



The Influence of Perceived Waiting Time and Medication Information on Word of Mouth Mediated by Patient Satisfaction

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ABSTRACT: This paper examines the impact of perceived waiting time and the delivery of medication information on word of mouth, mediated by patient satisfaction, at RSUD Beriman Balikpapan. Improving pharmaceutical services, including reducing waiting times and enhancing information delivery, is crucial for patient satisfaction and hospital reputation. This study investigates whether patients' perceptions of waiting times and medication information delivery affect their satisfaction and subsequently their likelihood to engage in word of mouth promotion. This research addresses the gap in understanding how specific aspects of pharmaceutical service quality influence word of mouth through patient satisfaction, a topic not extensively studied in the context of Indonesian public hospitals. A quantitative approach was employed, using primary data from questionnaires distributed to 130 outpatients at RSUD Beriman Balikpapan. Purposive sampling was used, and the data were analyzed using variance-based SEM (PLS) with SMART PLS 3.0. The analysis revealed that perceived waiting time and medication information delivery significantly and positively influence word of mouth, mediated by patient satisfaction. All five hypotheses were supported, with t-statistic values exceeding 1.96 and p-values below 0.05. The study concludes that improving perceived waiting time and medication information delivery enhances patient satisfaction, leading to increased word of mouth promotion. This suggests that hospitals should focus on these aspects to improve overall service quality and patient advocacy.

Keywords: Waiting Time, Medication Information, Word of Mouth, Patient Satisfaction, Quantitative Research.



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INTRODUCTION

Hospitals are integral to health and social organizations, providing comprehensive curative and preventive healthcare services. According to the Indonesian Minister of Health Regulation, hospitals are institutions that deliver holistic individual healthcare through outpatient, inpatient, and emergency services, aiming to achieve optimal public health. RSUD Beriman Balikpapan is a type C public hospital in the heart of Balikpapan, with 127 beds and specialized outpatient services.

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The increasing number of hospitals in Balikpapan has intensified competition, compelling hospitals to improve service quality continually. One crucial area for improvement is pharmaceutical services, which have shifted from a product-focused approach to patient-centered care, known as pharmaceutical care ([Permenkes, 2016](#)). Enhancing service quality is expected to significantly increase patient satisfaction.

According to [Kotler & Armstrong \(2018\)](#) patient satisfaction measures the quality of health services by comparing the services desired and received. Patient satisfaction reflects the difference between expectations and the performance of health institutions ([Muninjaya, 2015](#)). Satisfied patients are valuable assets; they become loyal and promote the hospital through word of mouth. Findings in previous research also show that subjective norms, including normative beliefs and motivation to comply, are effective in predicting and explaining the consumption intentions of healthy living and fitness enthusiasts towards supplements. This observation not only explains the dynamics of subjective norms in the context of health supplement consumption but also makes a significant contribution to existing knowledge in services, including consumer behavior and health psychology in the hospital context ([Yusriani et al., 2024](#); [Hair et al., 2014](#)).

Patient satisfaction can drive word of mouth, a powerful marketing strategy that stems from the perceived value of a service. Companies increasingly rely on word of mouth to market their products. Positive word of mouth from consumers leads to recommendations of services to others ([Ruliati, 2022](#)). Word of mouth includes direct communication or communication via social and electronic media, disseminating information based on personal experiences with products or services. A company's reputation, good or bad, can spread quickly through word of mouth.

Word of mouth has a significant influence on the presence of a hospital, especially when a public figure or influencer gives a positive review of a service. The more influential the reviewer, the more widely the hospital's services will be discussed. Word of mouth is not limited by space and time and occurs directly or through electronic media, making it an effective branding tool for hospitals ([Muhlis, 2021](#)). According to the 2021 Kemenpan Reformasi Birokrasi survey, RSUD Beriman Balikpapan's outpatient service satisfaction score was 87.48, which dropped by 5.31 points to 82.17 in 2022. This decline necessitates analyzing patient satisfaction with outpatient pharmacy services. RSUD Beriman Balikpapan continually strives to improve patient satisfaction and service quality by addressing deficiencies and encouraging public feedback through the Sipandumas system.

