

Factors Affecting Waiting Time for Outpatient Prescription Services in BPJS Patients at the Pharmacy Installation of the M Natsir Solok Regional General Hospital Year 2022

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DOI: <https://doi.org/10.52403/ijrr.20240301>

ABSTRACT

Modern hospital services are currently associated with one of the hospital quality indicators, namely waiting time, this waiting time is closely related to the level of patient satisfaction. The purpose of this study was to see what factors influence waiting time at the outpatient pharmacy installation at RSUD M Natsir Solok. Methods The research was conducted using a cross-sectional study design approach. The factors that influence the waiting time examined in this study are the type of prescription, the number of prescription items, the completeness of the amount of drug administration, the price of the BPJS prescriber, facilities, infrastructure and manpower. The results showed that there were more types of prescription types of officinalis (87.5%) than magistralis prescriptions (12.5%), the number of prescription items was more that did not comply with WHO standards (> 2 items) namely (77.2%), the completeness of the number of drug administration was obtained more many medicines were given in full (86.6%), BPJS prescription prices were obtained according to standards (90.4%), facilities, infrastructure, and staff were found to be incompatible with PMK and technical instructions. The conclusion in this study is that the most related factor is the type of recipe. Efforts that can be made by the hospital are to make improvements in efforts to increase waiting time to standard by maximizing power and increasing the power of the hospital.

Keywords: *factors that affect waiting time: BPJS prescription*

INTRODUCTION

Customer satisfaction, especially service users in receiving services, is based on the quality of hospital services carried out in accordance with service standards and ethics. If customer satisfaction is met, it will have an impact on the hospital by returning patients to provide services.

According to Pohan (2013), patient satisfaction is a level or state of the patient's feelings that arise as a result of the performance of the health services they obtain after the patient compares them with what they expected. According to Kotler and Keller in Donni Juni Priansah (2017: p.196) states that consumer satisfaction is a person's feeling of happiness or disappointment that arises after comparing the predicted performance (results) or product with the expected performance (or results) if the performance is below expectations, consumers are not satisfied, but if performance meets expectations consumers will be satisfied and if performance exceeds expectations, consumers are very satisfied/happy.

Patient satisfaction in pharmaceutical installations can be influenced by service quality, in which there are five dimensions

of service quality, namely tangibles, that is, people are impressed or stunned by the physical appearance and appearance of the service which can be directly felt or seen and its shape and form are real. , reliability (reliability), namely providing services appropriately and accurately, so that they can be relied upon in accordance with what is promised based on minimum service principles and standards, responsiveness (responsiveness), namely providing swift and responsive service, assurance (certainty/confidence), namely guaranteeing quality and service security so that certainty and confidence arises, empathy, namely attitudes and behavior that always pay attention to and care about the interests of individual customers. Overall, the quality of service in hospital pharmacy installations has been proven to have a big influence on patient satisfaction (Haryanto, et al. 2021), based on research conducted by Hayanto et al. The five dimensions of service quality have a positive or good effect on patient satisfaction, where the dimension of responsiveness has the biggest influence, followed by by the tangible dimension and assurance dimension, reliability dimension and empathy dimension. In line with research conducted at Hospital shows that there are gaps or differences in various dimensions between perceptions and expectations in the level of service quality. The highest gap in service quality is given to responsiveness followed by reliability, empathy, tangibles and assurance.

The results of research by Afni et al 2017 show that the variables of guarantee, physical evidence and reliability have a significant effect on patient satisfaction, but the variables of responsiveness and empathy do not have a significant effect on patient satisfaction. The results of research conducted by Fatima et al 2018 at hospitals in Pakistan show that the quality of hospital services such as responsiveness has the greatest influence, followed by the physical environment, communication, privacy and security which influence patient satisfaction. Meanwhile, research conducted by Essiam

in 2013 in a Ghanaian hospital found that patient satisfaction was influenced by responsiveness, followed by empathy, assurance, tangibles and reliability. In the dimensions of service quality, which consists of 5 dimensions, based on several studies conducted, it was found that responsiveness (responsiveness which also includes waiting time) is the dimension that has the most influence on patient satisfaction. One of the aims of setting pharmaceutical service standards is to improve service quality (Ministry of Health of the Republic of Indonesia, 2016). Increasing pharmaceutical services to patients will certainly have a positive impact on patient satisfaction (Ihsan et al., 2018). One indicator of pharmaceutical services in hospitals is the waiting time for drug services which is calculated from the time the patient submits the prescription until he receives the drug as stated in the hospital's Minimum Service Standards (SPM). Waiting time for drug services, which is an indicator of pharmaceutical services, can influence patient expectations of hospital services (Ihsan et al., 2018). Waiting time for services is a problem that often causes patient complaints in several hospitals. The length of patient waiting time reflects how the hospital provides services. Several obstacles that cause long waiting times often occur during the process of receiving prescriptions, processing compounded prescriptions, submitting prescriptions, confirming doctors, and peak patient days (Elsa, et al. 2021). The research results of Ogaji et al, 2017 show that long waiting times can provide a bad experience for patients so that patient satisfaction decreases. Research conducted by Hussain et al in a Pakistani hospital in 2019 showed that waiting time had an effect on patient satisfaction. The results of research conducted by Fahrizal et al stated that patients who were dissatisfied because the service was long or the waiting time was not on time was 94.8%, while patients who were dissatisfied with the service even though the waiting time for their

