

## The Effect of Health Center Facilities on Patient Satisfaction in Ambulatory Installations

### *Pengaruh Fasilitas Puskesmas terhadap Kepuasan Pasien di Instalasi Rawat Jalan*

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#### Abstract

**Objective:** This study aims to analyze the effect of facilities on patient satisfaction at the Pandaan Health Center.

**Methods:** This type of research is a quantitative analytic cross-sectional design. The population numbered around 1,568 patients with a total sample of 94 patients in ambulatory installations. Sampling technique with accidental sampling. The instrument measurement scale uses a Likert scale. Primary data collection methods using questionnaires and data analysis kolmogorov smirnov data normality test, linearity test, spearman correlation and logistic regression enter method.

**Results:** The results showed that the variable of facilities proved to have an effect on patient satisfaction with a significant value ( $p=0.016$ ,  $POR=3$ ).

**Conclusion:** The health center facilities are one of the factors that influence patient satisfaction at the Pandaan Health Center.

**Keywords:** facilities, satisfaction, health center

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## Introduction

Health facilities such as hospitals, maternity hospitals, health centers and other health facilities play an important role in improving health services. According to data from the Central Statistics Agency, Indonesia has 55,543 health facilities consisting of hospitals, health centers, and other health facilities. The distribution of existing health facilities in Indonesia is very uneven where most of the health facilities in Indonesia are only estimated to be in certain areas. Improving the facilities and infrastructure of the public health center also needs to be done to prevent the emergence of obstacles in providing quality health services. By improving the facilities and infrastructure, it is hoped that the public health center will be able to anticipate various technical obstacles faced by patients in obtaining quality services<sup>1</sup>.

Health services provided to patients are reduced or not good and can affect patient satisfaction as customers or recipients of health services. In order for patients to get satisfaction in accordance with the needs and expectations of patients and improve their quality, community health centers need to pay attention to several important factors such as work productivity, quality of service, facilities and pay attention to good communication with patients<sup>2</sup>.

Some of the problems with Public Health Centers in Indonesia related to facilities and patient satisfaction occurred at the Muara Laung Health Center, most of the variable facilities felt that the service facilities obtained by respondents were still lacking, namely as many as 51 people (51%) where facilities were lacking, including at health promotion, counseling and laboratory facilities. Meanwhile, when viewed from patient satisfaction with the services provided by the community health center, the majority of respondents still felt unsatisfied, namely as many as 56 respondents (56%)<sup>3</sup>.

At the Karya Tani Public Health Center, East Lampung Regency, most of the patients were dissatisfied, as many as 34 respondents (54%). Patient dissatisfaction includes the punctuality of health workers arriving at the room when you need them, health workers meeting if called upon, health workers not offering help when patients are having difficulties, health workers not providing information about the patient's condition, inadequate vehicle parking spaces and health workers did not clearly explain the things that must be obeyed about child care<sup>4</sup>.

At the Segiri Health Center, Samarinda City, it was found that 47 respondents (68.1%) had poor service facilities with dissatisfied patient satisfaction. At the Segiri Health Center there are deficiencies, namely the health center does not have a waiting room that is inadequate for arriving patients and the patient examination rooms are not neatly arranged, in terms of the environment the health center is not clean all day long and medical support equipment. This means that the facilities provided are not fully in accordance with the wishes, expectations and needs of the patient<sup>5</sup>.

The next service standard which is a supporting factor for health services in public health centers is medical infrastructure which has certain inadequate standards where some additional infrastructure is needed<sup>6</sup>. One of the factors that is thought to influence patient satisfaction is the facility. Facilities are anything that makes it easier for patients to benefit from the services provided by public health centers. This means that the increase in the level of patient satisfaction can increase along with the increase in facilities<sup>3</sup>. This research is supported by the results of Astarman et al<sup>6</sup> research at the Indragiri Hulu district health center which was analyzed through the Smart PLS 3 application showing that the value of the facility variable on patient satisfaction is a t count value of  $5.164 > t \text{ table } 1.984$ . It can be interpreted that infrastructure facilities have a positive and significant effect on patient satisfaction.

