



BPJS Patients Satisfaction Analysis Towards Service Quality of Public Health Center in Surabaya

Didit Darmawan¹, Fayola Issalillah^{2*}, Rafadi Khan Khayru², Andi Raina Ananda Herdiyana³, Arif Rachman Putra¹, Rahayu Mardikaningsih¹, Ella Anastasya Sinambela¹

¹Program Study of Management, Faculty of Economics, Sunan Giri University, Surabaya, Indonesia

²Program Study of Medical Education, Faculty of Medicine and Health Sciences, Maulana Malik Ibrahim State Islamic University, Malang, Indonesia

³Department of Management, Leeds Beckett University

*Authors Correspondence: fayola.issalillah@gmail.com/085109214999

ARTICLE INFO

Article History:

Received Mar, 25th, 2022

Accepted Sept, 28th, 2022

Published online Dec, 30th, 2022

Keywords:

Patient satisfaction;

SERVQUAL;

CSI;

public health center;

BPJS health insurance;

ABSTRACT

Surabaya is a growing city and actively develop basic service innovations through Public Health Center (PHC) such as implementing E-Health services, *BPJS* p-care, including various quality health services and oriented in increasing patient, family, or public satisfaction in Surabaya. The purpose of the study was to identify the level of satisfaction of *Badan Penyelenggara Jaminan Sosial (BPJS)* and *non-BPJS* patients with the quality of health services at Manukan Kulon PHC. This research method was a cross-sectional study. The measuring satisfaction instrument used the patient satisfaction index (Customer Satisfaction Index (CSI)). Meanwhile, the satisfaction dimension used the SERVQUAL Principle by looking at the value of gap between expectation and reality from the aspects of responsiveness, tangibles, assurance, empathy, and reliability. The research sample was determined by simple random sampling and the total samples collected were 110 respondents (67 *BPJS* patients and 43 *non-BPJS* patients). The results showed that *BPJS* patients were more satisfied (CSI 83.9%) than *non-BPJS* patients (CSI 83.4%). Specifically, *BPJS* patients' satisfaction dimension gap related to responsiveness is (0.3), tangibles (-0.3), assurance (0.9), empathy (0.6), and reliability (-1.0). While *non-BPJS* patients have a satisfaction gap value for responsiveness (-0.1), tangibles (0.1), assurance (0.1), empathy (0.2), and reliability (0.1). This means that in general, *BPJS* and *Non-BPJS* patients are very satisfied with the health services of Manukan Kulon PHC. However, it is necessary to prioritize service improvement on the aspects of responsiveness, tangibles and reliability as expected by patients.

INTRODUCTION

Puskesmas, known as Public Health Center (PHC), plays an important role as a first-level health service with a purpose of maintaining the level of public health. Various health services at public health center have been provided based on service standard, including curative, rehabilitative, promotive and preventive. The target of this service was expected to cover all levels of society and meet the basic needs of public health.¹

As one of the big cities in Indonesia, PHCs in Surabaya have various developments of health facility in order to achieve optimal public health for their citizen. Currently, PHC in Manukan Kulon has existed since 1981 and has been equipped with supports, such as E-Health and *Badan Penyelenggara Jaminan Sosial (BPJS)* which can support the provision of health services. E-Health is an innovation of Surabaya Health Department in the form of integrated information technology that was launched on November 10, 2014.^{2,3} This program is more developed than the national health insurance application (*JKN mobile*) which introduced in 2017 and reported has data synchronization issues.² E-Health provides simpler registration service to PHC and can be accessed through the website on www.ehealth.surabaya.go.id, mobile application and outlet that are available at PHC in this city.⁴ Manukan Kulon PHC has the most E-Health users in 2018 with a total of 81,932. This program hopefully can overcome the entry load problem and queuing time as well as maintaining the quality of medical resumes which directly make it easier for patients to refer from public health center to hospital or vice versa.^{3,5}

