



Waiting time: problems from the past, present, and future

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ABSTRACT

Long waiting times have long been an issue, but they haven't been fixed up to this point. One of the contributing elements to this issue is the fact that health care facilities constantly strive to expand the number of patient visits, but this is not accompanied by an improvement in service capability in terms of both human resources and facilities and infrastructure. Patient satisfaction levels will be affected by lengthy waiting times. Running a business in the health care sector depends heavily on patient satisfaction. Using a questionnaire as a primary data collection tool, this style of study is quantitative and uses analytic observational methods. The satisfaction questionnaire uses a Likert scale of 1-5. The researchers also collected actual data on waiting time for 139 internal medicine clinic respondents by following them from the line counter until the respondent left the health care facility. The sample size was estimated using the epi-info software and the consecutive sampling method. Data analysis using the chi-square approach in SPSS 21 software revealed that an average waiting time of 315 minutes had no effect on patient satisfaction, as there were other factors that could affect patient happiness besides waiting time.

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Kata kunci:

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Klinik Penyakit Dalam

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ABSTRAK

Waktu tunggu yang lama merupakan permasalahan yang terjadi hampir diseluruh fasilitas pelayanan kesehatan. Waktu tunggu yang lama merupakan permasalahan yang sudah ada sejak dahulu namun hingga saat ini masih belum terselesaikan. Salah satu faktor penyebab permasalahan ini terjadi dikarenakan fasilitas pelayanan kesehatan selalu berupaya meningkatkan angka kunjungan pasien namun tidak diikuti dengan peningkatan kemampuan pelayanan baik dari segi sumber daya manusia maupun sarana dan prasarana. Waktu tunggu yang lama nantinya akan berdampak pada tingkat kepuasan pasien. Kepuasan pasien merupakan faktor kunci dalam menjalankan bisnis dibidang jasa pelayanan kesehatan. Jenis penelitian ini merupakan penelitian kuantitatif dengan metode observasional analitik yang menggunakan kuesioner sebagai instrumen pengambilan data. Kuesioner penelitian tentang kepuasan menggunakan skala *likert* 1-5. Peneliti juga melakukan pengambilan data secara aktual terkait waktu tunggu terhadap 139 responden klinik penyakit dalam dengan cara mengikuti responden mulai dari loket antrian hingga responden meninggalkan fasilitas pelayanan kesehatan. Besaran sampel penelitian dihitung menggunakan *software epi-info* dengan metode pengambilan sampel *consecutive sampling*. Analisis data menggunakan metode *chi-square* pada *software* SPSS 21 menemukan bahwa dengan rerata waktu tunggu selama 315 menit tidak berpengaruh terhadap kepuasan pasien, hal ini dikarenakan terdapat faktor-faktor lain yang dapat mempengaruhi kepuasan pasien selain waktu tunggu.

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INTRODUCTION

Almost all healthcare facilities struggle with long waiting times. The length of time a patient waits is measured from the moment they walk up to the registration desk until they leave the medical facility. The definition of waiting time differs between theory and how patients actually experience it. For patients, the waiting time is measured from the moment they enter the healthcare facility until they leave, rather than from the moment they register to the moment they leave. (Alarcon-Ruiz, Christopher A. Heredia, Paula. Rondan-Taype, 2019).

The length of the consultation, the number of supporting examinations performed (additional if necessary), the type of recipe provided (concocted or not), and the clinic type (internal medicine, dental, and others) are all factors that affect waiting times in health services. These elements will have a significant impact on the patient's overall waiting time, which will vary depending on the elements and services that the patient has already received. (Biya et al., 2022; Li et al., 2020).

According to Study by Al-Harajin et al. (2019), waiting times might influence patients' impressions of the quality of the overall service and their level of satisfaction; the lower the waiting time, the greater the patient satisfaction. The definition of satisfaction is a contrast between what patients anticipate and what they actually receive or encounter.

A combination of wants, expectations, and experiences that are realized in reality must at least equal one another in order to be satisfied. (Thu Quyen et al., 2021). Numerous factors play a role in a patient's ability to reach a point of satisfaction, including age (being older makes one more likely to feel satisfied), gender (men are more likely to feel satisfied than women), level of education (the lower the level of education, the easier satisfied), social life (life in rural areas is more satisfying than in urban areas), type of visit (repeated visits are more satisfying than the first visit), service ethics, and the completeness and cleanliness of health service facilities, among others. (Al-Harajin et al., 2019; H. Lee et al., 2022; Thu Quyen et al., 2021).