prescription was on time was 83.5% (Maulana et al). Hospitals provide health services which include pharmaceutical services, this pharmaceutical service is one of the most important services in hospitals, pharmaceutical services are based on Decree of the Minister of Health Number 72 of 2016 concerning standards for pharmaceutical services in hospitals, namely that pharmaceutical services are an inseparable part from a hospital health service system that is oriented towards patient care, providing pharmaceutical preparations, consumable medical materials and health equipment that are quality and affordable for all levels of society, especially clinical pharmacy services. In carrying out its services, hospitals must comply with Government Regulations concerning Minimum Service Standards for hospitals based on regulation number 129/Menkes/SK II/2008 concerning hospitals in order to improve the quality of hospital services, in these regulations there are Minimum Service Standards (SPM) specifically for pharmaceutical services, one of which is the waiting time for prescriptions in pharmaceutical services which is divided into 2, namely the waiting time for prescriptions for official drugs (non-concocted / ready-made drugs) with a standard waiting time of ≤ 30 minutes and the waiting time for prescriptions for Magistralis (concocted) drugs ≤ 60 minutes, These two standards are also quality indicators for pharmaceutical services in hospital accreditation. The research results showed that the average Officinalis or non-concocted prescription was 83.76 minutes and the Magistralis or concocted prescription was 91.08 minutes. The longest delay before the process of taking Officinalis (non-concocted) drugs and before the process of preparing concocted (Magistralis) drugs, this is influenced by Human Resources that do not meet standards, lack of knowledge, expertise, skills, education and training, limited storage space, SIMRS has not been integrated, lack of drug availability,

insufficient allocation of funds from BPJS Health claims, unclear procedures, insufficient patient participation, prescribing outside the formulary and doctors' practices not being timely (Dovy, et al 2019). Based on research conducted (Heny, et al. 2020), the factors that influence the waiting time for prescription services at the RS. Maftuhah (2016) states that the number of prescriptions received at the pharmacy depot is one of the factors that influences the waiting time for prescription services. Apart from that, the number of medicinal items per prescription and the number of concoctions in each prescription also affect the waiting time for prescription services. Based on research (Angga, 2018) at DR Loekmono Regional Hospital, long waiting times for prescription services will reduce the level of patient satisfaction. The factors that cause long waiting times for prescription services are accumulation of prescriptions during peak hours, lack of human resources for inputting, human resources who do not understand documents and waiting times for prescriptions, prescriptions that do not match the doctor's illegible written formulary, and not optimal use of prescriptions. online, the room size does not meet standards, the number of medicine storage baskets does not match the number of medicines and the hospital system is not yet connected to the National Health Insurance system (Runggandini et al, 2020). Based on other research, it was found that factors that influence the waiting time for prescription services are the type of prescription, the number of Human Resources (HR), and the availability of infrastructure according to (Heny et al 2020). The M. Natsir Solok regional general hospital is a fairly large hospital in Solok City and is a class B hospital which has quite complete facilities and is a hospital which is the main reference for the people of Solok City and its surroundings. Based on a survey conducted on 50 patients, it was found that the waiting time for prescriptions for patients exceeded the standard, the waiting time for prescription services in

pharmacy installations that did not meet the standards was 78%, while those that met the standards were 22%, the average waiting time was 42.82 minutes.

Based on a pre-survey that we have carried out where the results for waiting times for prescription services are far from standard, this research will look at the factors that influence waiting times for prescriptions at M Natsir Solok Hospital in the pharmacy installation of M Natsir Solok Hospital on waiting times for prescription services, and in order to understand the efforts of the M Natsir Solok Hospital pharmaceutical installation in improving the quality of its services, especially in improving services at the pharmacy installation, the researcher chose the title of this research, namely "Factors that influence the waiting time for outpatient prescription services for BPJS patients at the M Hospital pharmacy installation Natsir Solok in 2022".

MATERIALS & METHODS

This study used a Quantitative method. Explanatory – sequential case study is a type of combination research that at an early stage aims to prove the hypothesis of a relationship (correlation) or difference

between variables and at a later stage aims to reveal in more depth about one or several cases related to the relationship or difference between these variables (4). This research was carried out with a quantitative approach using a cross-sectional study design which was carried out to see the relationship between waiting time and type of prescription, number of prescription items, completeness of the number of drug administrations. This research also wants to see the relationship between variables and factors that have the most influence on waiting time.

STATISTICAL ANALYSIS

The data that has been collected is then analyzed with univariate analysis to see the frequency distribution, bivariate analysis to determine the relationship between the independent variable and the dependent variable and multivariate analysis to see the most related factors.

RESULT

1. Quantitative research results

The following table shows the frequency distribution of the characteristics of the research:

Table 1. Number of outpatient prescriptions from the M. Natsir Solok Hospital Pharmacy Installation in December 2022

Recipe	(Σ)	(%)
Recipe type		
BPJS	2179	80.8
Non BPJS	517	19.2
Number of recipes BPJS		
Officinalis type	2096	96.2
Magistralis type	83	3.8

Table 2. Frequency distribution of BPJS prescription types of officinalis and magistralis types in a sample of outpatient BPJS patients at the M. Natsir Solok Hospital Pharmacy Installation in December 2022

Recipe type	(n)	(%)
Officinalis	119	87.5
Magistralis	17	12.5
Total	136	100

Table 3. Frequency distribution of the number of officinalis and magistralis type prescription items that meet standards and do not meet standards in outpatient BPJS patients at the M. Natsir Solok Hospital Pharmacy Installation in December 2022

Recipe	Number of Recipe Items			
	according to standards (≤ 2 recipe)		No standar (> 2 Recipe)	
	(n)	(%)	(n)	(%)
Officinalis type	23	19.3	96	80.7
magistralis type	8	47.1	9	52.9
Total	31	22.8	105	77.2