In addition to E-Health, *Badan Penyelenggara Jaminan Sosial (BPJS)* is involved as one of the supporting health service components in Manukan Kulon PHC. *BPJS* is a Guaranteed health protection for Indonesian citizen who are members of this program. These members include everyone who pays according to the stipulation of contributions as well as certain people whose their contributions are paid by the government such as people who cannot afford or poor. *BPJS* services provided at PHC including outpatient costs, medicines and referrals to hospital. Unfortunately, this program still gets complaints from the public, especially policy issues that are not clear and considered unprofessional.⁶

The two supporting services at public health center, E-Health and *BPJS* health insurance, are expected to make it easier for patients to get health services. This is also expected to be one of the efforts in fulfilling the interest of health of every Indonesian citizen through facility and services throughout Indonesia as guaranteed in one of Indonesia regulation verse 34 paragraph 3. Always monitor which can be assessed from the level of patients' satisfaction.⁷

Patients' satisfaction is a condition that is felt by the patient after comparing the level of their expectations of the services provided with the reality that is felt after receiving the service. The level of satisfaction can be influenced by various factors, one of them is the quality of service from health facility. According to Maqsood et al. good service quality is very important in health facility because this factor has a positive effect on patients' satisfaction.⁸ Helia et al. also shows that the five aspects of service quality (responsiveness, tangibles, assurance, empathy and reliability) have an effect on patients' satisfaction at provincial hospital in DIY.⁹ Therefore, PHC is expected to provide quality services in order to fulfill patients' satisfaction.

Previous research related to the level of satisfaction of *BPJS* patients has been carried out several times in various regions. Research conducted by Astutik et al. showed that *BPJS* patient satisfaction had a significant Correlation to the service quality of PHC.¹⁰ Putri also found that the satisfaction level of *BPJS* patients was different from *non-BPJS* patients (general) at Boom Baru PHC in Palembang. *BPJS* patients are very satisfied (CSI = 80%) while regular patients are satisfied (CSI = 77%) with the gap for each dimension is positive which means the level of patients' satisfaction with the services provided by PHC has been fulfilled.¹¹ However, there has been no study on *BPJS* patients' satisfaction at PHC in Surabaya, especially Manukan Kulon PHC. Therefore, this study analyzed the satisfaction level of *BPJS* patients and *non-BPJS* patients based on the service quality of Manukan Kulon PHC in Surabaya.

MATERIAL AND METHOD

This cross-sectional study was conducted in December 2021 towards Manukan Kulon PHC patients as the population. Samples were taken from patients using E-Health and determined us-

ing Simple Random Sampling Technique with the minimum based on the Slovens Formula. The sample was 110 patients which divided into 67 patients with *BPJS* health insurance patients as group A and 43 patients without *BPJS* as group B. Ethical clearance of this study in the form of approval letter from chief of Manukan Kulon PHC and a contract sheet with the respondent as substitution of study ethical clearance during data collection. The questionnaire used in this study related to service quality as the independent variable and patients' satisfaction as the dependent variable. It is made based on 5 dimensions of SERVQUAL Parasuraman and has met the validity and reliability test standards. The questionnaire consisted of 20 items which are detailed as 4 items for each service quality dimension (responsiveness, tangibles, assurance, empathy, and reliability) and used the likert scale for patients' satisfaction (1 for strongly disagree until 5 for strongly agree).

The data obtained were analyzed using Customer Satisfaction Index (CSI) and service quality (SERVQUAL). CSI is calculated by the perception and expectation values of each item on the question, while the gap on SERVQUAL is obtained from the difference in perception and expectation of each component of the question and average value of gap in each dimension regarding the quality of service provided. The CSI method is more widely used in the assessment of service quality because it has greater influence on the level of patient satisfaction than other method like the Importance Performance Analysis (IPA) which focuses more on the value of the service itself. The calculation formula and its interpretation of each analysis method as follows:

$$CSI = \frac{T}{5 \times Y} \times 100\%$$

$$SERVQUAL = perception - expectation$$

T= Total of score

5= Maximum score of the measurement scale

Y= Total score of the expectation aspect

RESULTS

Patients' Characteristic

Based on the analyzed data in Table 2, most of the patients at Manukan Kulon PHC were women (*BPJS* 67.21%; *non-BPJS* 69.76%), aged 36 years old in the *BPJS* group (43.28%) and 25-35 years old in the *non-BPJS* group (46.51%). In addition, most of them are dominated by high school graduates (*BPJS* 38.80%; *non-BPJS* 34.88%) and unemployed which housewives make a major contribution to both groups (*BPJS* 62.68%; *non-BPJS* 43.18%).