Age, gender, occupation, level of education, doctor consultation, and waiting time are all external elements from health care facilities that might affect patient satisfaction. Patients who have visited a health care facility multiple times are more satisfied than patients who have attended for the first time. (Alrasheedi et al., 2019) (Biya et al., 2022; Quyen et al., 2021)

Internal factors of health care facilities that can influence patient satisfaction include: human resource professionalism and expertise, completeness of health care facilities, service flow, speed of service, environment of health care facilities, and cleanliness of health care facilities. The waiting room's size, noise level, lighting, music, and television shows all have a favorable impact on patient happiness. (Li et al., 2020; Xuan et al., 2021).

This study was carried out because waiting time has long been a source of contention that has yet to be resolved. The goal of this study is to see how much waiting time influences patient satisfaction based on real waiting time. The study's findings should be able to clearly establish the permissible waiting time duration and how it influences patient satisfaction.

METHODS

This study employed a quantitative observational analytic Study design with a cross-sectional data collection approach utilizing a questionnaire among disease clinic patients at the dr. Efram Harsana Iswahyudi Air Force Hospital. The researchers created two questionnaires: one for waiting time duration and one for patient satisfaction. The researcher filled out the waiting time duration questionnaire based on actual data gathered by monitoring the Study respondents from the time they arrived until they departed the health care institution. The patient satisfaction level questionnaire is filled out by Study participants using a Likert scale of 1-5. The Study questionnaire also included notes on respondents' opinions, advice, and suggestions regarding the waiting time for internal medicine clinic services.

The Pearson correlation analysis test with a significance value of 0.05 was used to assess the validity of the Study questionnaire, and the Cronbach alpha method with a minimum alpha coefficient of >0.6 was utilized to examine the reliability. Apart from patients visiting the Internal Medicine clinic, 30 Study respondents who visited the outpatient installation at the Air Force Hospital dr. Efram Harsana Lanud Iswahyudi and met the inclusion criteria for this study were subjected to validity and reliability testing. The validity and reliability of the instrument were tested in this study because the questionnaire employed was based on previous Study conducted in English and then translated into Indonesian. With a significance value of 0.000 on 8 questions and an alpha value of 0.868, the questionnaire in this study was certified valid and reliable.

Based on epi-info software estimates, the number of samples in this study was 139 responders with a 95% confidence interval and a 5% margin of error. In this study, the following inclusion criteria were used to guide the sample method: 1. Patients who visit an internal medicine clinic; 2. Patients over the age of 17; 3. First-time or repeat-visit patients; 4. Patients with a minimum education level of Elementary School (SD); 5. Men and women; and 6. Patients who use BPJS insurance financing or private payments. Based on the Certificate of Ethics Committee for Health Research, Faculty of Medicine and Health Sciences, Muhammadiyah University of Yogyakarta No. 118/EC-KEPK FKIK Muhammadiyah University Yogyakarta/II/2023, this study has been pronounced ethically feasible.

To ascertain the impact of waiting time on patient satisfaction, the data analysis results were processed using SPSS Version 21 and the chi square analysis method. The study also performed a cross-tab analysis to determine specifically how many respondents with long waiting times reported being dissatisfied, how many reported being satisfied, how many reported being dissatisfied with a fast waiting time, and how many reported being satisfied with a fast waiting time.

RESULTS AND DISCUSSION

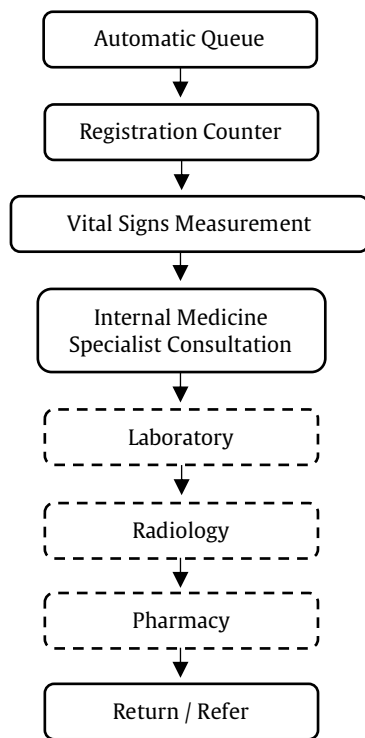
Validity And Reliability Tests For Study Instruments

The Pearson product moment correlation approach, which has been deemed valid, can be used to test the validity of the instrument in this study. Because the significance value reached was 0.05, the validity test that was conducted determined that all of the questionnaire's questions were valid.

This study used the Cronbach's alpha method for the instrument reliability test, which was deemed reliable when the alpha coefficient value was > 0.6. Because the coefficient values obtained were > 0.6 based on the testing, all of the questionnaire's questions were deemed credible.