Data from the RSUD Beriman Balikpapan Public Complaint System (2018-2022) reveal patient complaints about pharmacy services, especially long waiting times and inadequate information delivery. Over five years, there were 14 complaints about waiting times and 7 about information delivery. Given the importance of zero complaints for service quality, RSUD Beriman Balikpapan values every complaint as a reflection of patient satisfaction, necessitating an analysis of the impact of waiting times and medication information delivery on patient satisfaction and word of mouth.

Table 1. Average waiting time for medications at RSUD Beriman Balikpapan from 2020 – 2022

Year	Data	Average waiting time (minutes)	Standard (minutes)
2020	Ready-made medications	19 : 27	≤ 30
	Compounded medications	25 : 12	≤ 60
2021	Ready-made medications	16 : 19	≤ 30
	Compounded medications	21 : 96	≤ 60
2022	Ready-made medications	20 : 54	≤ 30
	Compounded medications	32 : 40	≤ 60

Source : Report on quality indicators of the Beriman Balikpapan Regional Hospital Unit

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Table 1 shows the average waiting time for medicines at the Beriman Hospital in Balikpapan from 2020 to 2022, meeting the standard of ≤ 30 minutes for ready-made medicines and ≤ 60 minutes for formulated medicines. However, patient complaints regarding waiting times still exist, namely in the last 5 years there were 14 complaints regarding waiting times for medicines and 7 complaints regarding the delivery of drug information, this shows that there are differences in patient expectations and the important nature of waiting times as a quality metric ([Rahmah, 2022](#)).

Studies by [Kautsar A et al. \(2017\)](#), [Janah \(2017\)](#), [Sulo \(2020\)](#), [Kebede et al. \(2021\)](#), [Badriya \(2021\)](#), [Ekadipta et al. \(2022\)](#), [Maharani & Mutmainah \(2019\)](#), and [Zhang et al. \(2023\)](#) found a positive relationship between waiting times and patient satisfaction. Conversely, [Wulandari \(2020\)](#) and [Rahmah \(2022\)](#) found no significant effect of waiting times on satisfaction, suggesting varied patient experiences.

Effective medication information delivery is crucial for improving patient quality of life and service quality, as inadequate information can lead to dissatisfaction and non-compliance ([Rahmi, 2022](#)). Studies by [Ekadipta \(2019\)](#), [Sulo \(2020\)](#), [Badriya \(2021\)](#), and [Kebede et al. \(2021\)](#) support the significant impact of information delivery on patient satisfaction, while [Rahmi \(2022\)](#) found no significant relationship.

Research by [Ruliati \(2022\)](#), [Akbolat et al. \(2021\)](#), and [Siripipatthanakul \(2021\)](#) indicates a positive relationship between patient satisfaction and word of mouth, with satisfied patients providing positive word of mouth. In contrast, [Muhlis \(2021\)](#) found no significant impact of satisfaction on word of mouth, suggesting that satisfaction does not necessarily influence word of mouth intentions.

Table 2. Number of outpatient depot patients at Beriman Balikpapan Hospital in 2020-2022

Number	Year	Number of patients
1	2020	35.295
2	2021	36.198
3	2022	79.592

Source : Hospital Information System, RSUD Beriman Balikpapan

Table 2. shows a significant increase in outpatient numbers from 2021 to 2022, potentially due to positive word of mouth. However, complaints about waiting times and information delivery remain unchanged, and the patient satisfaction survey score declined. Therefore, this study aims to analyze the influence of perceived waiting time and medication information delivery on word of mouth, mediated by patient satisfaction, at RSUD Beriman Balikpapan.

Research Questions in this study are:

- 1) Does perceived waiting time affect patient satisfaction at RSUD Beriman Balikpapan's Pharmacy Installation?
- 2) Does medication information delivery affect outpatient satisfaction at RSUD Beriman Balikpapan's Pharmacy Installation?
- 3) Does patient satisfaction influence word of mouth at RSUD Beriman Balikpapan?
- 4) Does patient satisfaction mediate the effect of perceived waiting time on word of mouth at RSUD Beriman Balikpapan?
- 5) Does patient satisfaction mediate the effect of medication information delivery on word of mouth at RSUD Beriman Balikpapan?

