

Compliance of Outpatient Medication Waiting Time with Minister of Health Regulation No. 58 of 2014 in the Outpatient Pharmacy Installation of X Purwodadi Hospital

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Abstract. Pharmaceutical services are direct and responsible services to patients related to pharmaceutical preparations with the aim of improving the quality of patient health. The benchmark for pharmaceutical services is the appropriateness of the waiting time to receive services for patients. The purpose of this study was to analyze the suitability of outpatient drug waiting times with Minister of Health Regulation No. 58 of 2014 at the Outpatient Installation of X Hospital, Purwodadi. This study is a descriptive quantitative study. Data were collected prospectively in June 2023. The sample of this study was 362 samples that met the inclusion criteria. The sampling technique used was a random sampling technique. The average waiting time for compounded prescriptions at X Hospital, Purwodadi, was 59 minutes 16 seconds, while the average waiting time for non-compounded prescriptions was 41 minutes 25 seconds. The response time of non-compounded drugs does not comply with the minimum prescription service standards required by the Decree of the Minister of Health of the Republic of Indonesia Number 129/Menkes/SK/II/2008 concerning the minimum service standards for finished drug prescriptions, where the minimum standard for non-compounded drugs is ≤ 30 minutes. Based on the waiting time for drug prescription services with the provisions of Permenkes No. 58 of 2014, the results obtained were that drug prescriptions served in accordance with the waiting time provisions of Permenkes No. 58 of 2014 were 230 prescriptions (63.53%), while those that did not comply with the provisions were 132 prescriptions (36.46%) because they still exceeded the specified time limit.

Keywords: Conformity, Racik, Non Racik, Waiting Time.

INTRODUCTION

Health is a crucial aspect, and therefore, the need for healthcare services must be met. One way to improve public welfare is by improving the quality of healthcare services (Wulandari, 2016). Healthcare services can be obtained at community health centers, hospitals, private practice physicians, and other levels (Nilawati & Liwa, 2018).

A hospital is a healthcare institution that provides comprehensive individual healthcare services, including inpatient, outpatient, and emergency care (Ministry of Health of the Republic of Indonesia, 2008). An example of an outpatient service provided at a hospital is pharmaceutical services. Pharmaceutical services are direct and responsible services to patients related to pharmaceutical preparations with the aim of improving the quality of patient health (Ministry of Health Regulation, 2014).

Pharmaceutical services include resource management, including human resources, infrastructure, pharmaceutical preparations and medical supplies, and administration. Clinical pharmacy services include receiving prescriptions, compounding medications, dispensing medications, providing drug information, and recording/storing prescriptions (Ministry of Health of the Republic of Indonesia, 2016).

Pharmaceutical service indicators that must be met include waiting time for compounded medication services of 80%; no occurrence of medication errors of 100%; customer satisfaction $>80\%$; and prescription writing according to the formulary of 100% (Ministry of Health of the Republic of Indonesia, 2008). The results of research by Esti et al. (2015) indicate that waiting time for prescription services is one indicator that can affect the level of patient satisfaction, because waiting time often causes obstacles for patients in several health care facilities, where patients feel uncomfortable because of the long time it takes to prepare medication.

Patient waiting time is defined as the time required from the time a patient submits a prescription to the Outpatient Pharmacy until the patient receives the medication. Waiting time for prescription services is divided into two categories: waiting time for prescription services for non-compounded medications

and waiting time for prescription services for compounded medications. The waiting time for non-compounded medications is <30 minutes, while the waiting time for compounded medications is <60 minutes.(Ministry of Health of the Republic of Indonesia, 2008).

Research byPurwandari et al. (2017)Data from Sultan Agung Islamic Hospital in Semarang shows that there are still many complaints from outpatients regarding long waiting times for prescription services. The average waiting time for non-compounded prescriptions is 55 minutes, while for compounded prescriptions it is 60 minutes. The average delay time for general patients is greater than for JKN patients, especially during the drug preparation stage. This is because compounded prescriptions will begin to be prepared after the patient pays at the cashier, so the patient waits for payment at the cashier first. The minimum pharmaceutical standards for these waiting times do not comply with those stipulated in the Minimum Service Standards (SPM) or Hospital Quality Indicators (IMRS).

There are many problems with pharmaceutical services, especially problems regarding the length of waiting time for drug prescription services, which must be adjusted to...Minister of Health Regulation No. 58 of 2014 in InstallationOutpatient Care at X Hospital Purwodadi.