Services Of Internal Medicine Clinic

Internal medicine clinic at dr. Efram Harsana Lanud Iswahyudi Air Force Hospital provides services beginning with the automatic queue machine turning on at 06.00 WIB, then the patient goes to the registration counter for registration, which begins at 07.00 WIB, and after registering, the patient goes to the waiting room of the internal medicine clinic to measure vital signs while waiting for the disease clinic, which begins at 10:00 am. The internal medicine clinic has two internal medicine specialists who alternate days of the week. The following is the flow of patient care in an internal medicine clinic:



Only patients who are required or recommended.

Figure 1. Internal Medicine Clinic Patient Service Flow

Characteristics Of Respondents

The characteristics of Study respondents in internal medicine clinics include the types of patient visits where most of the control patients (have visited internal medicine). Most of the respondents are aged over 46 years (early elderly). The gender of the respondents is mostly female. Most of the respondents' occupations are housewives (IRT). The education level of most of the respondents was junior high school (SMP).

Table 1
 Characteristics of Respondents

Criteria	Total	Percentage (%)
Type of Visits		
Control	117	84,2
First visits	22	15,8
Total	139	100
Age		
≥46 Years	128	92,1
<46 Years	11	7,9
Total	139	100
Sex		
Male	57	41
Female	82	59
Total	139	100
Occupation		
Housewife	49	35,3
Retired	5	3,6
Farmer	30	21,6
Civil servant	4	2,9
National army	9	6,5
Entrepreneur	42	30,2
Total	139	100
Last Education		
Elementary School	43	30,9
JHS	47	33,8
SHS	36	25,9
Universiity	13	9,4
Total	139	100

Service Waiting Time

The waiting time for internal medicine clinic services is calculated by adding the total waiting time in each service that must be passed or required by respondents who go to the internal medicine clinic in accordance with the flow of services for patients who want to go to the internal medicine clinic. The researcher follows actual patients who are willing to be Study respondents and have met the inclusion criteria in this study. The duration of internal medicine specialist services was not recorded in this study.

Table 2
 Waiting Time for Internal Medicine Clinic Services

Category	Waiting Time (Minutes)	
Average	315	
Longest duration	488	
Fastest duration	156	
Category	Total (n)	Percentage (%)
Long	71	51,1
Fast	68	48,9
Total	139	100

According to waiting time data for internal medicine clinic services, the average waiting time was 315 minutes, with the greatest duration being 488 minutes and the smallest period being 156 minutes. The researchers classified waiting times for internal medicine clinic treatments as lengthy or short. The waiting time is classified based on the findings of each respondent's waiting time duration compared to the average waiting time for service from all respondents. It is deemed "fast" if the result of comparing the respondent's waiting time to the average service waiting time of all respondents is less than, and it is deemed "long" if it is greater. Internal medicine

clinic waiting times varied widely among respondents, with 68 (48.9%) reporting a short waiting and 71 (51.1%), reporting a lengthy one.

In this study, the average total waiting time for internal medicine clinic services was longer than in Harada et al (2020), who discovered that the average total waiting time for internal medicine clinic services was 74 minutes. Sianturi et al (2020) discovered that 59.7% of a total of 62 Study respondents experienced a cumulative waiting time of more than 60 minutes at internal medicine clinic services.

The discrepancy in average waiting time between this study and prior studies is attributable to the fact that the starting time for internal medicine clinic services is at 10.00 WIB, whereas respondents began registering at the registration counter at 07.00 WIB. Second, not all survey participants require laboratory, radiology, or pharmacy services. Based on the characteristics of the respondents, 117

(84.2%) had this type of control visit, the majority of whom only took drugs to continue treating their illnesses and a small number of whom only asked for referrals to advanced health facilities without being given any drugs to take home.

Even though the responder did not use the laboratory, radiology, or pharmacy facilities, the waiting time from the registration desk to the appointment with an internal medicine expert was at least 156 minutes.

Patient Satisfaction Based on Waiting Time

According to a cross-tab study of waiting time and patient satisfaction, 40 respondents (28.8%) were dissatisfied with extended waiting times, while 31 (22.3%) were satisfied. With regard to rapid waiting times, 41 (29.5%) respondents were unsatisfied, whereas 27 (19.4%) respondents were satisfied.