Table. 4. Frequency distribution of the price per prescription of officinal and magistralis types for outpatient BPJS patients at the M. Natsir Solok Hospital Pharmacy Installation in December 2022

Recipe items	Total prescription price			
	According to standards		No standar	
	(n)	(%)	(n)	(%)
Officinalis recipe	106	89.07	13	10.9
magistralis recipe	17	100	0	0
Total	123	97.62	13	10.31

Table. 5. Frequency distribution of the completeness of the number of medications given to BPJS outpatients of the officinal and magistralis types at the M. Natsir Solok Hospital's pharmacy installation in December 2022

Recipe	Completeness of the amount of medication administered			
	complete (100%)		No complete (<100%)	
	(n)	(%)	(n)	(%)
Officinalis recipe	101	84.9	18	15.1
magistralis recipe	17	100	0	0
Total	118	86.8	18	13.2

Table.6. Frequency distribution of facilities for outpatient prescription services at the M. Natsir Solok Hospital Pharmacy Installation in December 2022 based on PMK No.72 of 2016

Facilities	(n)	(%)
According to standard	8	61.5
No Standar	5	38.5
Total	13	100

Table. 7. Frequency distribution of infrastructure in outpatient prescription services at the M. Natsir Solok Hospital in December 2022 based on PMK No.72 of 2016

Infrastructure	(n)	(%)
According to standard	11	84.6
No Standar	2	15.4
Total	13	100

Table. 8. Frequency distribution of availability of human resources/manpower in outpatient prescription services at the M. Natsir Solok Hospital's pharmacy installation in December 2022 based on PMK No.56 of 2014

Human resources	(n)	(%)
According to standar	6	75
No standar	2	25
Total	8	100

Table. 9. Waiting time for officinalis and magistralis types of prescriptions for outpatient BPJS patients at the M. Natsir Solok Hospital pharmacy installation in December 2022

Recipe type	Prescription waiting time			
	According to standards		No standard	
	(n)	(%)	(n)	(%)
Officinalis recipe	36	30.3	83	69.7
Magistralis recipe	10	58.8	7	41.2
Total	46	33.8	90	66.2

Table. 10. Waiting time for the total number of prescription items for the officinal and magistralis types in outpatient BPJS patients at the M. Natsir Solok Hospital's pharmacy installation in December 2022

Number of recipe items	Waiting time			
	According to standards		No standar	
	(n)	(%)	(n)	(%)
Officinalis recipe	39	32.8	80	83.3
Magistralis Recipe	3	17.6	14	82.4
Total	42	30.9	94	69.1

Table. 11. Waiting time for complete number of drug administrations for outpatient BPJS patients at M. Natsir Solok Hospital's pharmacy installation in December 2022

Completeness of the amount of medication administered	Waiting time			
	According to standards		No standar	
	(n)	(%)	(n)	(%)
No Complete	3	9.38	15	14.4
Complete	29	90.6	89	85.6
Total	32	25.5	104	74.5

Table 12. The relationship between the types of officinalis and magistralis prescriptions on waiting time

Type of Recipe	Waiting time						POR 95%CI	p-value
	No standar		According to standards		Total			
	n	%	n	%	n	%		
Officinalis	83	69.8	36	30.2	119	100	3.2 (1.1-9.3)	0.04
Magistralis	7	41.2	10	58.8	17	100		
Total	90	66.2	46	33.8	136	100		

Table 13. The Relationship between the Number of Official Prescription Items and Waiting Time

Number of recipe items officinalis	Waiting time						POR 95%CI	p-value
	No standar		According to standards		Total			
	n	%	n	%	n	%		
No standar	72	75	24	25	96	100	4.4 (1.7-11.4)	0.003
According to standards	8	34.8	15	65.2	23	100		
Total	80	67.2	39	32.8	119	100		

Table 14. The relationship between the number of magistral prescription items and waiting time

Number of recipe items magistralis	Waiting time						POR 95%CI	p-value
	No standar		According to standards		Total			
	n	%	n	%	n	%		
No standar	9	100	0	0	9	100	0.25 (0.09-0.66)	0.009
According to standards	3	37.5	5	62.5	8	100		
Total	12	70.6	5	29.4	17	100		

Tabel 15. The relationship between waiting time and the total prescription price based on BPJS costs for official and magistral prescriptions at the M. Natsir Solok Hospital pharmacy installation.

Total prescription price Officinalis dan Magistralis	Waiting time						POR 95%CI	p-value
	No standar		According to standards		Total			
	N	%	n	%	n	%		
No standar	14	15.6	76	84.4	90	100	0.511 (0.5-4.4)	0.628
According to standards	5	10.9	41	89.1	46	100		
Total	19	14.0	117	86.0	136	100		

Table 16. The relationship between the completeness of the number of drug administrations and the waiting time

Completeness of the amount of medication administered	Waiting time						POR 95%CI	p-value
	No standar		According to standards		Total			
	n	%	n	%	n	%		
No standar	16	95.7	2	4.3	18	100	4.7 (1.0-21.6)	0.033
According to standards	74	82.2	44	17.8	118	100		
Total	90	66.8	46	33.8	136	100		

4.3 Analisis Multivariat

Multivariate analysis aims to look at the factors that are most related to waiting time from all the variables studied (type of prescription, number of prescription items, completeness of drug administration, facilities, infrastructure, human resources).

Based on the bivariate analysis, independent variables will be selected that will be included in the multivariate analysis, namely variables that have a p - value <0.25 and variables that have a substantial effect on waiting time. The following are candidate variables in multivariate analysis.

