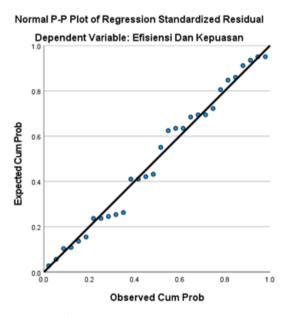


Figure 1. Normality Test Results

Based on the results of the statistical test above, it can be seen that the points on the P-Plot graph are seen following the direction of the diagonal line. It can be concluded that the data is normally distributed, so the regression model is suitable for use in the study because it has met the assumption of normality.

Simple Linear Regression

Table 1. Simple Linear Regression Analysis

Coefficients ^a					
	Unstandardized		Standardized		
	Coefficients		Coefficients		
Model	В	Std. Error	Beta	t	Sig.
1 (Constant)	23.449	6.334		3.702	.001
Pemanfaatan Teknologi E-Rese	.100	.166	.113	.601	.553

a. Dependent Variable: Efisiensi Dan Kepuasan

From the results of the above analysis, the multiple linear regression equation is obtained as follows:

 $Y = \alpha + \beta 1x1$ Y = 23.449 + 0.100 X1

Information:

Y : Efficiency and satisfaction

a : Constant

X1 : Utilization of E-Rese Technology

β1 : Regression coefficients

The regression equation can be explained as follows:

- 1. The constant value of 23,449 shows that if the use of e-rese technology (X1) is valued at 0, efficiency and satisfaction (Y) will increase by 23,449.
- 2. The value of the coefficient of using e-rese technology which is 0.100 shows that the use of e-prescription technology has a positive influence on efficiency and satisfaction, which means that every increase of 1 unit of e-rese technology utilization will affect efficiency and satisfaction by 0.100.

Discussion

Overview of E-Recipe Implementation

E-prescribing or electronic prescribing is an electronic technology that allows doctors and other medical practitioners to write electronic prescriptions (e-prescriptions) and send them to the computer of the desired pharmacy that is part of the e-prescribing network, directly from the doctor's practice/place of treatment. Another definition of e-prescribing is an electronic process that generates and sends electronic prescription requests from doctors to be sent by providers to the desired pharmacy computer directly from the doctor's place of treatment/practice. The doctor does not need to write the medication that will be given to the patient by hand on the prescription paper, but directly writes it on the computer. In e-prescribing, e-prescriptions are sent through a secure closed internet network (intranet) system. Electronic prescriptions are expected to be a solution to handle patient waiting times in accordance with minimum service standards.

Based on table 1 above, the waiting time for concocted and non-concocted drugs is 122 minutes for concocted prescriptions and finished drugs is 113 minutes, while the average waiting time after the use of e-prescriptions where concocted drugs are 90 minutes and finished drugs are 92 minutes. From the results of the two tables, researchers can see the difference in waiting time for concocted drugs there is a decrease in waiting time of 32 minutes 93 seconds while the drug is reduced to 31 minutes 59 seconds of waiting time.

The Effect of E-Prescriptions on Waiting Time

In a study (Maftuhah, 2016) which states that prescriptions received above 11.00 WIB have a longer waiting time than prescriptions received at 09.00 – 11.00 WIB, because starting at 11.00 WIB all polyclinics are complete in providing their services so that there is also a buildup of prescriptions at the pharmacy depot. The number of prescriptions received at the pharmacy depot is also one of the factors that affect the waiting time for prescription services.

Prescriptions received above 10.00 WIB have a longer waiting time than prescriptions received at 07.00-10.00 WIB, because starting at 10.00 WIB all polyclinics are complete in providing services so that in the outpatient pharmacy installation of dr H jusuf SK Hospital, prescriptions have begun to accumulate.

According to researchers, the types of prescriptions are divided into two types, namely finished drugs and concocted drugs. This type of concoction recipe takes longer than a finished drug. At dr H.

Jusuf SK Tarakan Hospital, there are several types of diseases that require many drugs in each treatment. The large number of drug packages will also affect the length of waiting time compared to the small number of drug packages. For this reason, officers are required to be faster and more thorough in providing every drug service to patients. The accumulation of prescriptions at the same time of patient visits also affects the waiting time for services.