The Satisfaction Level in *BPJS* Health Insurance Patients and Non-Insurance Patients Towards Service Quality of Manukan Kulon PHC

The measurement of patients' satisfaction is based on the CSI score derived from satisfaction dimension calculation, including aspects of responsiveness, tangibles, assurance, empathy, and reliability calculated according to the value gap between expectation and reality. According to the total expectation value (Y) and the total score (S) in Table 3, the patients' satisfaction of group A with *BPJS* health insurance patients were 83.91%. Meanwhile, the patients' satisfaction of group B patients without health insurance was slightly lower by 83.35%. These data show that the patients of Manukan Kulon PHC either *BPJS* or *non-BPJS* groups are very satisfied with the services provided.

Table 1. CSI Scale and SERVQUAL Score Interpretation

Interpretation	CSI Score (%)	Interpretation	SERVQUAL Score
Very Satisfied	81 – 100	Quality of service provided is beyond/better than the patient's expectations	(+)
Satisfied	66 – 80.9	Quality of service provided has met the patient's expectations	
Quite Satisfied	51 – 65.9	Quality of service provided has not met patient's expectations	(0)
Less Satisfied	35 – 50.9	Quality of service provided is beyond/better than the patient's expectations	(-)
Not Satisfied	0 – 34.9		

Source: Putri, 2021.¹¹

Table 2. The Description of Patients' Characteristic

Variable	Group A		Group B	
	(BPJS Health Insurance Patiens)		(Non-Health Insurance Patients)	
	n = 67	%	n = 43	%
Gender				
Men	22	32.83	13	30.23
Women	45	67.21	30	69.76
Age (Year)				
≤ 24	14	20.89	4	9.30
25-35	24	35.82	20	46.51
≥ 36	29	43.28	19	44.18
Education				
Elementary School	12	17.91	6	13.95
Junior High School	18	26.86	11	25.58
High School	26	38.80	15	34.88
College	8	11.94	10	23.25
Unschoolled	3	4.47	1	2.32
Profession				
Civil Servant	12	17.91	11	25
Private-Employee	5	7.46	4	9.09
Entrepreneurship	8	11.94	10	22.72
Unemployed	42	62.68	19	43.18

Source: Primary Data, 2021

Table 3. The Satisfaction Level in BPJS Health Insurance Patients (Group A) and Non-Insurance (Group B) Towards Service Quality of Manukan Kulon PHC

Dimension	Code	Group A			Group B		
		(BPJS Health Insurance Patients)			(Non-Health Insurance Patients)		
		Expectation	Perception	Score	Expectation	Perception	Score
Responsiveness	1.1	4.09	4.50	18.40	4.25	4.08	17.34
	1.2	3.94	4.37	17.21	4.43	4.12	18.25
	1.3	4.18	4.42	18.47	4.06	3.91	15.87
	1.4	3.87	4.19	16.21	3.86	3.77	14.55
Tangibles	2.1	3.92	3.68	14.42	3.92	4.01	15.71
	2.2	4.10	3.69	15.12	4.17	4.23	17.63
	2.3	3.98	3.61	14.36	4.43	4.50	19.93
	2.4	3.87	3.62	14.00	4.00	4.14	16.56
Assurance	3.1	3.90	4.73	18.44	4.34	4.46	19.35
	3.2	3.79	4.80	18.19	4.22	4.38	18.48
	3.3	3.81	4.73	18.02	3.97	4.14	16.43
	3.4	3.54	4.70	16.63	4.43	4.66	20.64
Empathy	4.1	3.87	4.64	17.95	4.04	4.20	16.96
	4.2	3.99	4.54	18.11	4.07	4.45	18.11
	4.3	4.02	4.55	18.29	4.10	4.31	17.67
	4.4	3.79	4.50	17.05	3.99	4.12	16.43
Reliability	5.1	4.42	3.74	16.53	3.89	4.04	15.71
	5.2	4.58	3.73	17.08	3.71	3.81	14.13
	5.3	4.31	3.71	15.99	3.63	3.69	13.39
	5.4	4.53	3.82	17.30	3.97	4.14	16.43
Total		80.5	84.27	337.77	81.48	83.16	339.57
CSI		$\frac{337.77}{5 \times 80.50} \times 100\% = 83.91\%$			$\frac{339.57}{5 \times 81.48} \times 100\% = 83.35\%$		