Tabel 17. Variable kandidat analisis multivariat

Variable	P value	information
Total recipe type		
Number of officinalis and magistralis prescription items (total)	0.04	candidate
	0.009	candidate
Completeness of the amount of medication administered	0.033	candidate
Price BPJS prescription	0.62	No candidate

Based on table 17, it shows that the total type of prescription, total number of prescription items, completeness of

medication administration are candidates in multivariate analysis. After obtaining a candidate for multivariate analysis, logistic

regression analysis is then carried out to obtain the most dominant variables along with the full form of the multivariate analysis model.

Table 18. Full Multivariate Analysis of variables that most influence waiting times at the M Natsir Solok Hospital Pharmacy installation in 2022.

Variable	p-value	POR	95% CI	
			Lower	Upper
Jenis resep Total	0.030	3.316	1.120	9.811
Jumlah item resep Officinalis dan Magistralis	0.009	3.148	1.332	7.440
Kelengkapan jumlah pemberian obat	0.144	3.175	0.673	14.969

Based on table 18, full model of multivariate analysis, multivariate modeling is carried out by entering independent variables together, then variables starting with p-value > 0.05 are removed from the model. Variables are removed in stages from the largest p-value. The first variable

that was removed was the completeness of the prescription because the p-value was the largest. After the variable with the largest p-value was removed, logistic regression analysis was carried out again. The results of the logistics analysis are as shown in the table below.

Table 19. First multivariate modeling

Variable	Variable out	p-value	POR Crude	POR Adjusted	Δ POR %
Total recipe items Number of recipe items		0.030	3.316	3.530	-12.1
Officinalis and Magistralis	Completeness of the amount of medication administered	0.009	3.148	3.836	-15.6

Based on table 19, the first model after the prescription completeness variable is taken out looks at the change in the OR. If the change in the OR is greater than 10% then the variable previously taken out is re-entered. In the analysis above, the OR

change results were more than 10%, so the prescription completeness variable was re-entered. Next, no variables can be removed again because there is no p-value more than 0.05, then the final model, here is the final modeling as below:

Table 20. Final model of multivariate analysis that most influences waiting time at the M. Natsir Solok Hospital's pharmacy installation

Variable	p-value	POR	95% CI	
			Lower	Upper
Total recipe items	0.030	3.316	1.120	9.811
Number of recipe items Officinalis and Magistralis	0.009	3.148	1.332	7.440
Completeness of the amount of medication administered	0.144	3.175	0.673	14.969

Based on table 20, the results of the multivariate analysis that have the most influence on waiting time are the type of prescription with a POR value = 3.316, which means the type of prescription that causes a long waiting time for a prescription and has a risk of 3.316 times making the waiting time for a prescription not meet the standard, followed by the completeness of a

prescription that has a POR 3,175, which means there is a risk of 3,175 times causing the waiting time for the prescription to be inappropriate. Then followed by the variable number of prescription items with a POR of 3,148, which means it has a risk of 3,148 times causing the waiting time for the prescription to not meet the standard.

Table 21. Nagelkerke R square

Variable	Nagelkerke R Square
Recipe items Completeness of the amount of medication administered Number of recipe items	0.157

Based on table 21, Negel Kerke R square, it is found that $0.157 \times 100\% = 15.7\%$. This shows that the type of prescription, number of prescription items and completeness of the prescription is only 15.7% related to waiting time, there is still 84.3% caused by other factors such as human resources which is done by looking at the quality of human resources

DISCUSSION

Based on the research results, it shows that the most prescriptions are BPJS prescriptions when compared to non-BPJS prescriptions in all prescriptions at M. Natsir Pharmacy Installation Hospital in November and December, with officinal prescriptions being 87.5%, while magistral prescriptions are 12.5%. This means that it shows that there are more officinal prescriptions than magistral prescriptions and at the time of the research the sample obtained for magistral prescriptions was obtained less than for officinal prescriptions, based on observations and interviews conducted with heads of outpatient installations, in December it was only around 60 - 70 For concocted prescriptions or magistral prescriptions, the average number of prescriptions coming into pharmacy installations is 150 - 250 prescriptions per day. Many concoction prescriptions are usually given to pediatric patients, at M. Natsir Solok Regional Hospital, the number of prescriptions coming from children's polyclinics is small compared to other polyclinics. Based on visit data for 2021, it was found that the number of visits to children's polyclinics was only 1349 of all visits, namely 79,377 visits. , while visits from other polyclinics average 4000-7000 visits per year, so that fewer concocted prescriptions or magistral prescriptions are obtained compared to officinal prescriptions.

Based on the results of this research, it was found that the waiting time for prescriptions for both Officinalis prescriptions and magistral prescriptions at the M. Natsir Hospital pharmacy installation found that

the waiting time did not meet the standard, namely 66.2% compared to the waiting time according to the standard, namely 33.8%. Waiting for a long prescription in this study was found to be more for officinalis prescriptions than magistral prescriptions. This is probably because the number of samples for officinal prescriptions is much greater than for magistral prescriptions, this is slightly different from other studies such as those conducted by Herowati et al at Mitra Hospital. Siaga Tegal 2020 obtained results that the waiting time for finished medicines or officinalis was faster than the waiting time for magistralis or concocted medicines with the average waiting time for finished medicines or officinalis being 5.08 minutes and concocted medicines 11.5 minutes based on research conducted. conducted by Hidayah et al at the Salatiga City Hospital, it was found that the average waiting time for concocted drugs was 9.18 minutes and the average waiting time for finished drugs or non-concocted drugs was 5.70 minutes, this is also different from the research we conducted. Based on the Hospital Minimum Service Standards, namely the waiting time for an official prescription is ≤ 30 minutes while the waiting time for a magistral prescription is ≤ 60 minutes, in this study it was found that waiting times that did not meet the standards were more than those that met the standards of the Hospital SPM, in this case caused by officinalis prescriptions require more prescription items per prescription, while magistral prescriptions require fewer prescription items per prescription, although no assessment was carried out regarding busy hours, this long waiting time for prescriptions may be due to busy service hours because the doctors providing the service arrive at the same time so that patients pile up in pharmacies at that time, this is also in line with research conducted by Runggandini et al (2020) that the accumulation of prescriptions during peak hours causes the waiting time for prescription services to be longer, this research is also in line with research which