Apart from the number of patients increasing day by day, although the dr. H. Jusuf SK Tarakan Hospital has received prescriptions electronically, but there are several factors that are the cause, namely the inhibition of prescription services, especially prescriptions that must go through verification on the bpjs application system, still printing prescriptions onto paper first before the medicine is done, and the system that sometimes still often experiences errors.

The Effect of E-Prescription Utilization on Patient Satisfaction

The use of e-prescriptions in the Outpatient Pharmacy Installation of Dr. H. Jusuf SK Tarakan Hospital has brought significant changes in pharmaceutical services that have a direct impact on patient satisfaction. Based on the results of the study, patients felt an increase in the aspect of service speed after the implementation of e-prescriptions, because the process of sending prescriptions from doctors to pharmacies no longer had to go through physical intermediaries, such as paper or manual handover by patients. E-prescriptions allow doctors to digitally and real-time deliver prescriptions to pharmacies, so pharmacists can start processing medications even before patients arrive at pharmacies. This shortens overall wait times and provides a more efficient service experience. Patients express satisfaction with the speed with which they receive medications, which is an important indicator in pharmaceutical services. This aspect is in line with the opinion of Adrisal et al. (2019) that the speed of service greatly affects the level of patient satisfaction, especially in technology-based services.

The e-prescription system also plays a role in increasing the clarity of the drug information received by patients. When prescription information is displayed in a structured, digital system, the potential for misinterpretation of doctor's handwriting is drastically reduced. This study found that patients felt more confident in the clarity of doses, rules of use, and drug interactions informed by pharmacists. The integration of e-prescriptions with Electronic Medical Records (RMEs) also allows the system to provide alerts to allergies or drug interactions, so that patients feel safer and more educated when receiving medications. Research by Moh. Husnun Niam et al. (2021) support this finding, stating that the clarity and completeness of information from pharmacy officers through digital systems has a major impact on patients' positive perceptions of hospital services.

Patient satisfaction is also influenced by the attitude and professionalism of pharmacists in providing services. Although e-prescription technology has a major role in speeding up and simplifying the service process, human interaction remains an important element. The results showed that patients felt valued when the staff showed a friendly attitude, gave explanations patiently, and were open to questions about medications. This officer's attitude is strengthened by an e-prescription system that makes it easier for them to provide information, because the drug data provided is more accurate and complete. Melita K. et al. (2022) stated that the communicative and friendly attitude of the officer is closely related to patient satisfaction, especially in service situations that have been supported by information technology such as e-prescriptions. The combination of system reliability and quality human service creates a more satisfying experience for patients.

Effect of Wait Time on Patient Satisfaction

Waiting time is one of the main indicators that greatly affects patient satisfaction in hospital pharmacy services. Based on the results of the study, it was found that although e-prescriptions managed to significantly reduce waiting times (from an average of 122 minutes for concocted drugs and 113 minutes for finished drugs to 90 minutes and 82 minutes respectively), the figure still did not

reach the minimum service standards set by the Ministry of Health. Patients still feel the impact of the waiting time that is still relatively long, especially during peak hours. The feeling of boredom and tired of waiting has a direct impact on negative perceptions of service quality. This is strengthened by the findings of Lestari (2021) who stated that the longer the waiting time, the lower the level of patient satisfaction, especially in outpatient pharmacy services.

Patient responses to wait times include aspects of perceived service efficiency as well as the value of the waiting experience itself. Patients who wait too long tend to feel less noticed, even though the service received at the end is quite good. Research shows that long waiting times interfere with patients' perception of hospital professionalism and the order of the service system. Factors such as long queues, delays in prescription input to the system, and lack of information during the waiting process worsen the patient experience. Fahrurazi et al. (2022) explain that the length of the waiting time is greatly influenced by the number of items in the prescription, the number of pharmacists, and interventions on problematic prescriptions, all of which have an impact on patient satisfaction with the speed and accuracy of service.