The results of other studies that support them include: Byre<sup>7</sup> research at the Koeloda Health Center explains the statistical test results of the regression test for the completeness of the facility variable (x1) obtained a t count of 2.683 meaning  $t \text{ count} > t \text{ table } 1.671$  and significant value  $0.002 < 0.05$ . Wiranto et al<sup>8</sup> study explained that there was an indirect effect between facility performance on patient satisfaction at the Pasir Putih Health Center.

While Suparwo<sup>9</sup> study at the Noeranny Maternity Clinic showed an f count value of  $33.101 > f \text{ table } 3.090$  and a sig value smaller than the probability value of  $0.000 < 0.05$ . Thus it can be interpreted that there is a significant influence between the facility variable on patient satisfaction simultaneously and the variable Contribution of facilities and service quality on patient satisfaction, which is equal to 40.6%. While Retno and Pratama<sup>10</sup> research at Wijaya Kusuma Lumajang Hospital shows facility variables that have a significant level 0.000 this value is smaller than 0.05 ( $0.000 < 0.05$ ) with tcount

$18.363 > t \text{ table } 1.660$ . This means that  $H_0$  is rejected and  $H_a$  is accepted, so it can be said that facilities have a significant effect on customer satisfaction.

Based on initial observations with interviews conducted by researchers on 20 respondents at the ambulatory installation at the Pandaan Health Center, it was found that there were still complaints that patients were still unsatisfied where the service of health workers was not friendly, the waiting time was quite long, and the placement of seat facilities was still inefficient. poly and registration waiting room and many patients who choose to stand near the poly. Research related to the effect of facilities on patient satisfaction has never been carried out at the Pandaan Health Center. Based on the problems described by the researchers, the researchers were interested in conducting research on "The Effect of Facilities on Patient Satisfaction at the Pandaan Health Center".

## Methods

This research uses a quantitative analytical type of research with a Cross Sectional design and will be carried out in September-October 2021. The population in this study were all patients at the Pandaan Health Center ambulatory installation, totaling around 1,568 patients with a total sample of 94 patients at the Pandaan Health Center ambulatory installation using the Slovin formula.

Sampling technique with Accidental Sampling<sup>11</sup>. The inclusion criteria in this study were: 1) New patients who had received services at the Pandaan Health Center outpatient installation, 2) Patients who had previously used ambulatory services at the Pandaan Health Center, 3) Patients were conscious and able to communicate well, 4) Willing to be a research respondent. Exclusion criteria: 1) Patients under 17 years old, 2) Patients with mental disorders, 3) patients in critical condition.

The instrument measurement scale uses a Likert scale. The primary data collection method uses a questionnaire and data analysis uses SPSS 24 with the Kolmogorov Smirnov data normality test to check whether the data is normally distributed or not, Linearity Test, Spearman Correlation and to analyze the effect of facilities on patient satisfaction using the Logistic Regression Enter method.

## Results

### Univariate Analysis

**Table 1.** Frequency Distribution of Age, Education Level, Occupational Status of Patients

Variables	Frequency (n)	Percentage (%)
<b>Age</b>		
Young Adults	60	63,8
Old Adult	34	36,2
<b>Level of Education</b>		
Basic Education	19	20,2
Middle/High Education	75	79,8
<b>Occupation Status</b>		
Doesn't work	49	52,1
Work	45	47,9
<b>Total</b>	<b>94</b>	<b>100</b>

Based on table 1, the results show that most of the respondents are in the young category, with 60 respondents (63.8%), namely 17-40 years. Meanwhile, for the education level variable, most of the respondents were educated at the middle and high school levels, namely high school and university education, as many as 75 respondents (79.8%). In the employment status variable, most of them did not work, namely as many as 49 people (52.1%), namely housewives, students and the unemployed.

### Data Normality Test

After carrying out univariate data analysis, then a Normality Test was carried out to find out whether the data under study was normally or not normally distributed. The Normality Test in this study used the Kolmogorov-Smirnov Test because the number of samples was more than 50, namely the total number of 94 respondents.

**Table 2.** Results of Normality Test for Variable Data of Health Center Facilities and Patient Satisfaction

Variable	Mean	Median	SD	Min-Max	95% CI	Kolmogorov-Smirnov
Health Center Facility Score	27,96	28,00	3,030	20-36	27,34-28,58	0,001 (non-normal data distribution)

Patient Satisfaction Score	28,87	29,00	1,370	25-33	28,59-29,15	0,000 (non-normal data distribution)
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From the results of table 2, the results show that both the facility score and the patient satisfaction score have a p value  $<0.05$ , both data groups have abnormal data distribution so that the Pearson correlation test analysis cannot be used. Alternative spearman correlation test but must meet the requirements of linearity.