states the results of research The average non-concocted prescription was 83.76 minutes and concocted 91.08 minutes carried out by Heny, et al. 2020 which stated that the waiting time for prescriptions at the hospital was not up to standard. The waiting time that does not meet the standards in this study is also in line with research conducted by Maftuhah (2016) that the type of prescription received at the pharmacy depot is one of the factors that influences the waiting time for prescription services.

Based on the results of univariate analysis of the number of prescription items that do not comply with standards, there are more in officinal prescriptions, namely 69.1% compared to magistral prescriptions, 21.9%. there are more officinalis prescriptions than magistralis prescriptions, based on data obtained from the M. Natsir Solok Hospital pharmacy installation, the number of officinalis prescriptions is more than magistralis prescriptions, namely around 150 – 250 prescriptions per day than magistralis prescriptions, the number of prescription items is not according to the standards in this study This is also in line with research conducted by Maria Nirwani Ukun (2019), the waiting time for drug prescription services is based on the number of drug items, namely the waiting time for a drug prescription with one drug item is 2 minutes and for a prescription with more than one drug item is 6, 4 minutes, this illustrates that the greater the number of prescription items, the longer the waiting time required. Based on the standards set by WHO, the number of prescription items is 1.8 – 2.2 prescription items, while the number of prescription items in the M. Natsir Solok Hospital pharmacy installation was found not to meet the standard > 2 prescription items in each prescription, based on WHO prescription items 1.8-2.2 of these prescription items are possible so that polypharmacy does not occur in treatment for each patient, but the administration of medication to patients at M.Natsir Solok Hospital is also not limited but is the right

of the doctor as a service provider based on the knowledge of the scientists in has, this is based on interviews conducted with the head of the pharmaceutical installation, the number of prescription items for BPJS patients is not limited, everything prescribed by a doctor is the doctor's right as a service provider, for BPJS patients based on PMK 52 of 2016. Based on the waiting time for prescription services on the number of prescription items that do not comply with the standard, the waiting time that does not comply with the standard is 77.2%, while the number of items that comply with the standard also produces a waiting time that meets the standard, so it can be concluded that if the number of prescription items is according to the standard, the waiting time will be according to the standard, while the recipe that contributes the longest waiting time to the number of recipe items that meet the standard or not meet the standard is the magistralis recipe, this is in line with research conducted by Maftuhah (2016) that the number of recipes that received at the pharmacy depot is one of the influencing factors

waiting time for prescription services and in line with research conducted by Kristian et al at hospitals in Kupang 2018, prescriptions with the smallest number of items, namely 1 item, had an average waiting time of 15.89 minutes and prescriptions with the largest number of items, namely 8 items, had an average of 15.89 minutes. The average waiting time is 55 minutes, this illustrates that the greater the number of prescription items, the longer the waiting time required. This is also in line with research conducted by Wongkar (2000), where each additional drug item in the prescription will provide additional time at each stage of the prescription service. The research showed that a large number of medicinal items required a longer service time, namely 66 minutes compared to a small number of items, namely 33.8 minutes.

In terms of the total price for BPJS prescriptions, it was found that the price for prescriptions in pharmacy installations was

more than the price that did not meet the standard, namely 86% according to the standard. The price for BPJS prescriptions was determined based on an agreement between the hospital and the head of the Pharmacy installation, namely IDR 70,000, but at home illness does not prevent doctors from prescribing medicines that are more or less than the agreed price. There is a subsidy mechanism for BPJS patients in hospitals, meaning that if the hospital's Ina CBGs rate for one patient exceeds that price, it will be subsidized by the Ina CBGs rate at the price per prescription. below the overall INA CBGs rate, so that hospital management is still able to manage doctors who prescribe and is able to manage hospital finances, especially for BPJS patient drug prices.

Based on the completeness of medication administration, it was found that 118 (86.8%) prescriptions were given according to the prescription written by the doctor, while 18 (13.2%) were incomplete because the medication was empty, based on an interview with the head of the pharmacy installation because there was no medication. because distributors are late in delivering medicines, this is what causes incomplete medicines to be given by outpatient pharmacy installations. In this study, it was found that the waiting time for incomplete prescription services caused the waiting time for prescription services to be longer, namely 83.3% compared to the waiting time for complete prescriptions, this is in line with research conducted by Wongkar (2000), the availability of drugs according to prescription received will make waiting times faster, and the time to find replacement medicines that are empty can be reduced.