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Hypothesis Development

Based on the objectives of the research, the following hypotheses can be designed for this research:

- 1) The influence of perceived waiting time for medicine on outpatient satisfaction at the Beriman Balikpapan Regional Hospital.

The relationship between patient satisfaction and the length of waiting time for medication has been studied by several researchers in different health care facilities, including research from [Kautsar et.al \(2017\)](#), [Janah \(2017\)](#), [Sulo \(2020\)](#), [Kebede et al \(2021\)](#), [Badriya \(2021\)](#), [Ekadipta et al \(2022\)](#), [Maharani et al \(2022\)](#) and [Zhang et al \(2023\)](#), state that there is a positive and strong relationship between the length of waiting time for medication and its effect on patient satisfaction, that the shorter the duration of The patient's waiting time for medicine will be more satisfied, and vice versa, the longer the waiting time for medicine, the more dissatisfied the patient will be.

Based on the above, the hypothesis that will be developed in this research is as follows:

H1: Perception of waiting time for medication has a positive effect on outpatient satisfaction at the Beriman Hospital, Balikpapan

- 2) The effect of providing drug information on outpatient satisfaction at the Beriman Hospital in Balikpapan.

According to research from [Ekadipta et al \(2019\)](#), [Sulo \(2020\)](#), [Badriya \(2021\)](#) and [Kebede et al \(2021\)](#) stated that the delivery of drug information can significantly influence the level of patient satisfaction in health service facilities. Based on this, a hypothesis can be developed in this research, namely as follows:

H2: Delivery of drug information has a positive effect on outpatient satisfaction at the Beriman Hospital in Balikpapan

- 3) The influence of patient satisfaction on word of mouth of outpatients at the Beriman Hospital in Balikpapan.

Listening to research conducted by [Ruliati \(2022\)](#), that patient satisfaction can influence word of mouth strongly and significantly, this means that the more satisfied the patient feels when going to the hospital for treatment, the more word of mouth behavior can increase, where word of mouth is one of the marketing communication mixes for hospitals, where word of mouth marketing by satisfied patients can become a reference for other consumers.

H3: Patient satisfaction has a positive effect on word of mouth of outpatients at the Beriman Balikpapan Regional Hospital

Practical Benefits in this research are:

- 1) Provide data and insights for hospital management to identify factors influencing word of mouth mediated by patient satisfaction at RSUD Beriman Balikpapan, enhancing service quality and minimizing patient complaints.
- 2) Inform pharmacy staff about developing standard operating procedures for pharmaceutical services at RSUD Beriman Balikpapan to improve satisfaction and positive word of mouth through efficient, accurate, and reliable services.

The definition of perception, according to [Kotler & Keller \(2021\)](#) is a process of selecting, interpreting and organizing information to form an image. Perception of waiting time is a person's feeling about the activity of waiting to obtain a service. This feeling becomes a measure of investing time to access a service, so that in hospitals the term patient's willingness to wait appears

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One indicator of hospital quality is the waiting time for drug services. The waiting time in question is the calculation of the waiting time from the time the patient starts handing over the prescription received from the doctor to the pharmacy officer to be prepared, until the medicine is handed over to the patient accompanied by the provision of drug information (Badriya, 2021).

The term delivery of drug information is one of the pharmacist's activities to explain to patients information related to drugs that is accurate, unbiased and up-to-date to patients and parties who need it (Kenre, 2022).

According to Gelayee et al. (2017) providing appropriate drug information determines the correct use of drugs and can determine the patient's recovery, therefore pharmacists are responsible for ensuring that every patient who receives medication gets the information they need, so that the quality of drug use can be maximized.

Customer satisfaction is a key factor that describes the performance of a product or service exceeding expectations (Meesala & Paul, 2018). Research from Patiro et al. (2023) stated that patient satisfaction can be formed from the patient's positive emotions which are influenced by good service quality, while Saleh et al. (2018) stated that patient satisfaction depends on the patient's perceptions and expectations.