### Linearity Test

**Table 3.** Linearity Test Results for Variable Data of Health Center Facilities and Patient Satisfaction

Variable	R	F	df	Sig	Test Results
Scores of Health Center Facilities and Patient Satisfaction	0,398	0,524	94	0,903	Linear

From the results of table 3, the Deviation from Linearity Sig value is 0.903, which is greater than 0.05. So it can be concluded that there is a significant linear relationship between facility variables and patient satisfaction. The requirements for the linearity test are met, so that the Spearman correlation test can be used.

### Bivariate Analysis

**Table 4.** Results of Spearman Correlation Analysis of Facility Relationships with Patient Satisfaction at the Pandaan Health Center

Health Center Facilities	Patient Satisfaction
	$r=0,403$ $p=0,000$ $n=94$

### Spearman Correlation Test

From the results of table 4, the value of  $p = 0.000 < 0.05$  is obtained which indicates that the correlation between facilities and patient satisfaction is statistically significant. The Spearman correlation value of 0.403 indicates a positive correlation with a weak correlation strength.

**Table 5.** Results of Logistic Regression Analysis of the Effect of Facilities on Patient Satisfaction at the Pandaan Health Center

Factor	$\alpha$ (Constant)	$\beta$ (Coefficient)	p-value	POR
Less Facilities	-0,125	1,099	0,016	3,000

#### Logistic Regression Test

Based on table 5, the value of  $p = 0.016 < 0.05$  is obtained, so it can be concluded that there is an influence between the lack of facilities and patient satisfaction at the Pandaan Health Center. The value of  $POR = 3$  means that facilities that lack the risk of patients experiencing dissatisfaction are 3 times greater than those with good facilities.

#### Discussion

Facilities are anything that makes it easier for patients to benefit from the services provided by public health centers. This means that the increase in the level of patient satisfaction can increase along with the increase in facilities<sup>5</sup>. Patient satisfaction is important and widely used as an indicator of the quality of health services<sup>12,13</sup>. Satisfaction is a comparison of patient expectations and perceived experience of health services<sup>12,14,15</sup>. Most patients are dissatisfied and only a few patients are satisfied with the health services they receive. This can happen due to expectations that are too high or the experience they feel fails to live up to their expectations<sup>12</sup>.

Patient satisfaction is related to service quality which focuses on existing facilities in service facilities. By knowing the level of patient satisfaction, the management of health service facilities can improve the quality of service<sup>5</sup>. The results of this study also explained that there was an effect of lack of facilities on patient satisfaction at Pandaan Health Center with a significance value of  $p = 0.016 < 0.05$ .

Research that is in line with this research Ayranci and Atalay<sup>16</sup> explains that statistically significant factors of facilities on patient satisfaction are related to the context of the hospital, such as proper layout, guidelines, parking, lighting, and cleanliness, health care places must be hygienic and well designed, easy to find what one is looking for in the building, cleanliness toilets are maintained, There are sufficient and understandable guide signs, Adequate car parking facilities. Other research Javed, Liu and Mahmoudi<sup>17</sup> explained responsiveness of health care facilities being the most important factor

contributing to private hospital patient satisfaction among public sector hospitals, patients perceived reliability most strongly influenced satisfaction from hospital services.

According to Tanniru and Khuntia<sup>18</sup> explained that positive feedback about facilities has a positive effect on patient satisfaction, which means that the more positive feedback about facilities, the higher patient satisfaction. While the findings from research Danty<sup>19</sup> explaining the same thing there is a strong positive relationship between facilities and infrastructure simultaneously on customer satisfaction.

Hussain et al<sup>20</sup> dan Astarman, Triyono and Fitrio<sup>6</sup> describe good facilities such as complete medical equipment and physical infrastructure have a positive and significant effect on patient satisfaction as well as statements from Salihin et al<sup>21</sup> explained that the Public Health Center has several obstacles that are often complained about related to satisfaction, such as service time standards, speed, availability of facilities. Of course, not all of these reasons are true because the people who visit the Totolis Health Center are very dynamic. Sometimes the visits are many and sometimes few. Other studies that support the results of this study include: Adiyanto<sup>1</sup>, Putri, Ngaliman and Satriawan<sup>2</sup>, Byre<sup>7</sup>, Suparwo<sup>9</sup>, Tarjo<sup>22</sup>, Sie and Bernarto<sup>23</sup>, Novaliana et al<sup>24</sup>.