Source: Primary Data, 2021

The Satisfaction Gap Level in *BPJS* Health Insurance Patients and Non-Insurance Based on Five Dimensions of SERVQUAL

The SERVQUAL results which show the gap between the expectation of patients in groups A and B for the services provided and the perception that are felt after receiving services in accordance with Table 4. The *BPJS* group shows that the highest negative gap occurs in reliability dimension, specifically providing services suitable with patient needs (Code 5.2). Meanwhile, the highest positive gap is found in assurance dimension related to officer who is honest, friendly, polite and trustworthy (Code 3.4). In the *non-BPJS* group, the highest negative gap was found in the responsiveness dimension related to services which start on time (Code 1.2) while the highest positive gap was found in

the empathy dimension related to good attention from staff to patients (Code 4.2).

More detailed SERVQUAL analysis show that there is variance mean of level gap from each dimension. This is obtained from the difference between the average level of expectation and perception in accordance with Table 5. In general, many dimensions of service quality at Manukan Kulon PHC have exceeded patients' expectations either groups A or B. The highest value of positive gap is assurance dimension for group A and empathy dimension for group B. However, there are still some dimensions that have not met desired level of satisfaction which is presented by negative gap score. These dimensions include the dimensions of tangibles (-0.32) and reliability (-1.00) in group A and the dimension of responsiveness (-0.18) in group B.

Table 4. The Satisfaction Gap Level in *BPJS* Health Insurance Patients (Group A) and Non-Insurance (Group B) Towards 5 Dimensions of SERVQUAL from Manukan Kulon PHC

Dimension	Code	Group A (<i>BPJS</i> Health Insurance Patients)			Group B (Non-Health Insurance Patients)		
		Expectation	Perception	Gap	Expectation	Perception	Gap
		Responsiveness	1.1	4.09	4.50	0.41	4.25
	1.2	3.94	4.37	0.43	4.43	4.12	-0.3
	1.3	4.18	4.42	0.24	4.06	3.91	-0.1
	1.4	3.87	4.19	0.32	3.86	3.77	-0.1
Tangibles	2.1	3.92	3.68	-0.24	3.92	4.01	0.1
	2.2	4.10	3.69	-0.41	4.17	4.23	0.1
	2.3	3.98	3.61	-0.37	4.43	4.50	0.1
	2.4	3.87	3.62	-0.25	4.00	4.14	0.1
Assurance	3.1	3.90	4.73	0.83	4.34	4.46	0.1
	3.2	3.79	4.80	1.01	4.22	4.38	0.1
	3.3	3.81	4.73	0.92	3.97	4.14	0.1
	3.4	3.54	4.70	1.16	4.43	4.66	0.2
Empathy	4.1	3.87	4.64	0.77	4.04	4.20	0.1
	4.2	3.99	4.54	0.55	4.07	4.45	0.3
	4.3	4.02	4.55	0.53	4.10	4.31	0.2
	4.4	3.79	4.50	0.71	3.99	4.12	0.1
Reliability	5.1	4.42	3.74	-0.68	3.89	4.04	0.1
	5.2	4.58	3.73	-0.85	3.71	3.81	0.1
	5.3	4.31	3.71	-0.60	3.63	3.69	0.1
	5.4	4.53	3.82	-0.71	3.97	4.14	0.1
Total		80.50	84.17	22.88	81.48	83.16	1.68

Source: Primary Data, 2021

Table 5. Average SERVQUAL for Each Dimension of Service Quality at Manukan Kulon PHC