Word of mouth (WOM) or word of mouth communication is a communication process in the form of providing recommendations both individually and in groups for a product or service which aims to provide personal information (Kotler & Keller, 2021). Meanwhile, according to Ruliati (2022), word of mouth is defined as comments or recommendations given by consumers referring to their experiences and influencing other parties in their decision-making process.

Marketing implemented by word of mouth or known as WOM Marketing, can be used as one of the communication mixes of marketing because it can be used as a reference for consumers to make choices according to their expectations (Muhlis, 2021).

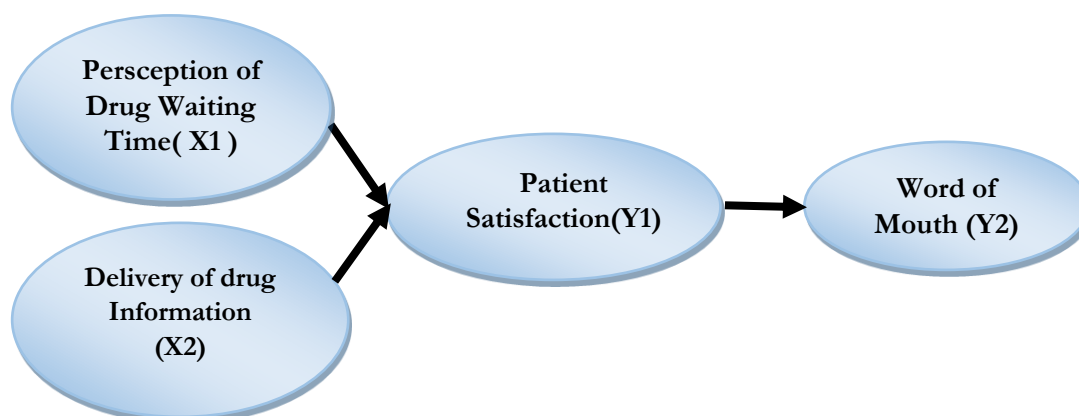


Figure 1. Research Model

Operational Variables

1. Perception of waiting time for drug services is the patient's perception of how fast or slow they are in dispensing medicine, the speed and responsiveness of staff when serving requests from patients (Badriya, 2021 and Okoloagu, 2023). According to research by Badriya (2021) and Okoloagu (2023), indicators of waiting time for drug services (speed of drug service) are:
 - a. Staff service is quick to respond

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- b. Service is fast and correct
 - c. Fast service in providing prices
2. Drug Information Services is the patient's perception of officers when providing counseling, information, education to patients and supervising the course of pharmaceutical services. ([Badriya, 2021](#)). Indicators of drug information services referring to research by [Sulo \(2020\)](#) and [Gelayee \(2017\)](#) are that the type of information provided by pharmacists consists of: name of drug, drug preparation, drug dosage, how to use the drug, how to store it, drug indications, drug contraindications, drug stability, drug side effects and drug interactions.
3. Patient satisfaction is a person's feeling of happiness or disappointment that arises after comparing the performance (results) of the product in question against the expected performance ([Kotler, 2018](#)). Indicators of patient satisfaction referring to research by [Sulo \(2020\)](#), and [Bambambamba \(2022\)](#), are the friendliness of pharmacy staff, speed of drug service, speed of cashier service, cleanliness of the waiting room, availability of drugs, ability of staff and availability of brochures/leaflets.
4. Word of mouth is communication from word of mouth, namely a communication process in the form of providing recommendations both individually and in groups for a product or service with the aim of providing personal information ([Kotler and Keller, 2021](#)). Word of mouth indicators are consumers' ability to talk about positive things, recommend to others and encourage friends or relations to purchase company products and services.

METHOD

This study employs a quantitative approach, where data is obtained and presented in numerical form ([Sugiyono, 2018](#); [Patiro et al. 2023](#)). The data used in this study is primary data, collected directly from the source, specifically from outpatients or their family members who are collecting medication at the outpatient pharmacy. These individuals were provided with explanations to ensure they could accurately respond to the research questions. Primary data can be obtained individually as the subject's opinion or collectively, related to the variables being studied ([Sugiyono, 2018](#); [Patiro, et al.,2023](#)).