Based on the data obtained, it was found that 5 (31.3%) facilities did not comply with standards, while 2 (15.4%) facilities and infrastructure at the hospital were found to be non-compliant with standards. According to PMK No. 76 of 2016 and the 2019 Ministry of Health Technical Guidelines, there are still some that do not meet pharmaceutical installation standards, based

on interviews conducted by the head of the pharmaceutical installation, additional facilities, infrastructure and improvements have been submitted to hospital management for improvements in the current year. Based on research conducted (Heny, et al. 2020), one of the factors that influences the waiting time for prescription services at the RS. Sekar Ayu Runggandini et al 2020, research results showed that delays in waiting times for finished medicines were caused by a buildup of prescriptions during peak hours, a lack of human resources in the input department, a lack of knowledge and skills of human resources related to documents and drug waiting time standards, prescriptions that did not comply with the formulary, writing doctors who are illegible, the use of online prescriptions is not optimal, the size of the medicine storage room is not yet standard, the number of medicine storage baskets is not in accordance with the number of medicines and the hospital system is not connected to the JKN system, in this study it was found that the hospital facilities and infrastructure were also can affect the waiting time for prescription services

Based on the research results, it was found that human resources did not meet the standards, namely 2 (25%) and according to the standards 6 (75%). Based on PMK 56 of 2014, the calculation of the need for pharmacists is based on workload in outpatient pharmacy services which includes managerial pharmacy services and clinical pharmacy services with the activities of reviewing prescriptions, dispensing drugs, recording drug use (PPO) and counseling, ideally a pharmacist is needed with a ratio of 1 Pharmacist for 50 patients based on the latest pharmaceutical regulations.

At M. Natsir Solok Hospital, the number of pharmacists is 3 people and 1 is the head of the pharmacy installation, with an average of 150-250 outpatient prescription services at M. Natsir Hospital per day, meaning around 6 pharmacists are needed to provide outpatient prescription services, pharmacists

at M. Natsir Hospital, based on the results of interviews, there are 2 civil servant pharmacists, namely 1 pharmacist for outpatient prescription services and 1 pharmacist as head of the pharmacy installation and 2 pharmacists with BLUD (Regional Business Services Agency) status who provide direct services to patients. by double checking the prescription and at the end of 2022, a recruitment selection was carried out for 2 first aid workers, but based on the interview we conducted with the head of the first aid outpatient installation who passed the test, he was a pharmacist with BLUD staff status at M. Natsir Regional Hospital with the words On the other hand, pharmacists still do not meet the staffing standards for the outpatient installation of M.Natsir Regional Hospital itself.

The relationship between the type of prescription and waiting time

Based on bivariate analysis in this study, it was found that there was a relationship between the type of prescription and waiting time, where the waiting time that did not meet the standard was more, namely 66.2%, while the waiting time that met the standard was 22.8%. The statistical test results showed that the P-Value was 0.04 with PORT 3.2 because this research shows a relationship between the type of prescription and waiting time. This is in line with the results of research on an average of 83.76 minutes for non-concocted prescriptions and 91.08 minutes for compounded prescriptions, which was carried out by (Heny, et al. 2020) which states that the factors that influence the waiting time for prescription services at the RS. recipe. This is also in line with research conducted by Maftuhah (2016) that the type of prescription received at the pharmacy depot is one of the factors that influences the waiting time for prescription services, and is also in line with research conducted by Matda. relationship with waiting time: 62 of the number of prescriptions (63.3%) did not match the waiting time and 36 of the

number of prescriptions (36.7%) matched the waiting time.

Based on bivariate analysis in this study, it was found that the number of officinal prescription items was related to waiting time, inappropriate waiting times were greater than appropriate waiting times, statistical test results showed that the P-value was 0.003 with a POR of 4.4, meaning there was a relationship between the number of items. officinalis prescriptions with waiting times, the number of officinalis prescription items that do not meet the standard has a 4.4 times greater risk of causing long waiting times, this is in line with research conducted by Wongkar (2000), where every additional drug item in the prescription will result in additional time at each stage of prescription service. In his research, it was shown that a large number of medicinal items required a longer service time, namely 66 minutes compared to a small number of items, namely 33.8 minutes. This is also in line with research conducted by Maria Nirwani Ukun (2019), the waiting time for drug prescription services is based on the number of drug items, namely the waiting time for a drug prescription with one drug item is 2 minutes and for a prescription with more than one drug item is 6, 4 minutes, this illustrates that the greater the number of prescription items, the longer the waiting time required.

Based on bivariate analysis in this study, it was found that the number of magistral prescription items was related to waiting time, inappropriate waiting times were 70.6%, more than appropriate waiting times. The statistical test results obtained a P-value of 0.009 with a POR of 0.25, there was a relationship between the number of magistral prescription items that did not meet the standards and the waiting time. The number of magistral prescription items that did not meet the standards had a risk of 0.25 times the long waiting time. This is in line with research conducted by Maftuhah (2016) that the number of prescriptions received at the pharmacy depot is one of the factors that influences the waiting time for

prescription services. Apart from that, the number of medicinal items per prescription and the number of concoctions in each prescription also influence the waiting time for prescription services, which is also in line with research conducted by Wongkar (2000) in this case the number of prescription items, where each additional medicinal item in the prescription will provide additional time at each stage of prescription service. In his research, it was shown that a large number of medicinal items required a longer service time, namely 66 minutes compared to a small number of items, namely 33.8 minutes.

Based on bivariate analysis in this study, it was found that the number of officinalis and magistralis prescription items were related to waiting time, inappropriate waiting times were 66.2%, more than appropriate waiting times. The statistical test results obtained a P-value of 0.009 with a POR of 3.1, there is a relationship between the number of officinal and magistralis prescription items and waiting time. The number of officinal and magistralis prescription items that do not meet the standard is at risk of having 3.1 times the waiting time that does not meet the standard, this is in line with research conducted by Wongkar (2000) in this case is the number of prescription items, where each additional drug item in the prescription will provide additional time at each stage of prescription service. In his research, it was shown that a large number of drug items required a longer service time, namely 66 minutes compared to a small number of items, namely 33.8 minutes and in line with what was done by Maria Nirwani Ukun (2019), the waiting time for drug prescription services was based on the number of drug items, namely time. The wait for a drug prescription with one drug item is 2 minutes and for a prescription with more than one drug item it is 6.4 minutes. This illustrates that the greater the number of prescription items, the longer the waiting time required.