Satisfaction with waiting times is also closely related to the efficiency of pharmacists in handling patient prescriptions. The study found that most patients were aware of the officers' efforts to speed up the medication taking process, but still expected broader systemic improvements. Patients feel more satisfied when the process of submitting prescriptions to receiving drugs takes place quickly, organized, and with minimal errors. Toreh et al. (2020) stated that standard waiting times not only impact the work efficiency of officers, but also create a positive perception of the hospital as a whole. In the case of dr. H. Jusuf SK Tarakan Hospital, service efficiency through reducing waiting time has indeed progressed, but further optimization is still needed to meet patient expectations and achieve the expected quality standards.

4. CONCLUSION

In conclusion, the use of e-prescriptions has a positive impact on improving the efficiency of pharmaceutical services and patient satisfaction at dr. H. Jusuf SK Tarakan Hospital. E-prescriptions simplify the prescribing process, minimize errors in writing or reading prescriptions, speed up drug distribution, and support the delivery of clearer and more accurate drug information to patients. The system also promotes transparency and improves coordination between doctors and pharmacists. Patients feel more valued because they receive faster service and more understandable information. Clarity of dosage, rules of use, and more structured service are aspects that are highly appreciated by patients. The change from manual to digital systems gives the impression that hospitals are trying to innovate and keep up with technological developments to improve service quality.

The reduction in waiting time after the implementation of e-prescriptions has an impact on increasing patient satisfaction, although the average waiting time for concocted and finished drugs is still above the minimum service standard. This condition shows that even though there has been an increase in efficiency, optimization of the service system is still needed, both in terms of adding pharmacists, queue management, and increasing the speed of prescription verification in the system. Patients' perceptions of the quality of service are not only influenced by the speed of service, but also by the quality of interaction with pharmacists and the reliability of the systems used. The e-prescription system has been proven to improve the overall pharmaceutical service process, but to achieve the maximum level of patient satisfaction, more comprehensive and continuous improvement efforts are still needed in the implementation of digital-based pharmaceutical services.