The research was conducted at RSUD Beriman Balikpapan from February to April 2024.

- a. Population: The population includes all objects of observation, which in this study refers to patients and their companions using outpatient services and receiving care at the Pharmacy Depot of RSUD Beriman.
- b. Sample: The sample is a subset of the population that has characteristics representative of the population ([Sugiyono, 2018](#); [Patiro et al. 2023](#)). In this case, the sample comprises patients using the outpatient pharmacy services at RSUD Beriman Balikpapan during the specified period.
- c. Sample Size: The sample size for this study was determined based on [Hair et al. \(2014\)](#) and [Patiro et al. \(2023\)](#), who stated that the ideal sample size for maximum likelihood (ML) estimation in SEM analysis is 100–200. Considering this and the average number of visiting patients, along with the limited research timeframe and survey conditions over approximately ten working days, 130 questionnaires were distributed.
- d. Sample Criteria: The criteria for the sample in this study are outpatients or their family members who agree to be observed while collecting medication at the outpatient pharmacy of

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RSUD Beriman Balikpapan and are willing to fill out a questionnaire. The sample includes adult patients who can read and write, with characteristics such as age, gender, and education level.

- e. Sampling Method: The sampling method used in this study is non-probability sampling, which does not provide all elements of the population with an equal chance of being selected as a sample. The specific type of non-probability sampling used is purposive sampling. Purposive sampling involves selecting samples based on certain criteria representing the population to be observed ([Hair et al. 2014](#); [Sugiyono, 2018](#)).

The rationale for using purposive sampling is that not all individuals in the population meet the criteria relevant to the phenomenon being studied. Thus, purposive sampling is chosen based on criteria that the respondents must fulfill, including:

- 1) Patients or their companions waiting for medication at the outpatient pharmacy of RSUD Beriman Balikpapan.
- 2) Willingness to participate as respondents.
- 3) Ability to read and write.
- 4) Age over 18 years, as individuals in this age range are expected to understand the questionnaire questions well (Hurlock, 1990).
- 5) Patients without mental disorders and in a conscious state.

RESULT AND DISCUSSION

Outer Model Testing

The results of testing the outer construct indicator model are presented based on the value of each test result indicator which can be seen in the table. the following:

Table 3.
Outer Loading Algorithm Results of Testing Models

	X1	X2	Y1	Y2
X1.1	0,932			
X1.2	0,887			
X1.3	0,884			
X2.1		0,883		
X2.2		0,803		
X2.3		0,894		
X2.4		0,901		
X2.5		0,864		
X2.6		0,886		
X2.7		0,665		
X2.8		0,855		
X2.9		0,906		
X2.10		0,583		
Y1.1			0,902	
Y1.2			0,895	
Y1.3			0,897	
Y1.4			0,794	
Y1.5			0,834	

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Y1.6	0,879
Y1.7	0,821
Y2.1	0,977
Y2.2	0,940
Y2.3	0,974

Source: data processed in 2024

Based on table 4.12. all the outer loading indicator values on the variable perception of waiting time for medicine (X1), the indicator values on the patient satisfaction variable (Y1) and the indicator values on the word of mouth variable (Y2) are not less than 0.7, while the indicator values on the delivery variable drug information (X2) has an indicator of 0.7, it is best to continue using this indicator value as long as the AVE score is > 0.5 .

Discriminant Validity

In this section, the results of the discriminant validity test are explained. This test uses cross loading values. An indicator is declared to meet discriminant validity if the cross loading value of the indicator on the variable is the largest compared to other variables.

Table 4.
AVE Model Test Results

	Average Variance Extracted (AVE)
Perception of drug waiting time (X1)	0,812
Delivery of drug information (X2)	0,682
Patient satisfaction (Y1)	0,742
Word of mouth (Y2)	0,929

Source: data processed in 2024

Based on Table 4, the convergent validity shows that the AVE value for all constructs is more than 0.5. Thus, the AVE value meets the rule of thumb used to test convergent validity. This indicates that the data is valid for subsequent testing.