Dimension	Group A (<i>BPJS</i> Health Insurance Patients)				Group B (Non-Health Insurance Patients)			
	\bar{x} E	\bar{x} P	\bar{x} Gap	Rank	\bar{x} E	\bar{x} P	\bar{x} Gap	Rank
	Responsiveness	4.02	4.37	0.35	3	4.15	3.97	-0.18
Tangibles	3.97	3.65	-0.32	4	4.13	4.22	0.09	4
Assurance	3.76	4.74	0.98	1	4.24	4.41	0.17	2
Empathy	3.92	4.56	0.64	2	4.05	4.27	0.22	1
Reliability	4.46	3.45	-1.00	5	3.80	3.92	0.12	3

Source: Primary Data, 2021

DISCUSSION

The results showed that patients were very satisfied with the quality of service provided by Manukan Kulon PHC (CSI *BPJS* 83.91%; CSI *non-BPJS* 83.35%). It is different from another study on the satisfaction level of patients at Jagir PHC in Surabaya with CSI score by 74.8% which is classified as satisfied.¹² A high level of patients' satisfaction in Manukan Kulon PHC will make a positive influence on patients' trust and loyalty so that long-term visit will occur.¹³

In general, the average result of the gap for each dimension is positive which indicates the service provided are in accordance with the patient's expectations, namely the dimensions of tangibles, assurance, empathy, and reliability. Unfortunately, there is a negative gap on the responsiveness dimension. This occurs due to the influence of several factors such as those related to the lack of human resource management at PHC so that the response given is not based on the patients' expectations. If this is not handled immediately, it will affect the patients' decision to revisit this PHC.^{13,14}

Specifically, there are differences in the level of satisfaction in each dimension component. The responsiveness dimension related to the speed and accuracy of patient care which includes timely services, information conveyed clearly and easily to understand, officers who are responsive and quick to handle patients' complaint and service that consistent to schedule. Negative gap values are observed in several aspects of responsiveness in the non health insurance patients, such as explanation of service procedures that are difficult to understand (code 1.1), attitude and willingness in patient care (code 1.2), attitudes and response of doctors when facing patients' health problems (code 1.3) and explanation of drug information by pharmacists (code 1.4). Meanwhile, the *BPJS* group has positive gap value in all aspects of responsiveness. This indicates the need to improve related aspects of responsiveness, especially non health insurance patients because each component of this dimension has significant correlation with patients' satisfaction. Putri also found that responsiveness was in line with patients' satisfaction, where the faster the service was carried out, the more satisfied patients would be. On the other hand, patients become dissatisfied if the officers are not

responsive in providing services as happened at Manukan Kulon PHC.¹¹

Tangibles of service includes the quality of existing facility such as waiting room, availability of parking space, clean medical equipment, and clean as well as tidy staff clothes. Parasuraman explained that the tangibles dimension is the most important aspect in determining service quality. Unfortunately, the level of patients' satisfaction on this dimension has not been met, such as aspects of cleanliness and appearance of officers (code 2.1), cleanliness of waiting room (code 2.2), completeness of emergency equipment (medical oxygen regulator, wheelchairs, etc) (code 2.3) and availability of parking space. (code 2.4). Clean, complete and advanced facility, such as E-health as well as the cleanliness of existing staff can make patients comfortable so that satisfaction will be achieved. Meanwhile, Kitapci et al. added that patients who are not satisfied with the public health center facility can be caused by the waiting room which is not regularly cleaned and the number of trash bins is minimal so that the patient becomes uncomfortable.¹⁵

The assurance dimension relates to patients' trust, such as providing guarantee if there is an error during service, courteous and competent staff, available medicine according to standards and the cost of services according to the quality received by the patient. The results obtained in this study are correspondent with Putri who found that these dimensions have given satisfaction to *BPJS* and *non-BPJS* patients at Boom Baru PHC in Palembang.¹¹

The empathy dimension of service quality includes good attention from officers, good communication between patient and staff and the convenience provided during service in order to understand the patients' wishes. The results obtained are supported by Kitapci et al. where empathy is directly related to patients' satisfaction. Good relation between officers and patients will create sincere personal concern for patients so that satisfaction will be achieved.¹⁵

