
Overview Of Prescription Service Wait Times At The Sidomulyo Community Health Center (Outpatient Department) In Delima Tampan Subdistrict, Pekanbaru

Aulia Fitri¹⁾ *, Mukhairani Azmi²⁾, Hanisa³⁾, Sakinah⁴⁾, Annisa⁵⁾, Dwi Susanti⁶⁾
^{1,2,3,4,5,6)} Pharmacy Professional Education Program, Riau College of Pharmacy, Indonesia

*Corresponding Author
Email: Auliafitri@stifar-riau.ac.id

Abstract

Prescription service waiting time is an indicator used to assess the quality and efficiency of pharmaceutical services at Community Health Centers (Puskesmas). The duration of the prescription service process can influence patient comfort and satisfaction while also reflecting the effectiveness of the medication dispensing workflow. This study aimed to analyze the outpatient prescription service waiting time at the Sidomulyo Panam Community Health Center in Pekanbaru. A descriptive research design with an observational approach was employed. Data were collected through direct observation of the outpatient prescription service process from June 26 to 28, covering a sample of 131 prescriptions. Waiting time was measured from the moment pharmacy staff received the prescription until the medication was handed to the patient; data were then categorized by prescription type: non-compounded and compounded. The results showed that 121 prescriptions were non-compounded and 10 were compounded. The average waiting time for non-compounded prescriptions was 10.46 minutes on Day 1, 9.54 minutes on Day 2, and 9.1 minutes on Day 3. Meanwhile, the average waiting time for compounded prescriptions was 32.6 minutes on Day 1, 33.5 minutes on Day 2, and 33 minutes on Day 3. Based on these observations, the outpatient prescription service waiting time at the Sidomulyo Community Health Center met established pharmaceutical service standards. Factors influencing waiting time included the type of prescription, the number of pharmacy staff, service stages, and medication availability.

Keywords: Waiting Time, Prescription Service, Community Health Center, Pharmaceutical Services.

INTRODUCTION

Puskesmas is a technical implementation unit of the district/city office that is responsible for organizing health development in a work area. This agency is important because it is a functional organization that organizes health efforts that are comprehensive, integrated, equitable, acceptable and affordable by the community. In general, puskesmas must provide preventive, promotive, curative and rehabilitative services either through individual health efforts (UKP) or public health efforts (UKM) (Permenkes RI., 2014).

Indonesia has regulated in State Law Number 36 of 2009 concerning Health explaining that pharmaceutical practices include the establishment including quality control of pharmaceutical availability, protection, supply, residency and distribution of drugs, drug administration facilities based on doctor's prescriptions, drug explanation services and not to forget the presentation of drugs, modern medicinal materials and traditional medicines must be carried out by health workers who have knowledge and expertise in accordance with the provisions of regulations determined by law (Ministry of Health of the Republic of Indonesia., 2009).

Health services at Community Health Centers (Puskesmas) have a strategic role as the front line in providing health services for the community. As a first-level health service facility, Puskesmas is the starting point for patient interaction with the health system as well as the main referral in handling various health problems. Therefore, the quality of services provided by Puskesmas greatly affects the level of satisfaction, trust, and public perception of the quality of the health service system as a whole (Putri et al., 2025).

In the context of pharmaceutical services, one of the main indicators of service quality that is easy to observe and has a direct impact on the patient experience is the waiting time for prescription services. Prescription service waiting time reflects the speed and efficiency

of pharmacists in delivering drugs to patients, which is measured from the time the prescription is submitted to the drug received by the patient. The ideal waiting time according to the standards set by (Safitri et al., 2024). is a maximum of 30 minutes for non-concocted prescriptions and a maximum of 60 minutes for concocted prescriptions (Amiruddin et al., 2023) (Safitri et al., 2024).

Too long waiting times not only impact patient satisfaction, but can also reduce adherence in drug use. Patients who feel that waiting too long are at risk of delaying or even not taking medication at all, which can ultimately affect the success of therapy, worsen health conditions, and cause a negative perception of the quality of Puskesmas services (Candra Nurhayati & Robby, 2021).

Until now, there is no data on the description of the waiting time for drug services on a doctor's prescription at the health center in Sidomulyo, namely the identification of problems related to the length of waiting time for pharmaceutical services, so it is necessary to conduct research related to the problems that occur.

Based on this background, a study is needed to describe, and identify the factors that are associated with the length of waiting time for drug services on a doctor's prescription (dispensing time) at the Sidomulyo Health Center, with the hope that this study can be used as a reference to control the factors that affect the length of patient waiting time at the Sidomulyo Health Center, so that the health center can provide good, quality services and uphold patient safety and satisfaction.

RESEARCH METHODS

This study uses a descriptive quantitative research design with an observational approach that aims to describe the waiting time for outpatient prescription services at the Sidomulyo Panam Health Center Pekanbaru. The research was carried out on June 26-28, 2026 with a focus on the prescription service process at outpatient pharmaceutical installations/depots. Data collection was carried out through direct observation of the entire series of prescription services, starting from the prescription received by the pharmacist until the drug was completed to be handed over to the patient accompanied by Drug Information Provision (PIO).