Composite Reliability

This test is part of the analysis used to test the reliability value of indicators on a variable. A variable can be declared to meet composite reliability if it has a value > 0.6 . The composite reliability results can be seen in the following table:

Table 5.
Composite Reliability Test Results

	<i>Composite Reliability</i>
Perception of drug waiting time (X1)	0,928
Delivery of drug information (X2)	0,955
Patient satisfaction (Y1)	0,952
Word of mouth (Y2)	0,975

Source: data processed in 2024

From table 5, the composite reliability value for all research variables is > 0.6 , which means that all variables have a high level of reliability.

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Cronbach Alpha

The Cronbach Alpha value can be used to strengthen the reliability test. A variable can be declared reliable if it meets the Cronbach Alpha value >0.7 . Cronbach Alpha results can be seen in the following table:

Table 6.
Cronbach Alpha Test Results

	<i>Cronbach Alpha</i>
Perception of drug waiting time (X1)	0,885
Delivery of drug information (X2)	0,946
Patient satisfaction (Y1)	0,941
Word of mouth (Y2)	0,962

Source: data processed in 2024

Based on data from table 6, the value of each research variable is > 0.7 . Thus, these results indicate that each research variable has met the Cronbach Alpha requirements so that it can be stated that all variables have a high level of reliability.

Construct Equations

Table 7.
Average Variance Extracted

	<i>Rata-rata Varians Diekstrak (Average Variance Extracted / AVE)</i>
Perception of drug waiting time (X1)	0,812
Delivery of drug information (X2)	0,682
Patient satisfaction (Y1)	0,742
Word of mouth (Y2)	0,929

Source: data processed in 2024

Inner Model Testing

The structural model (inner model) is evaluated by looking at the coefficient values of the relationship path parameters between latent variables. Testing of the structural model (inner model) was carried out after the relationship model built in this research was in accordance with the observation data and overall model suitability (goodness of fit model). The purpose of testing this structural relationship model is to determine the relationship between the latent variables designed in this research. From the PLS (Partial Least Square) model output, structural model and hypothesis testing was carried out by looking at the estimated path coefficients and critical point values (t-statistics) which were significant at $\alpha = 0.05$.

The results of testing the research structural model were evaluated using a significance test via the path coefficient value. Researchers used the bootstrapping technique in SmartPLS to test the significance of direct relationships between constructs in this research. The results of the research hypothesis test can be seen in the following table:

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Table 8.
Research Hypothesis Test Results

	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>T Statistics (O/STDEV)</i>	<i>P Values</i>
H1 = perception of drug waiting time (X1) -> patient satisfaction (Y1)	0,193	0,195	0,066	2,906	0,004
H2 = delivery of drug information (X2) -> patient satisfaction (Y1)	0,718	0,717	0,068	10,530	0,000
H3 = patient satisfaction (Y1) -> word of mouth (Y2)	0,857	0,851	0,040	21,167	0,000
H4 = perception of drug waiting time (X1) -> patient satisfaction (Y1) -> word of mouth (Y2)	0,165	0,166	0,058	2,834	0,005
H5 = delivery of drug information (X2) -> patient satisfaction (Y1) -> word of mouth (Y2)	0,615	0,610	0,066	9,272	0,000

Source: data processed in 2024

Significance Test.

The hypothesis built in this study uses two tailed hypothesis testing on H1, H2, H3, H4, and H5. The hypothesis is accepted if the t-statistic value is more than the two-tailed rule of thumb, namely > 1.96 or p value < 0.05 . The following is a description of hypothesis testing for each construct in the model.