METHODS

Types of research

This research is descriptive and uses a quantitative approach. Quantitative data collection was conducted using a prescription waiting time data collection sheet, which calculates the time from receiving the prescription to delivering the medication to the patient. Research Design

This study examines the waiting time for patients for prescription services for compounded and non-compounded drugs in outpatient pharmacy installations, starting from when the patient submits the drug until the patient receives the drug.

Location and Time of Research

The study was conducted at Dr. R. Soedjati Soemodiardjo Purwodadi Regional General Hospital, located at Jl. DI Pandjaitan No. 36, Purwodadi, Grobogan Regency in June 2023, based on patient data from April 2023.

Research Population and Sample

Population: The population in this study was all outpatient prescriptions received at the outpatient pharmacy installation. The population in this study was 3,734 prescriptions in April 2023.

Sample: The sample taken was 362 outpatient prescriptions with the following inclusion and exclusion criteria:

1. Inclusion Criteria
 - a. Official prescription written by at Hospital X.
 - b. Outpatient prescriptions can be calculated from screening, drug entry, to drug delivery.
 - c. Non-mixed recipes, which have a service time of ≤ 30 minutes
 - d. Mixed recipes, which have a service time speed of ≤ 60 minutes.
2. Exclusion Criteria
 - a. A prescription from an outpatient that was cancelled at the Pharmacy Installation of Dr. R. Soedjati Regional Hospital.
 - b. Prescriptions that cannot be filled because the drug stock is empty
 - c. Prescriptions originating from outside the hospital

Research Instruments

The instruments used in this study include a data collection sheet (LPD) containing the patient's name, date, duration of prescription receipt, prescription screening, labeling, drug preparation, drug delivery, and the total time spent on prescription services in minutes.

Data analysis

Data analysis was conducted by directly observing the sampled prescriptions. Observations were made by calculating the time required to complete each stage of the patient's prescription, starting from the time the prescription was received until the medication was ready to be dispensed to the patient, using the response time billing of X Hospital, Purwodadi. The data obtained was then processed using Microsoft Excel to determine the total processing time for each patient's prescription, both compounded and non-compounded. The average formula used in this data analysis is as follows:

$$X = \Sigma X / N$$

X : Average time
 ΣX : Amount of time on service
 N : Number of Samples

The results of the data analysis will obtain the total average waiting time for the process of serving mixed and non-mixed prescriptions, which will then be analyzed according to the suitability of the waiting time according to the Minimum Service Standards (SPM).

RESULTS AND DISCUSSION

Based on Government Regulation No. 51 of 2009 concerning Pharmaceutical Work, Pharmaceutical Workforce consists of Pharmacists and Pharmaceutical Technical Personnel. Pharmacists are pharmacy graduates who have graduated as pharmacists and have taken the pharmacist's oath of office. Pharmaceutical Technical Personnel are personnel who assist pharmacists in carrying out pharmaceutical work, consisting of Bachelor of Pharmacy, Associate Pharmacy Experts, Pharmaceutical Analysts, and Intermediate Pharmacy Personnel/Pharmacist Assistants. Pharmaceutical service officers at the Outpatient Pharmacy Installation of X Purwodadi Hospital consist of 8 people, each with their respective duties as seen in Table 1.

Table 1. Informant Characteristics

Informant	Age (years)	Gender	Position	Experience	Last education	Abbreviation
1	39 years old	P	Pharmacist	10th	S1+Pharmacist	S.Farm, Apt
2	33 years old	P	Pharmacist	7th	S1+Pharmacist	S.Farm, Apt
3	49 years old	P	TTK	20 years old	D3 Pharmacy	Amd.Farm
4	30 years old	P	TTK	7th	D3 Pharmacy	Amd.Farm
5	37 years old	L	Pharmacist	8th	S1+Pharmacist	S.Farm, Apt
6	57 years old	L	Non-TTK	30 years old	SENIOR HIGH SCHOOL	-
7	45 years old	L	Non-TTK	8th	SENIOR HIGH SCHOOL	-
8	24 years old	P	Non-TTK	4th	SENIOR HIGH SCHOOL	-

Source: Primary Data

Each officer has been assigned a specific task to prevent double-tasking, minimizing errors in the patient medication preparation process. Each officer's duties must be carried out in accordance with standard operating procedures (SOPs) as part of efforts to protect patients from errors.

Prescription reviews must be conducted by pharmacists in accordance with standard operating procedures (SOPs), which include reviewing administrative requirements, pharmaceutical/preparation requirements, and clinical requirements (Rosida & Sudiro, 2017). One of the minimum service standards in hospitals concerning pharmacy is the waiting time for finished and compounded drugs (Minister of Health of the Republic of Indonesia, 2008).