Reliability consists of appropriate, orderly, neat and uncomplicated services and based on the needs of patients. This study shows that *BPJS* patients' satisfaction is not achieved on this dimension due to several complaints which include lack of discipline in service time (code

5.1), complicated patients' registration (code 5.2), lack of doctor explanation about patients' condition (code 5.3), and queue occurred during drug collection and registration (code 5.4). This has an effect in achieving patients' satisfaction. Accurate service consistency is an important aspect of reliability. This dimension has correlation with patients' satisfaction.^{16,17} Accurate service on the patients' first visit will determine the level of patients' satisfaction which is supported by the ease and speed of the service. Patients' satisfaction that has not been achieved in the reliability dimension of *BPJS* group also occurs in other studies, such as Arma et al. This study shows that the complaints felt by *BPJS* patients include complicated patient registration, the doctor's arrival time is not on time and queue occur during Medicine Taking and registration.¹⁰ With the E-Health at Manukan Kulon PHC, these problems can be overcome by that technology which helps the service process faster.

These findings above have shown the importance of knowing every dimension of service quality on the level of satisfaction of *BPJS* and non-health insurance patients. Dimension that still have a negative average gap, such as tangibles, reliability for *BPJS* patients and responsiveness for non-health insurance patients, need urgent improvement. In addition, dimensions that already have a positive average gap, such as responsiveness, assurance, empathy for *BPJS* patients and tangibles, assurance, empathy, reliability for non-healthcare patients, are important to maintain the service quality according to related components.

CONCLUSION AND RECOMMENDATION

The satisfaction level of Manukan Kulon PHC patients either *BPJS* or *non-BPJS* patients is very satisfied with only dimensions of tangibles and empathy in the *BPJS* group and responsiveness in the *non-BPJS* group which still does not meet the expectations desired by the patient. Therefore, the development of service quality related to innovative facility such as E-Health, speed and accuracy of *BPJS* services, and good attention to patients so that the expected satisfaction target can be achieved. Indirectly, this will play a role in achieving the highest degree of public health in Indonesia.

ACKNOWLEDGMENTS

Many supports from various people have helped in this study. We would like to express our appreciation for the head of Manukan Kulon Public Health Center, Surabaya along all health workers who helped to carry out this study.

AUTHOR CONTRIBUTIONS

DD, FI, RKK and ARAH designed the experiments; FI, RKK, ARP, RM, and EAS performed the experiments; DD, RKK, ARAH analyzed the data; DD and FI wrote the paper. DD = Didit Darmawan; FI = Fayola Issalillah; RKK = Rafadi Khan Khayru; ARAH = Andi Raina Ananda Herdiyana; ARP = Arif Rachman Putra; RM = Rahayu Mardikaningsih; EAS = Ella Anastasya Sinambela.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

REFERENCES

1. Agustina R, Dartanto T, Sitompul R, Susiloretni KA, Suparmi, Achadi EL, et al. Universal Health Coverage in Indonesia: Concept, Progress, and Challenges. *The Lancet*. 2019. 393. [https://doi.org/10.1016/S0140-6736\(18\)31647-7](https://doi.org/10.1016/S0140-6736(18)31647-7)
2. Prabowo SA, Rizky M. Implementasi E-Health Sebagai Alternatif Antrian Online di Puskesmas Kalirungkut Kota Surabaya. *J Syntax Transform*. 2020;1(2):66–73. <https://doi.org/10.46799/jst.v1i2.19>
3. Pamungkas A, Priyadi B, Herawati A. Analisis Efektivitas Pengguna Program Mobile Jaminan Kesehatan Nasional di badan Penyelenggaraan Jaminan Sosial Kesehatan Cabang Semarang. *J Public Policy Manag Rev*. 2022;11(4):408–421. [10.14710/jppmr.v11i4.36200](https://doi.org/10.14710/jppmr.v11i4.36200)
4. Agastya KP, Fanida EH. Penerapan Layanan E-Health di Puskesmas Jagir Kelurahan Jagir Kecamatan Wonokromo Kota Surabaya. *J Fak Ilmu Sos dan Huk*. 2016;1(1). <https://doi.org/10.26740/publika.v4n5.p%25p>
5. Putri YA, Budiarto W. Literature Review: The Implementation of E-Health at Primary Healthcare Centers in Surabaya City. *J Adm*