REFERENCES

- Adrianto, R. (2021). Identifikasi Medication Error Tahap Dispensing di Instalasi Farmasi Rawat Jalan RSI Siti Aisya Madium.
- Adrisal dkk, (2019). Analisis pelayanan resep konvensional dan electronik serta pengaruhnya terhadap kualitas pelayanan kefarmasian di RSUD M. Natsir Solok Indonesia.
- Alifa Sabrina dkk. (2024). Evaluasi Kesesuaian Waktu Tunggu Pelayanan Resep di Instalasi Farmasi Rawat Jalan RSU Kabupaten Tangerang. Jurnal Kesehatan Masyarakat, 12(1), 45-52.
- Amalia, R., & Ramadhan, F. (2021). Pelayanan Kefarmasian di Rumah Sakit dan Kepatuhan terhadap Standar Pelayanan Minimal. Jurnal Kesehatan dan Farmasi
- Bustami. 2011. Penjaminan Mutu Pelayanan Kesehatan & Akseptabilitasnya. Jakarta: Penerbit Erlangga
- Creswell, J. W. & Creswell, J. D. 2017. Research design: Qualitative, quantitative, and mixed methods approaches, Sage publications.
- DeLone & McLean, W. 2003. Delon & Ephraim R. Mclean, (2003). The Delon and McLean Model of Information Systems Succes: A Ten Years Update, 9-30.
- Erviani, dkk. (2021). Evalusi waktu tunggu pelayanan resep pasien rawat jalan di Rumah Sakit Anwar Medika Fahrurazi, M., Utami, S., & Wibowo, J. (2022). Faktor-faktor yang Mempengaruhi Lamanya Waktu Tunggu dalam Pelayanan Kesehatan: Sebuah Penelitian di Rumah Sakit X. Jurnal Manajemen Kesehatan
- Forterfield, R. (2014). Advances in E-Prescribing and Its Impact on Patient Safety. Journal of Health Informatics Goodman, Douglas, 2003. Penentuan Faktor-faktor yang Berpengaruh dalam Kinerja Pelayanan. Kumpulan Terjemahan: Penentuan Variabel X Terhadap Y. Jakarta: Penerbit UI Press.
- Husna, A., & Rahmawati, F. (2020). *Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pasien di Instalasi Farmasi Rumah Sakit*. Jurnal Manajemen Kesehatan Indonesia, 8(1), 45-52.
- Husnun Moh. Niam dkk, (2021). Implikasi resep elektronik dalam manajemen kendali obat di Rumah Sakit.
- Kementerian Kesehatan Republik Indonesia. (2004). Peraturan Menteri Kesehatan Republik Indonesia Nomor 1127/Menkes/Per/XI/2004 tentang Akreditasi Rumah Sakit. Jakarta: Kementerian Kesehatan RI.
- Kementerian Kesehatan Republik Indonesia. (2008). *Peraturan Menteri Kesehatan Republik Indonesia Nomor X Tahun 2008 tentang Rumah Sakit.* Jakarta: Kementerian Kesehatan RI
- Kementerian Kesehatan Republik Indonesia. (2009). Keputusan Menteri Kesehatan Republik Indonesia Nomor HK.02.02/Menkes/133/2009 tentang Standar Pelayanan Rumah Sakit. Jakarta: Kementerian Kesehatan RI.
- Kementerian Kesehatan Republik Indonesia. (2016). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 73 Tahun 2016 tentang Rumah Sakit*. Jakarta: Kementerian Kesehatan
- Kementerian Kesehatan Republik Indonesia. (2017). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 9 Tahun 2017 tentang Pedoman Akreditasi Rumah Sakit. Jakarta*: Kementerian Kesehatan RI.
- Kementerian Kesehatan Republik Indonesia. (2020). *Pedoman Manajemen Rumah Sakit. Jakarta:* Kementerian Kesehatan RI.
- Muin Hartini, (2019). Kepuasan pengguna tentang pemanfaatan SIM RS terhadap kinerja petugas unit rawat jalan di RS Nene Mallomo Kab. Sidenreng Rappang
- Nugroho, A. S., & Widiastuti, T. (2021). *Analisis Faktor-Faktor yang Mempengaruhi Kepuasan Pasien di Apotek*. Jurnal Farmasi dan Ilmu Kesehatan, 9(2), 123-130.
- Novianti. (2017). Efektivitas Pelayanan Puskesmas Makale Teradap Pasien Di Kabupaten Tana Toraja
- Pratiwi, A. (2019). Implementasi e-prescribing dalam Sistem Kesehatan di Indonesia. Jurnal Teknologi Kesehatan, 10(2), 123-135.
- Purwandari, S. (2017). Faktor-faktor yang Mempengaruhi Lamanya Waktu Tunggu Pelayanan Resep di Apotek. Jurnal Manajemen Kesehatan.

- Sabrina Alifa, (2024). Evaluasi kesesuaian waktu tunggu pelayanan resep diinstalasi farmasi rawat jalan rumah sakit umum kabupaten Tangeran.
- Sugiyino, M. P. K. 2013. Kualitatif, dan Kombinasi (Mixed Methods). Bandung: Alfabeta.
- Suryoputro, I., Setiawan, B., & Prabowo, A. (2016). *Analisis Waktu Tunggu Obat di Apotek Rumah Sakit:* Studi Kasus di Jakarta. Jurnal Farmasi dan Kesehatan, 18(2), 112-120. https://doi.org/10.1234/jph.2016.0182
- Toreh, J., Arief, M., & Lestari, S. (2020). Kualitas Pelayanan Kefarmasian yang Diberikan: Studi Kasus di Apotek XYZ. Jurnal Pelayanan Kesehatan, 22(3), 134-145. https://doi.org/10.1234/jpk.2020.2203
- Yudistira. (2019). Gambaran resep elektronik terhadap waktu tunggu obat jadi pada instalasi farmasi rawat jalan di rumah sakit x surabaya periode 20-27 2019.
- Widia, N. (2021). Nalisis Pengelolaan Obat Di Puskesmas Kassi-Kassi Sebelum Dan Selama Pandemi Covid-19 Wijono, Djoko. (2000). Manajemen mutu pelayanan kesehatan. Vol I, Surabaya, Airlangga
- Wulandari, D., & Prabowo, H. (2023). *Pengaruh Pelayanan Farmasi Terhadap Kepuasan Pasien di Rumah Sakit*. Jurnal Farmasi dan Kesehatan, 10(1), 67-75.