Physical facilities have an impact on patients. As per the general hospital context, patients face several problems regarding physical infrastructure, such as cleaning, poor ventilation problems, lack of proper seating, and poor bed conditions, and poor restroom conditions<sup>25</sup>. Some of the statements made by Hussein et al were in line and some contradicted the opinion of the researchers regarding the research findings at the Pandaan Health Center, namely that the facilities were in good condition in terms of cleanliness of toilet facilities and air ventilation in the poly waiting room.

However, it still needs to be improved on other facilities, especially the inadequate waiting room chairs. Apart from that, the layout of the waiting room chairs also needs to be considered, especially in the elderly polyclinic where elderly patients often suffer from hearing loss. The layout of the waiting room chairs that are too far from the poly room and the absence of loudspeakers when making patient calls causes patients to prefer standing near the poly room so they can still listen when the officer calls the patient. So it is necessary to readjust the room layout and waiting room chairs so that they can function more efficiently



## Conclusion

The variable that is proven to influence outpatient satisfaction at the Pandaan Health Center is the Facility variable. Suggestions for community health centers recommend maximizing the function of available waiting room facilities, especially for general polyclinics and the elderly. This can be done by placing chairs in the waiting room adjacent to the poly room. In addition, you can also add loudspeakers so that patients seeking treatment at general polyclinics and the elderly can hear when the patient's name is called. Suggestions for other researchers recommend that further research be carried out regarding other variables that affect patient satisfaction at public health centers such as competency, officer performance, effective communication, service quality, service waiting time.

## References

1. Adiyanto Y. Effect Of Service Quality and Facilities On Patient Satisfaction at Puskesmas Labuan. *J Manag Accounting, Econ busines*. 2020;01(03):83–96.
2. Putri IP, Ngalian, Satriawan B. Effect of Product, Quality of Service, and Facilities on Patient Satisfaction in Puskesmas Ranai–Natuna. *Int J Educ Rev Law Soc Sci*. 2022;2(1):189–96.
3. Arifin S, Rahman A, Muhyi R, Putri AO, Hadianor. Hubungan Usia, Tingkat Pendidikan, Fasilitas Kesehatan Dengan Kepuasan Pasien Di Puskesmas Muara Laung. *J Publ Kesehat Masy Indones*. 2019;6(2):40–5.
4. Zainaroh MA, Kusumaningsih DK. Hubungan Pelayanan Dan Fasilitas Kesehatan Dengan Kepuasan Pasien Pada Pelayanan Manajemen Terpadu Balita Sakit (Mtbs) Di Puskesmas Karya Tani Kabupaten Lampung Timur. *Malahayati Nurs J*. 2019;1(1).
5. Amary A, Suprayitno. Analisis Hubungan Fasilitas Terhadap Kepuasan Pasien Pengguna BPJS Di UPT Puskesmas Segiri Kota Samarinda. *Borneo Student Res*. 2021;2(2):1067–73.
6. Astarman, Triyono A, Fitrio T. The Effect of Competence, Infrastructure and Accessibility on Patients' Satisfaction at the Puskesmas in Kabupaten Indragiri Hulu. *Int J Sci Res Manag*. 2019;7(09).
7. Byre RO. The Influence of Completeness of Facilities, Quality of Service and Competence of Medical Personnel on Patient Satisfaction at the Koeloda Community Health Center, Golewa District, Ngada Regency. *Proc 3rd Int Conf Banking, Accounting, Manag Econ (ICOBAME 2020)*. 2021;169(Icobame 2020):21–5.
8. Wiranto U, Sarumi R, Lestrari DR, Sila A. Facilities and Work Behavior of Nurses on Patient Satisfaction through Nurse Performance at Pasir Putih Health Center. *J Sci Heal* [Internet]. 2022;2(1):57–66. Available from: <http://journal.pkpm.ac.id/index.php/JSH/article/view/58%0Ahttp://journal.pkpm.ac.id/index.php/JSH/article/download/58/24>
9. Suparwo A. The Effect of Facility and Services Quality on Patient Satisfaction in Noeranny ' s Maternity Clinic. *Enrich J Manag*. 2022;12(5):3592–8.
10. Retno W, Pratama MSR. The Influence of Services Quality and Facilities on

Patient Satisfaction at Wijaya Kusuma Hospital Lumajang, East Java. *Adpebi Int J Multidiscip Sci.* 2022;1(1):166–74.