- 1) Hypothesis 1 (H1). H1 states that the perception of waiting time for medicines in the pharmacy installation has a positive and significant effect on the satisfaction of outpatients at the Beriman Hospital, Balikpapan. The test results show that the t-statistics value for the first hypothesis is t count 2.906 (> 1.96), p value 0.004 (< 0.05) so it can be concluded that H1 = accepted.
- 2) Hypothesis 2 (H2). H2 states that drug information obtained from pharmacy installation officers has a positive and significant effect on the satisfaction of outpatients at the Beriman Hospital, Balikpapan. The test results show that the t-statistics value for the second hypothesis is t count 21.167 (> 1.96 , p value 0.000 (< 0.05) so it can be concluded that H2 = accepted.
- 3) Hypothesis 3 (H3). H3 states that patient satisfaction has a positive and significant effect on the Word of Mouth of patients at the Beriman Balikpapan Regional Hospital. The test results show that the t-statistics value for the third hypothesis is t count 10.530 (> 1.96), p value 0.000 (< 0.05) so it can be concluded that H3 = accepted.
- 4) Hypothesis 4 (H4). H4 states that the perception of waiting time for medicine which is mediated by patient satisfaction has a positive and significant effect on the Word of Mouth of patients at Beriman Hospital Balikpapan. The test results show that the t-statistics value for the fourth hypothesis is t count 2.834 (> 1.96), p value 0.005 (< 0.05) so it can be concluded that H4 = accepted.

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- 5) Hypothesis 5 (H5). H5 states that the delivery of drug information mediated by patient satisfaction has a positive and significant effect on the Word of Mouth of patients at Beriman Balikpapan Hospital. The test results show that the t-statistics value for the fifth hypothesis is t count 9.272 (> 1.96), p value 0.000 (< 0.05) so it can be concluded that H5 = accepted.

Based on the results of hypothesis testing obtained, the influence of the independent variable and dependent variable can be described below:

1. The influence of the perception of waiting time for medicines in the pharmacy installation on the satisfaction of outpatients at the Beriman Balikpapan Regional Hospital.

Based on the research results, it is known that the perception of waiting time for medicines in the pharmacy installation has a positive and significant effect on the satisfaction of outpatients at the Beriman Hospital, Balikpapan.

The results of this research are in accordance with previous research conducted by [Prasetya et al. \(2020\)](#), namely that there is a positive and significant influence between the perception of waiting time on patient satisfaction at Kendari Regional Hospital, where the perception of a short waiting time can offset the actual length of waiting time. Research by [Zhang et al. \(2023\)](#) also states that there is a positive and significant relationship between patient satisfaction and the length of waiting time, whereas this is contrary to research conducted by [Okoloagu & Ndibuagu \(2023\)](#) which shows that there is no significant influence between the perception of patient waiting time on satisfaction. patients in an eye hospital, Nigeria, where patient perceptions of waiting times were subjective and did not influence patient satisfaction.

2. The effect of drug information obtained from pharmacy installation officers on the satisfaction of outpatients at the Beriman Balikpapan Regional Hospital.

Based on the research results, it is known that drug information obtained from pharmacy installation staff has a positive and significant effect on the satisfaction of outpatients at the Beriman Hospital, Balikpapan.

The results of this study are in accordance with previous research conducted by [Sutrisnawati \(2023\)](#) showing that the type of drug information conveyed by pharmaceutical staff is related to patient satisfaction. [Muharni \(2023\)](#) shows that the services provided by pharmacy staff regarding providing drug information have a significant influence on patient satisfaction.

One of the parameters that shows the success of providing drug information is public satisfaction. Providing drug information has an important role in improving the quality of life of patients and providing quality services for patients. Quality of life and quality services can decrease due to non-compliance with the treatment program

3. The influence of patient satisfaction on word of mouth of patients at the Beriman Balikpapan Regional Hospital.

Based on the research results, it is known that patient satisfaction has a positive and significant effect on the Word of Mouth of patients at the Beriman Balikpapan Regional Hospital.

The results of this study are in accordance with previous research conducted by [Cahyani \(2024\)](#) showing that there is a significant positive influence between the level of patient satisfaction and the WOM phenomenon at Graha Husada Jepara Hospital. There is a significant positive correlation between patient satisfaction and intention to revisit and patient satisfaction provides significant positive impact on WOM. Apart from that, it was also revealed that WOM had a significant positive effect on repeat visit intentions.