Based on bivariate analysis in this study, a relationship was found between

completeness of drug administration and waiting time. The statistical test results obtained a P-value of 0.033 with a POR of 4.7, which means there is a relationship between completeness of drug administration and waiting time, completeness of drug administration that does not meet standards has a risk of 4.7 times the length of waiting time. This is in line with research conducted by Wongkar (2000), that the availability of medicines according to the prescription received will make waiting times faster, and the time to look for empty replacement medicines can be reduced. Based on the results of the multivariate analysis, it was found that the type of prescription was the variable that had the most influence on waiting time, followed by the number of prescription items and completeness of the prescription. Total prescription type, total number of prescription items, completeness of drug administration were candidates in the multivariate analysis. So that the results of the multivariate analysis that have the most influence on waiting time are the type of prescription with p-value. The results of the multivariate analysis that have the most influence on waiting time are the type of prescription with a POR value = 3.316, which means the type of prescription that causes long waiting times for prescriptions and has a risk of 3.316. Sometimes the waiting time for a prescription is not up to standard. Followed by the completeness of the prescription which has a POR of 3.175, which means it has a risk of 3.175 times causing the waiting time for the prescription to be inappropriate. Furthermore, the variable number of prescription items has a POR of 3.148, which means it has a risk of 3.148 times causing the waiting time for the prescription to not meet the standard.

Based on the Negel Kerke R square, it is found that 0.157 others, in this case it can also be caused by human resources such as work motivation, human resources that do not meet standards, lack of knowledge, expertise, skills, education and training according to this research.

Based on the study's results, it was found that the variables of knowledge, attitude and health worker support had a significant relationship with the behaviour of pregnant women with Chronic Energy Deficiency in consuming biscuit supplementary feeding with a p-value <0.05. At the same time, the variables of availability of health services and husband's support did not have a relationship with the behaviour of pregnant women with Chronic Energy Deficiency. Knowledge and attitude are the predisposing factors for pregnant women to take action (consuming biscuit supplementary feeding). The results of this study are in line with the research The results of this study are in line with Yuliani's research in 2021 at the Bogorejo Health Centre, Most (55.6%) respondents had fairly good knowledge (10). However, this result is different from the research by Nurul Amalina in 2022 in the working area of the West Pasaman Health Office. Most (53%) respondents had a low level of knowledge (11).

Pregnant women with a high level of knowledge about the benefits of consuming biscuit supplementary feeding tend to behave well. Likewise, pregnant women with a positive attitude reflect that the pregnant women accept the health program provided. Health worker support can influence the behaviour of chronic energy deficiency supplementary food consumption. Health worker support is one of the driving factors that play a role in influencing a person's behaviour. Health worker support that can affect the behaviour of pregnant women with chronic energy deficiency can be done in various ways, namely by educating to pregnant women with chronic energy deficiency. Health workers need to provide education about the importance of proper nutrition in overcoming the problem of chronic energy deficiency. o

They can explain the impact of malnutrition on the body and provide information on the consumption of additional food biscuits offered by the health center. In addition, the expected role of health workers is to

conduct continuous monitoring and support through regular visits and monitoring. Health workers can identify progress in the target's acceptance of the products provided and improve individual consumption behavior. Help overcome complaints and provide support and motivation to maintain the consistency of pregnant women in consuming the biscuits provided. The quantitative research results show that almost all health services are available for this program. This is in line with the interviews in the qualitative research that for now the stock of biscuits at the puskesmas is sufficient. In contrast to last year, there was a supply shortage at one of the health center. The lack of association between the availability of health services and the behaviour of Pregnant women with Chronic Energy Deficiency could be because although health services are available, pregnant women may not have adequate access to information about the importance of supplementary food consumption during pregnancy. If pregnant women do not understand of the nutrients needed during pregnancy, they may not change their food consumption behaviour even if health services are available. It is also because not all individuals have the same awareness and motivation to maintain good health during pregnancy. Some pregnant women may not feel the need or be motivated to change their diet, even if health services are available and provide appropriate information. This is supported by the statement of one of the puskesmas heads that what is still a problem in our society is the lack of awareness and behavior of pregnant women. They (pregnant women) especially young women exposed to technological sophistication do not think about the intake of their babies. They only fulfill food intake based on their desires. Husband support also did not have a significant relationship with the behaviour of Pregnant women with Chronic Energy Deficiency in consuming biscuits. This may be due to other roles in support. There may be other factors in support that are more dominant or more influential on the eating

behavior of pregnant women. For example, support from other family members, friends, or medical personnel may have a more significant impact in helping pregnant women adopt healthy eating behaviors. A pregnant woman's perception of the value of her husband's support is also influential. Suppose pregnant women feel that their husbands do not provide adequate support or do not take the issue of Chronic Energy Deficiency seriously. In that case, the behaviour of pregnant women in consuming supplementary food may not change much. There are four types of husband support, first of which is emotional support, which involves expressions of empathy, concern, encouragement, or emotional assistance. Emotional support is by Rukiyah's (2014) theory that husbands are the most critical person for pregnant women in providing attention and love to their partners during pregnancy (9).