11. Sugiyono, Puspandhani M. *Metode Penelitian Kesehatan*. Bandung: Alfabeta; 2020. 800 p.

12. Yusri CR, Hidayat M, Djuhaeni H. Role of Satisfaction with Health Care Services in Increasing Patient Loyalty: an Ambulatory Setting. *Althea Med J* [Internet]. 2017;4(3):329–34. Available from: <http://dx.doi.org/10.15850/amj.v4n3.1177>

13. Ferreira DC, Vieira I, Pedro MI, Caldas PV, Varela P. Patient Satisfaction with Healthcare Services and the Techniques Used for its Assessment: A Systematic Literature Review and a Bibliometric Analysis. *Healthc.* 2023;11(631):1–23.

14. Berhane A, Engusellasse F. Patient expectations and their satisfaction in the context of public hospitals. *Patient Prefer Adherence.* 2016;10:1919–28.

15. Shabbir A, Malik SA, Janjua SY. Equating the expected and perceived service quality: A comparison between public and private healthcare service providers. *Int J Qual Reliab Manag.* 2017;34(8):1295–317.

16. Ayranci E, Atalay N. Demographic Determinants of Patient Satisfaction: A Study in a Turkish Context. *Int J Acad Res Bus Soc Sci.* 2019;9(6):829–39.

17. Javed SA, Liu S, Mahmoudi A. Patients' satisfaction and public and private sectors' health care service quality in Pakistan: Application of grey decision analysis approaches. *Int J Health Plann Manage* [Internet]. 2019;34(1):1–14. Available from: <https://doi.org/10.1002/hpm.2629>

18. Tanniru M, Khuntia J. Dimensions of Patient Experience and Overall Satisfaction in Emergency Departments. *J Patient Exp.* 2017;4(3):95–100.

19. Danty KR. The Influence of Human Resources, Facilities and Infrastructure To Hemodialization Patient Satisfaction in Bhayangkara Hospital TK. 1 Raden Said Soekanto Jakarta. *AFEBI Manag Bus Rev.* 2019;4(1):126–31.

20. Hussain A, Asif M, Jameel A, Hwang J, Sahito N, Kanwel S. Promoting OPD patient satisfaction through different healthcare determinants: A study of public sector hospitals. *Int J Environ Res Public Health.* 2019;16(19):1–12.

21. Salihin, Baharuddin, Jusuf E, Azikin IS, Taufik M, Syarifuddin A. The Effect of Service Quality with Facilities on Patient Satisfaction through the Image of Public Health Centre. *Proc First Aust Int Conf Ind Eng Oper Manag.* 2022;2857–64.

22. Tarjo. The Effect of Service Quality and Facilities on Patient Satisfaction (Study at the Tanah Sepenggal Health Center in Bungo District). *Int J Hum Resour Stud.* 2020;10(3):190–205.

23. Sie MCS, Bernarto I. The Effect of Service Time, Facilities, Location, and Price Affordability on Patient Satisfaction at dr. Ranny Clinic. ... *Critics Inst* ... [Internet]. 2022;4455–66. Available from: <https://www.bircu-journal.com/index.php/birci/article/view/4155>

24. Novaliana I, Arintowati D, Bawono M, Ningtyas DA. The Effect of Quality of Services and Facilities on Patient Satisfaction During the Covid-19 Pandemic at Puskesmas Berbek Nganjuk Regency. In: *Proceedings of the 1st International Conference of Management and Business* [Internet]. Atlantis Press International BV; 2023. p. 163–70. Available from: [http://dx.doi.org/10.2991/978-94-6463-160-9\\_18](http://dx.doi.org/10.2991/978-94-6463-160-9_18)

25. Hussain A, Sial MS, Usman SM, Hwang J, Jiang Y, Shafiq A. What factors affect patient satisfaction in public sector hospitals: Evidence from an emerging economy. *Int J Environ Res Public Health.* 2019;16(944):1–14.