Prescription services at the Pharmacy Unit of RSUD X have been computerized. Prescriptions served at RSUD X consist of two types: compounded prescriptions and non-compound prescriptions. Compound prescriptions consist of a mixture of medicinal ingredients written by a doctor in a Taha prescription, such as powder, while non-compound prescriptions consist of finished preparations such as syrup.

A compounded prescription is a prescription that consists of several active substances in certain amounts for each made in one form, while a non-compounded prescription is a prescription that contains medicine without going through a compounding stage (Ministry of Health, 2016). The stages of prescription service include officers screening prescriptions by reviewing the completeness of the prescription administratively and pharmaceutically as a form of initial screening in prescription services, to prevent medication errors. (Rauf et al, 2020).

The next stage at Hospital X is when the prescription is complete, the prescription can be input by the prescription input officer, then the next prescription can be immediately prepared by the drug compounding officer. The correction officer will check the conformity between the prescription and the medication that has been filled by the previous officer. If it is correct, it is submitted to the pharmacist to be then given to the patient. If the prescription is a compounded prescription, it will be submitted to the compounding officer first, and when it is ready, it is given to the pharmacist to be immediately handed to the patient.

Hospital pharmacists have the duty to be able to carry out clinical pharmacy service responsibilities in the form of drug information services (Ministry of Health, 2016). Outpatient drug information services are provided by pharmaceutical officers when dispensing drugs to patients along with the delivery of drug information verbally and in writing through labels on drug packaging (Porayow et al., 2022).

Number of Samples Based on Recipe Type

The number of prescriptions in April 2023 at the Outpatient Pharmacy Installation of Hospital X was 3,734 prescriptions consisting of prescriptions for both compounded and non-compounded drugs, then calculated using the Slovin formula which resulted in 362 prescriptions. From the number of prescriptions 362 divided by active days, which is 20 days, resulting in a calculation of 18.1 prescriptions per day which is then rounded to ≤ 18 prescriptions so that the total sample obtained is 362 prescriptions.

Table 2. Percentage of Samples Based on Recipe Type

No	Recipe Types	Number of Recipes	Percentage (%)
1	Non-mixed	290	80
2	Mixture	72	20
	Amount	362	100%

Source: Primary Data

Based on Table 2, the types of prescriptions taken were 290 non-compound prescriptions (80%) and 72 compound prescriptions (20%), this shows that the samples of non-compound prescriptions studied were more than the compound prescription samples. The greater number of non-compound prescription samples in this study was because in pediatric patients, doctors more often wrote drugs in syrup form so that children could more easily take them. And also because the dermatologist in that month was not actively practicing for some reason, even though dermatologists are one of the doctors who often write compound prescriptions from several types of ointments to be made into one ointment pot according to the needs of each patient.

The patient's prescription from the X Hospital's Lung Polyclinic is made in accordance with the X Hospital's drug formulary. The drugs in the formulary are a list of drugs that have been agreed upon by lung specialists, including those who must be implemented at X Hospital and are scientifically proven for hospital services. Doctors can immediately write the desired formula according to the patient's condition and the prescription can be prepared immediately without having to go through the compounding stage first.

Average Waiting Time for Each Process Based on Recipe Type

Table 3. Average Waiting Time for Each Process Based on Recipe Type

No	Recipe Types	Number of Recipes	Average Waiting Time Classification			Average Total Time (minutes / Hours)
			Screening	Drug Entry	Drug Handover	
1	Non-mixed	290	6 minutes 8 seconds	8 minutes 7 seconds	27 minutes 36 seconds	41 minutes 25 minutes
2	Mix	72	4 minutes 35 seconds	13 minutes 12 seconds	42 minutes 9 seconds	59 minutes 16 seconds

Source: Primary Data

Based on research at X Hospital Purwodadi, the average waiting time for compounded prescriptions was 59 minutes 16 seconds. The average waiting time for non-compounded prescription services was 41 minutes 25 seconds. The response time for non-compounded drugs does not comply with the minimum prescription service standards required by the Decree of the Minister of Health of the Republic of Indonesia Number: 129/Menkes/SK/II/2008 concerning minimum service standards for finished drug prescriptions where the minimum standard for non-compounded drugs is ≤ 30 minutes, so an evaluation must be carried out on the provision of prescription services, especially non-compounded, evaluating

the number of officers and evaluating the implementation of SOPs.