The population in this study is all outpatients who redeem prescriptions at pharmaceutical installations/depots during the research period. The research sample was determined using a simple random sampling technique, so that every patient who meets the research criteria has the same opportunity to be selected as a sample. The sample includes patients with prescriptions from BPJS services and general patients served at outpatient pharmacy depots. The types of prescriptions observed include non-concocted prescriptions, concocted prescriptions, and combination prescriptions consisting of concocted and non-concocted drugs.

Data collection was carried out by directly observing the prescription service process and recording the time from service until the drug was handed over to the patient and PIO. Waiting time measurement was carried out using a digital clock to obtain the actual duration of service. The data obtained was then recorded and grouped by type of prescription, namely non-concocted prescriptions, concocted prescriptions, and combinations, to find out the difference in service duration in each group.

The research data was analyzed in a quantitative descriptive manner by calculating the distribution of frequency and average waiting time for prescription services. The results of the next measurement were compared with the standard waiting time for prescription services set by the Ministry of Health of the Republic of Indonesia, which is a maximum of 30 minutes for non-concocted prescriptions and a maximum of 60 minutes for concocted

prescriptions. The comparison was carried out to determine the suitability of the waiting time for prescription services at the Sidomulyo Panam Pekanbaru Health Center with the applicable pharmaceutical service standards.

RESULTS AND DISCUSSION

Table 1. Number of Pharmaceutical Personel

No	Pharmacy Personel	Quantity	Percentage
1	Pharmacist	2	(33,4 %)
2	TTK	4	(55,4 %)
3	Total	6	100 %

Table 2. Recap of Waiting Time for Non-Concocted Recipe Service

Day	Recipe Type	Number of Recipes	Average	Compliance (%)		Remarks
				Compliant (%)	Non-Compliant (%)	
H+1	Not a Blend	39	10.46 minutes	+100%	+0%	Compliant
H+2	Not a Blend	42	9.64 minutes	+100%	+0%	Compliant
H+3	Not a Blend	40	9.1 minutes	+100%	+0%	Compliant

Table 3. Recap of Waiting Time for Recipe Servicing

Day	Recipe Type	Number of Recipes	Average	Compliance (%)		Remarks
				Compliant (%)	Non-Compliant (%)	
H+1	Blend	5	32.6 minutes	+100%	+0%	Compliant
H+2	Blend	2	33.5 minutes	+100%	+0%	Compliant
H+3	Blend	3	33 minutes	+100%	+0%	Compliant

Percentage of Wait Time for Compounded and Non-Compounded Prescription Services (Day 1 through Day 3)

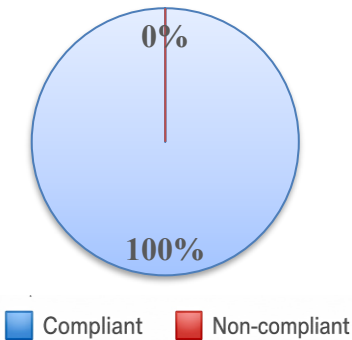


Figure 1. Diagram of Waiting Time for Combined and Non-Compounded Recipe Services at the Health Center Day 1 to Day 3

Discussion

This research was conducted at the Sidomulyo Outpatient Health Center Pharmacy with the aim of finding out the waiting time for concocted and non-concocted prescription services based on minimum service standards. The study used a descriptive method with an

observational approach. Data collection was carried out through direct observation of the outpatient prescription service process on June 26-28 with a sample of 131 prescriptions. The waiting time was calculated from the time the prescription was received by the pharmacist until the drug was handed over to the patient, then grouped by the type of prescription, namely non-concocted and concocted prescriptions.

The number of pharmacists at the Sidomulyo Health Center consists of 2 pharmacists (44.6%) and 4 Pharmaceutical Technical Personnel (55.4%). The composition of these personnel has met the provisions of the Minister of Health Regulation Number 74 of 2016 which states that the implementation of pharmaceutical services at the health center is at least carried out by 1 pharmacist as the person in charge and can be assisted by pharmaceutical technical personnel as needed. (Sagita et al. , 2021) stated that the adequacy of the number and competence of pharmaceutical personnel is one of the important factors that can affect the speed of service, especially in periods with high patient loads.

The results showed that all recipes observed during the three days of observation met the criteria for service waiting time. On D+1, the average waiting time for non-concocted recipes was 10.46 minutes and concocted recipes 32.6 minutes. On D+2, the average waiting time for nonconcocted recipes decreased to 9.64 minutes, while concocted recipes increased to 33.5 minutes. On D+3, the average waiting time for nonconcocted recipes decreased again to 9.1 minutes, while concocted recipes became 33 minutes. The standard waiting time for prescription services used as a reference was ≤ 30 minutes for non-concocted recipes and ≤ 60 minutes for concocted recipes (Nurhaliza et al. , 2025). Based on this standard, all observed recipes are still within the service time limit, with a percentage of conformity of 100% and nonconformity of 0%.