- Kesehat Indones.* 2020;8(1).
<https://doi.org/10.20473/jaki.v8i1.2020.40-55>
6. Bintang HJ. Peran Hukum Kesehatan dalam Melindungi Peserta Program Badan Penyelenggara Jaminan Sosial Kesehatan (Studi di RSUD Dr. Pirngadi Medan). *J Huk Responsif*. 2017;4(4):34-47.
<https://jurnal.pancabudi.ac.id/index.php/hukumresponsif/article/view/625>
 7. Undang-Undang Dasar Pasal 34. Perekonomian Nasional dan Kesejahteraan Sosial. 1945.
 8. Maqsood M, Maqsood H, Kousar R, Jabeeb C, Waqas A, et al. Effects of Hospital Service Quality on Patients Satisfaction and Behavioural Intention of Doctors and Nurses. *Saudi J Med Pharm Sci*. 2017;3(Jun):556-567.
https://saudijournals.com/media/articles/SJMPS_36B556-567.pdf
 9. Asnawi AA, Awang Z, Afthanorhan A, Mohamad M, Karim F. The Influence of Hospital Image and Service Quality on Patients' Satisfaction and Loyalty. *Manag Sci Lett*. 2019;9(56). [10.5267/j.msl.2019.2.011](https://doi.org/10.5267/j.msl.2019.2.011)
 10. Astutik EE, Amrullah AE, Madijanto S. Hubungan Mutu Pelayanan Kesehatan dengan Kepuasan Pasien Peserta BPJS Rawat Jalan di Puskesmas. *J Kesehat dr Soebandi*. 2020;8(2):158-136.
<https://media.neliti.com/media/publications/468617-relationship-between-health-service-qual-34ef9ded.pdf>
 11. Putri UM. Analisis Kepuasan Pelayanan Puskesmas Terhadap Pasien BPJS dan Non BPJS Menggunakan Metode Servqual. *J Manaj Inform dan Sist Inf*. 2021;4(2):149-159.
<https://e-journal.stmiklombok.ac.id/index.php/misi/article/view/355>
 12. Dewi RM, Lukmandono L PA. Penentuan Prioritas Perbaikan Kualitas Public Service dengan Metode Customer Satisfaction Index, Importance Performance Analysis dan Potential Gain in Customer Value (Studi Kasus: Puskesmas Jagir Surabaya). In: Seminar Nasional Sains dan Teknologi Terapan. 2021;9(1):15-21.
 13. Darmawan D. The Effect of Customer Satisfaction on Trust and Customer Loyalty. *Management & Accounting Research Journal*. 2019;03(02):1-8.
<https://jurnal.ikbis.ac.id/global/article/view/237>
 14. Ferrinadewi E, Darmawan D. Perilaku Konsumen: Analisis Model Keputusan. Yogyakarta: Universitas Atma Jaya; 2004.
 15. Kitapci O, Akdogan C, Dortyol İT. The Impact of Service Quality Dimensions on Patient Satisfaction, Repurchase Intentions and Word-of-Mouth Communication in the Public Healthcare Industry. *Procedia - Soc Behav Sci*. 2014;148:161-169.
<https://doi.org/10.1016/j.sbspro.2014.07.030>
 16. Anjayati S. Review Artikel: Analisis Kualitas Pelayanan Terhadap Kepuasan Pasien di Puskesmas Menggunakan metode Servqual. *Nurs Care Heal Technol J*. 2021;1(1):31-38.
<https://doi.org/10.56742/nchat.v1i1.7>
 17. Supandri O, Ketaren O, Veronika LR. Perbedaan Kualitas Pelayanan pada Pasien BPJS dan Pasien Umum Rawat Inap di Rumah Sakit Muhammadiyah Medan Tahun 2019. *J Ilm Simantek*. 2019;3(2):48-60.
<https://simantek.sciencemakarioz.org/index.php/IJK/article/view/71>