CONCLUSION

The number of BPJS prescriptions is greater than non-BPJS prescriptions. The number of official type BPJS prescriptions is greater than the magistral type prescriptions. Types of prescriptions, number of prescription items, price for BPJS patient prescriptions, completeness of prescriptions for officinal prescriptions is greater than for magistral prescriptions and the frequency of prices for BPJS prescriptions that comply with standards is greater than those that do not comply with standards. Facilities, infrastructure and human resources/ pharmaceutical personnel are still lacking or do not comply with the standards of Ministry of Health regulations. The waiting time for prescriptions in the type of prescription, the number of prescription items in the officinalis type and magistral type prescriptions shows that there are more waiting times for prescriptions that do not meet the standards. There is a significant relationship between the type of prescription, number of prescription items, completeness and waiting time and there is no significant relationship between the

BPJS prescription price and waiting time. The factor most associated with waiting time based on multivariate analysis is the type of prescription.

Declaration by Authors

Ethical Approval: This research has received ethical approval from the ethics committee of the Faculty of Medicine Universitas Andalas with number 290/UN.16.2/KEP-FK/2023

Acknowledgment: None

Source of Funding: None

Conflict of Interest: The authors declare no conflict of interest.

REFERENCES

1. Adrini, M; Harijanti, Tuti; Woro, E, 2015. *Faktor-faktor yang Mempengaruhi Rendahnya Pelaporan Insiden di Instalasi Farmasi RSUD Ngudi Waluyo Wlingi*. Jurnal Kedokteran Brawijaya, Vol. 28, Suplemen No. 2.
2. Adie Angga Permana, Drs. Nurul Mutmainah, M. Si, 2018 *Evaluasi Waktu Tunggu dan Kepuasan Pelayanan Pada Pasien Rawat Jalan di RSUD Dr. Lukmono Hadi Kudus*, Universitas Muhammadiyah Surakarta, UMSL Library, Periode Februari-April 2018.
3. Afni Amalia, Harapan Tua R.F.S dan Zaili Rusli Daya Tanggap, Jaminan, Bukti Fisik, Empati, Kehandalan, Dan Kepuasan Pasien Program Studi Magister Ilmu Administrasi Fakultas Ilmu Sosial dan Ilmu Politik Universitas Riau Kampus Bina Widya Jl. H. R. Soebrantas, Km. 12,5 Panam Pekanbaru
4. Amelia Sari, Defri Aroni, Ismaul Hasanah, 2019. *Tingkat Kepuasan Pasien Rawat Jalan Terhadap Pelayanan Kefarmasian Di Instalasi Farmasi RSUD Datu Beru Takengon*, Volume 4 nomor 1 Desember 2019: 45-52.
5. Aryani, F., Husnawati, S.M., Mutia, L., dan Richa, A. 2015. *Analisa Kepuasan Pasien Rawat Jalan Terhadap Kualitas Pelayanan di Instalasi Farmasi Rumah Sakit Islam Ibnu Sina Pekanbaru*. Jurnal Pharmacy. 12(1):101.
6. Bustani, N.M., Rattu, A.J. & Saerang, J.S.M. (2015). *Analisis Lama Waktu Tunggu Pelayanan Pasien Rawat Propinsi Sulawesi*

- Utara. *Jurnal e Biomedik (eBm)*. 3(3): 872-883.
7. Dovy Saptika Faulin, Budi Hartono, Arief Wahyudi, 2019. Program Studi Magister Kesehatan Masyarakat STIKes Hang Tuah Pekanbaru (Naskah diterima: 1 Juni 2019, disetujui: 28 Juli 2019) Yayasan Akrab Pekanbaru *Jurnal Akrab Juara* volume 4 Nomor 3 Edisi Agustus 2019 (47-64)
 8. Dedy Almasdy, Trianengsih, Hardisman, 2019. *Implementasi Permenkes Nomor 72 Tahun 2016 tentang Standar Pelayanan Kefarmasian di Rumah Sakit Terhadap Tatakelola SDM Instalasi Farmasi Rsu Mayjen H.A Thalib Kerinci Tahun 2018*, *Jurnal Kesehatan Andalas*. 2019; 8(2)
 9. Elsa Roselina, Ari nurfikri, Okta Aulia, 2021. *Evaluasi Layananan Resep Rawat Jalan Di Instalasi Farmasi: Waktu tunggu dan Kendala*. *Jurnal Vokasi Indonesia*, Vol.9, Nomor 2, Juli-Dseember; P-ISSN 2355-5807. E-ISSN 2477-3433
 10. Joshua Ofori Essiam. Service Quality and Patients Satisfaction with Healthcare Delivery: Empirical Evidence from Patients of the Out Patient Department of a Public University Hospital in Ghana. *European Journal of Business and Management*. 2013. Vol.5, No.28.
 11. Fahrizal HM, Pamudji G dan Andayani TM, (2018). Analisis Pelaksanaan Standar Pelayanan Minimal (SPM) Rumah Sakit Bidang Farmasi Di Instalasi Farmasi Rumah Sakit Umum Daerah Muara Teweh Tahun 2016. *Jurnal Farmasi & Sains Indonesia*, April 2018. ISSN 2621-9360.
 12. FX Haryanto Susanto, Nancy Isnawati Simbolon, Eva Monica, 2021. Program Studi Farmasi, Universitas Ma Chung Villa Puncak Tidar Blok N No.1, Malang 65151, Indonesia *jurnal Pharmacy Indonesia* volume 18 01 juli 2021 p- ISSN 1693-3591 e-ISSN 2579-910X

How to cite this article: Ayuria Rethmana, Dedy Almasdy, Ida Rahmah Burhan. Factors affecting waiting time for outpatient prescription services in BPJS patients at the pharmacy installation of the M Natsir Solok Regional General Hospital Year 2022. *International Journal of Research and Review*. 2024; 11(3): 1-15. DOI: <https://doi.org/10.52403/ijrr.20240301>