Pharmaceutical service quality control can be carried out through monitoring and evaluation aimed at ensuring that pharmaceutical services are implemented in accordance with plans and efforts to improve future activities (Minister of Health of the Republic of Indonesia, 2016). Minimum service standards (SPM) in the health sector in hospitals used as a benchmark for health service performance include achieving waiting times for medication services (Sabarudin et al., 2015).

The first step is receiving a prescription and assigning a queue number to the patient. The number of prescriptions arriving at the same time can also be a factor influencing the length of the waiting time. This is because if prescriptions arrive at the same time, there will be a buildup of patients in the queue at the prescription reception counter. Furthermore, the number of medication items in each prescription can also affect the length of the waiting time. (Maftuhah & Susilo, 2016).

Furthermore, during the prescription input process, if there is a backlog of prescriptions that have already arrived, it can result in longer wait times. Based on my research, the additional step in the JKN prescription process, where the officer must first enter BPJS online, also affects patient wait times. This online BPJS claim stage aims to determine whether the patient is ready to receive their medication. Chronic JKN patients can only receive chronic medication once per month and are not allowed to have their appointments moved forward.

According to Nasution et al, (2021) Another factor that can affect the length of the prescription processing time is the occurrence of a drug shortage. Out-of-stock situations and missed availability reviews increase the time required to confirm and retrieve the drug from the pharmacy, which impacts patient waiting times (Kurniawan & Teuku, 2022).

The waiting time calculation process must always be implemented by staff to minimize the occurrence of medication shortages in patient prescriptions (Pertiwi & Rochmah, 2019). Brainstorming through effective communication and bridging communication between hospital staff is a solution to improve waiting times for medication services in hospitals (Fitriah et al., 2016).

The billing response time was missed due to the accumulation of finished drugs that had to be immediately delivered to patients, so the main focus of the officer was to immediately deliver the drugs to patients so that patients would not have to wait too long.

Compliance of Waiting Time with the Provisions of the Indonesian Minister of Health Regulation No. 58 of 2014

Patient waiting time is defined as the time period from when the patient submits the prescription to the Outpatient Pharmacy Installation until the patient receives the medication and leaves the pharmacy installation (Megawati et al, 2015). Based on the suitability of the waiting time for drug services in the Indonesian Minister of Health Regulation No. 58 of 2014 for compounded drugs is ≤ 60 minutes and non-compounded drugs is ≤ 30 minutes.

Table 4. Waiting time for drug prescription services according to the provisions of Minister of Health Regulation No. 58 of 2014

No	Recipe Types	Standard	Classification		Total	Percentage (%)
			In accordance	It is not in accordance with		
1	Mixture	≤ 60 minutes	51	21	72	36.46
2	Non-mixed	≤ 30 minutes	179	111	290	63.53
Total Amount			230	132	362	100

Source: Primary Data

Based on Table 4, 230 prescriptions (63.53%) were served according to the waiting time stipulated in Minister of Health Regulation No. 58 of 2014, while 132 prescriptions (36.46%) were not in accordance with the provisions because they exceeded the specified time limit. Based on research by Puspita et al, (2018) The type of prescription can be a factor influencing the length of wait times for prescription services. Wait times for compounded prescription services are longer than for non-compounded prescription services because compounded prescriptions require more time, not only to prepare the medication but also to calculate the dosage and compound the medication.

According to Rawandi & Karminingtyas, (2021) The number of TTK and pharmacist personnel and the number of patient visits can also affect the waiting time for prescription services. The number of patient visits that occur after the end of the doctor's service in each clinic causes a backlog of

prescriptions because the medication is not collected until the next day by patients due to the excessive number of patients (Miftahudin, 2019). According to Herjunianto & Aryo (2014), the management of waiting times and the provision of drug information in pharmaceutical services in hospitals really needs to be improved for patient satisfaction with pharmaceutical services.

Besides these factors, several issues arise in prescription services at Hospital X that can impact prescription processing times. Inconsistencies in patient data written on prescriptions require pharmacy staff to reconfirm with the patient. Drug prescriptions that do not comply with the formulary require staff to reconfirm with the prescribing physician.

CONCLUSION

Based on the results of research conducted at the Outpatient Pharmacy Installation of X Purwodadi Hospital, data obtained on the level of suitability of the waiting time for prescription services that are in accordance with the provisions of the Minimum Service Standards in Permenkes No. 58 of 2014 is 63.53% and the average waiting time for compounded prescriptions is 59 minutes 16 seconds, while for non-compounded prescription services the average waiting time is 41 minutes 24 seconds.

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