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4. The influence of the perception of waiting time for medicine which is mediated by patient satisfaction has a positive and significant effect on the word of mouth of patients at the Beriman Balikpapan Regional Hospital.

Based on the research results, it is known that the perception of waiting time for medicine which is mediated by patient satisfaction has a positive and significant effect on the Word of Mouth of patients at the Beriman Balikpapan Regional Hospital.

The results of this research are in line with research conducted by [Ima \(2019\)](#) where there is a relationship between waiting time for services and the level of patient satisfaction which has an impact on patient word of mouth. If the waiting time for services at a pharmacy installation is more in line with the SPM (Minimum Service Standards), then patients tend to feel satisfied and recommend to family and friends to use the services at that hospital.

5. The effect of conveying drug information mediated by patient satisfaction on the word of mouth of patients at the Beriman Balikpapan Regional Hospital.

Based on the research results, it is known that the delivery of drug information mediated by patient satisfaction has a positive and significant effect on the word of mouth of patients at the Beriman Balikpapan Hospital.

Improving the quality of the patient-pharmacy staff relationship and the expertise of the pharmacy staff can increase patient satisfaction and loyalty, which ultimately can lead to better patient treatment outcomes. Patient loyalty results in positive behavior such as willingness to recommend health care providers, compliance, and higher use of health services.

CONCLUSION

The conclusions from the results of this research are as follows:

1. Perception of waiting time for medicines in pharmacy installations has a positive and significant effect on satisfaction of outpatients at the Beriman Balikpapan Regional Hospital
2. Drug information conveyed by pharmacy installation officers has a positive and significant effect on the satisfaction of outpatients at the Beriman Balikpapan Regional Hospital
3. Patient satisfaction has a positive and significant effect on the word of mouth of patients at the Beriman Balikpapan Hospital
4. Perception of waiting time for medicines mediated by patient satisfaction has a positive and significant effect on word of mouth of patients at Beriman Balikpapan Regional Hospital.
5. Delivery of drug information mediated by patient satisfaction has a positive and significant effect on word of mouth of patients at Beriman Balikpapan Regional Hospital

Based on the findings, the study recommends:

1. With the positive and significant influence between perceptions of waiting time and word of mouth which is mediated by patient satisfaction, especially the indicator that dominantly influences patient satisfaction, namely patients are happy with the responsive service of pharmacy staff, then hospital management needs to maintain consistent service according to The patient's desire is to carry out regular briefings to remind staff to provide responsive service, as well as identify obstacles that hinder this. as an effort to maintain and increase patient satisfaction, because satisfied patients will be motivated to provide word of mouth to the people around them.

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2. To increase patient satisfaction regarding waiting times and delivery of drug information, it is necessary to increase the competency of officers through training, so that they can work according to operational standards. Apart from that, it is also important to increase the friendliness of officers and optimize the cleanliness and comfort of existing infrastructure in the area hospital.
3. Because patient satisfaction has a positive and significant influence on word of mouth, efforts need to be made so that patients can provide positive word of mouth to their family and acquaintances by providing services that are better than the patient's expectations, for example providing health-related counseling while the patient is waiting, so that even though they wait a long time, patients don't get bored and can gain additional knowledge related to health.

There are several limitations to this research, including:

- a. This research was conducted on outpatients at the Beriman Hospital in Balikpapan with limited outpatient services, so that the data obtained is more representative, so that future researchers can research in other hospitals with more complete outpatient services, for example type A or B hospitals.
- b. This research is limited to pharmaceutical services, namely regarding perceptions of waiting time for drugs and drug information services. Future researchers can examine patient satisfaction in terms of other services at the hospital.

Referring to the limitation, we propose ideas for future research as follow:

- a. This research is limited to patient respondents or patient families who use outpatient facilities, further researchers can examine respondents who use Emergency Room (IGD) or inpatient facilities.
- b. Future research can examine the relationship between perceptions of waiting time and delivery of drug information on staff workload when visits increase, whether high visits on certain days can affect staff workload and their performance in serving patients.

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