Table 3
Cross Tab Analysis of Waiting Time on Patient Satisfaction

Kategori	Kepuasan Berdasarkan Waktu Tunggu				Total
	Tidak Puas		Puas		
	Jumlah	Persentase (%)	Jumlah	Persentase (%)	
Waktu Tunggu					
Lama	40	28,8	31	22,3	71
Cepat	41	29,5	27	19,4	68
Total	81		58		139

Aside from service waiting times, other factors can influence patient satisfaction. Patients are satisfied when there is a match between what they expect and what they receive during a health care process. (Dwi Lestari et al., 2020). A short waiting time has a significant impact on patient satisfaction. Patients are better happy if the time they spend waiting for health services is short. Patients, on the other hand, are disappointed if the waiting time is very long. Patient satisfaction drops by 3% for every 1% increase in waiting time duration. The typical amount of waiting time that patients can tolerate from the moment they leave the registration desk until they receive the last service they require is around 90 minutes.(Abdus-salam et al., 2021; Al-Harajin et al., 2019; Alarcon-Ruiz et al., 2019; Alrasheedi et al., 2019; Anyanwu et al., 2021; Sharma et al., 2022).

Some of the explanations cited to researchers by respondents were related to the lengthy waiting time, but the respondents were still satisfied. First, because these respondents are used to and frequently perform monthly controls, they believe that the waiting time for services at an internal medicine clinic is lengthy. Patient satisfaction might be affected by the amount of repeat visits. individuals who return to a health care facility are more likely to be satisfied than individuals who attend for the first time. individuals who have numerous visits to a health institution are more familiar with the duration, setting, and culture of service in the health facility than individuals who have never visited a health care center. (Al-Harajin et al., 2019; Davis-Dao et al., 2020; Sinyiza et al., 2022; Tenforde et al., 2020).

Second, responders are already comfortable with the services of internal medicine specialists, thus they are satisfied despite the lengthy wait. Patient satisfaction is affected by forms of communication ranging from the method of speaking, tone, attitude, and behavior of doctors in providing information and education about difficulties encountered by patients. Even if they have to waiting a long time, they can examine and choose which doctor they wish to

visit to cure their health concerns. (Borghi et al., 2019; Chandra et al., 2018; de Waard et al., 2018).

The researcher also recognized the reasons stated to the researchers by respondents who had a short waiting time but were dissatisfied. Respondents who had a short waiting but were dissatisfied did so because they had received treatment at other hospitals and compared the opening hours of internal medicine clinics at other hospitals to the opening hours of the internal medicine clinic at RSAU dr. Efram Harsana Iswahyudi Air Force Base. The findings of this study's respondents' opinions are consistent with the findings of Homma (2018) and Qiao (2019), who discovered that patients who had previous "doctor shopping" experiences at various health facilities were more easily dissatisfied because they had high expectations of the time they would spend waiting for and the services they would receive when visiting a health facility.

To investigate the influence of waiting time on patient satisfaction, a Chi square analysis was performed. With a significance value of >0.05, precisely 0.636, it is known that waiting time for services at internal medicine clinics has no effect on patient satisfaction.

Table 4
Chi Square Analysis of Waiting Time on Satisfaction

Category		
independent variable	Variabel Terikat	Sig.
Waiting Time	Patient satisfaction	0,636

Because there are other internal and external elements that can affect patient satisfaction in addition to waiting time, there is no effect of waiting time on patient satisfaction. External factors include waiting times, the frequency of repeat visits to the same hospital, the ethics of service, the cleanliness and completeness of facilities in a health service,

ease of access to and from health care facilities, and low costs. Internal factors include age, gender, education level, social life, and type of work. (Li et al., 2020; Quyen et al., 2021; Tesfaye Geta & Mekonnen Edessa, 2020; Zawisza et al., 2020).

The findings of this study are likewise consistent with studies by Jabour (2020) and Leow & Liew (2022), which discovered that waiting times had no impact on patient satisfaction. Age, gender, marital status, type of work, education level, type of clinic, type of sickness experienced, and expectations individuals had before to visiting a medical institution are just a few of the variables that can affect patient satisfaction. (H. Lee et al., 2022; S. Lee et al., 2020; Leow & Liew, 2022).

LIMITATIONS OF THE RESEARCH

The study's limitation is that it has not yet conducted an examination of the aspects that can affect patient satisfaction aside from the service waiting time factor.

CONCLUSIONS AND SUGGESTIONS

Patient satisfaction is determined not only by the length of time they must waiting for services; the waiting process is unpleasant for patients who have health concerns. Aside from waiting time, various factors, both internal and external, can influence patient satisfaction. These two factors can be explored further to determine how much influence each of these aspects has on patient satisfaction, which will be used as a reference in proposing ways to boost patient happiness that are not limited to the waiting time factor. Solutions based on this advanced study will have a good impact on business in the field of health services in the future since it can determine how much influence internal and external elements have on patient happiness, which is the key to the firm's continuation.

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