The average waiting time for non-concocted prescriptions during the three observation days was about 9.73 minutes. The relatively short service time is related to the simpler stages of service because the nonconcoction prescription does not require the processing process or mixing of several drug ingredients. After the prescription is received and examined, the drug can be prepared immediately according to the prescription, then re-examined before being handed over to the patient. This condition allows the service of non-concocted prescriptions to take place faster during the observation period.

The results showed that there was a variation in the average waiting time for non-mixed prescriptions compared to previous research. Rusnedy et al. (2025) obtained an average waiting time of 6 minutes at the Garuda Pekanbaru Health Center, while Nurhaliza et al. (2025) obtained an average of 13.73 minutes at the Jatinegara District Health Center. Jaya et al. (2018) obtained an average of 4 minutes at the Denpasar City Health Center, while Oktavia et al. (2026) obtained an average of 20 minutes at the Langsat Health Center in Pekanbaru City. These differences can be influenced by the characteristics of prescriptions, the number of prescriptions and patients, the number of drug items, and the conditions of service at each health facility.

A concocted prescription has a longer waiting time than a non-concocted prescription on all observation days. The average waiting time for a concocted prescription was 32.6 minutes on D+1, increasing to 33.5 minutes on D+2, then decreasing slightly to 33 minutes on D+3. Overall, the average waiting time for a concocted prescription was around 33.03 minutes. Although longer than a nonconcocted prescription, the value is still within the standard limit of ≤ 60 minutes (Nurhaliza et al. , 2025). Longer service time can be attributed to the presence of additional stages in the compounding process, such as the preparation of medicinal ingredients, weighing if necessary, refinement or mixing of ingredients, preparation preparation, packaging, labeling, and final examination before the drug is handed over to the patient.

The average waiting time for concocted recipes in this study was higher than several previous studies. Rusnedy et al. (2025) obtained an average of 12 minutes at the Garuda Pekanbaru Health Center, Nurhaliza et al. (2025) obtained 20.14 minutes at the Jatinegara District Health Center, Jaya et al. (2018) obtained 7 minutes at the Denpasar City Health Center, while Oktavia et al. (2026) obtained 11 minutes at the Langsat Health Center in Pekanbaru City. These differences can be influenced by the amount and type of ingredients that must be mixed, the number of drug items, the complexity of the prescription, the number of prescriptions that come in at the same time, and the stages of preparation and examination of the drug before it is handed over to the patient.

The comparison of the two types of prescriptions shows a consistent pattern, namely the waiting time for concocted prescriptions is longer than for non-concocted prescriptions. The average difference in waiting time on D+1 is 22.14 minutes, D+2 is 23.86 minutes, and D+3 is 23.9 minutes. This difference shows that the compounding process provides additional time to the service of prescriptions. This finding is supported by Destiyana Anggun et al. (2025) who stated that concocted prescriptions take longer than non-concocted prescriptions and the more drug items, the longer the time required for the examination, preparation, and re-examination process before the drug is handed over to the patient.

Reviewed based on observation days, the change in waiting time was relatively small. The non-concoction waiting time decreased from D+1 to D+3, while the cohesion waiting time increased slightly on D+2 and decreased again on D+3. The pattern did not show a major change during the observation period. However, because the study was only conducted for three days, the variation could not be used to conclude that there was a statistical difference in service performance between days.

The waiting time for prescription services is not only related to the drug preparation process, but can also be influenced by the number of prescriptions received, the number of pharmacists, the availability of drugs, the completeness of prescriptions, the process of checking prescriptions, the number of patients, and the process of dispensing drugs. These factors were not all measured in this study, so the causes of the variation in waiting time cannot be determined based solely on average values. Rusnedy et al. (2025) mentioned the number of prescriptions processed at a certain time, the number of patients, the complexity of prescriptions, insurance problems, and inaccuracies in prescription writing as factors that can affect waiting time. Nurhaliza et al. (2025) mentions peak hours, limited pharmaceutical personnel, and the number of drug items, while Jaya et al. (2018) mentions human resources, pharmaceutical inventory management, service methods, and service instruments as factors related to the length of waiting time.

Overall, the results of the study showed that all the observed prescriptions met the standard waiting time used, namely ≤ 30 minutes for non-concocted prescriptions and ≤ 60 minutes for concocted prescriptions in accordance with the Minimum Service Standards of the Ministry of Health of the Republic of Indonesia. Although nonconcocted prescriptions have a shorter service time, while concocted prescriptions take longer because they involve compounding stages, but all results have met the standard. Therefore, the evaluation of service flows, queue systems, computerization, and the suitability of the number of pharmacists with the service load are still necessary to maintain service efficiency and patient safety.

CONCLUSION

Based on the results of the study, all prescriptions observed at the Sidomulyo Outpatient Health Center Pharmacy during the period of June 26-28 met the standard waiting time for prescription services. The average waiting time for non-concocted prescriptions during the three observation days was 9.73 minutes, while concocted prescriptions were 33.03 minutes. All prescriptions had a 100% suitability percentage, with a non-concocted waiting time of ≤ 30 minutes and a concocted prescription of ≤ 60 minutes. Overall, the prescription service during the observation period met the standards.

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