Paper Type: Research Article

Application of Importance Performance Analysis Method in Measuring the Level of Community Satisfaction with the Quality of Service of the Minasa Upa Public Health Center

Resti Wulandari Muchlis[1*], Anis Saleh[2*], Muhammad Fachry Hafid[3*]

[1,2,3] **Jurusan Teknik Industri, Fakultas Teknologi Industri, Universitas Muslim Indonesia, Makassar, Indonesia.**
Email Address: restiwulandarimuchlis@gmail.com[1*], anis.saleh@umi.ac.id[2*], muh.fachryhafid@umi.ac.id[3*]

*Corresponding author: anis.saleh@umi.ac.id

Abstract

Purpose: The purpose of this study was to measure the level of patient satisfaction with service quality at the Minasa Upa Health Center.
Design/methodology/approach: This study uses the Importance Performance Analysis (IPA) method to measure community satisfaction with service quality. Data was obtained by distributing questionnaires. Five dimensions are measured: tangible variables, reliability, responsiveness, assurance, and empathy.
Findings: The results of this study indicate that the quality of service at the Minasa Upa Public Health Center in terms of five dimensions results in a perception value below the expected value. These results suggest that patient satisfaction with services at the Minasa Upa Health Center in Makassar city still needs to be fulfilled.
Research limitations/implications: This research was fieldwork at the Minasa Upa Public Health Center. The respondents in this study were people who had visited or received treatment at the Minasa Upa Public Health Center, as many as 100.
Originality/value: Public Health Center describes a public service engaged in health services that has an essential role in the National Health System. Public Health Center is a health service provider organization that exists in all regions. The quality of service at the Minasa Upa Public Health Center is still not good, as evidenced by the perceived value, which is still below the expected value and has led to decreased public confidence in seeking treatment at the health center. So, this can affect the decline in health levels in the community. In addition to this, facilities and infrastructure factors still do not satisfy service users.
Keywords: Quality, Service, Importance Peformance Analysis

1. Introduction

Health business is the right of the community to obtain health services, and public awareness to get their rights is increasing (Yesinda & Murnisari, 2018). Health services are services that are very much needed by the community. One health service that has an important position in society is the public health center (Wahyudin et al., 2022).

The public health center is the spearhead to determining the sustainability of the treatment process at stage one (initial) or the end of treatment (in a healthy condition), where the Public health center has a tremendous responsibility for the sustainability of health in a specific area (Purwanto & Sugiarto, 2022)

Public health center Minasa Upa is a treatment (inpatient) Public health center with additional rooms and facilities to save emergency patients. The actions provided are limited operative actions and temporary hospitalization.

Poor health services can reduce public confidence in seeking treatment at the public health center, which can affect the decline in the level of health in the community because many diseases will not be resolved. A decrease in the number of community visits to public health centers can be caused by community dissatisfaction with public health center services. This dissatisfaction indicates that the services provided by the health center have yet to meet community expectations (Muazansyah & Sudirman, 2019).

Based on this, to determine the level of community satisfaction, the Importance Performance Analysis (IPA) method is used. This method is a measurement method to determine the gap between the performance of a variable and employee expectations of that variable. The IPA method was chosen in processing the data for this study because this analytical tool is a straightforward application technique for measuring variables of importance and satisfaction.

Based on these problems, the authors are motivated to choose the research title "Application of the IPA (Importance Performance Analysis) Method in Measuring the Level of Community Satisfaction with the Quality of Service of the Minasa Upa Public Health Center."

2. Literature Review

2.1. Definition of Public Health Center

Public Health Center is one of Indonesia's most important public health service facilities. Public Health Center is a technical implementation unit of the district/city office responsible for organizing health development in a working area. The grouping of Public Health Center is based on specific characteristics, which in this case are regulated in PMK Number 75 of 2014, as described in article 20 to article 31 of the regulation (Niawati et al., 2020).

Public Health Center, as the first and foremost level health service unit in the health service system, must carry out mandatory health efforts and several optional health efforts tailored to the conditions, needs, demands, abilities, and innovations as well as local government policies (Luthfia & Alkhajar, 2019), (Hariyoko et al., 2021).

Public Health Centers are responsible for maintaining public health in their working areas. Following its mission, the health center must provide good and quality services to improve the community's and its environment's health (Eninurkhayatun et al., 2017).

Quality health services are health services that can satisfy every user of health services following the average level of satisfaction of the population and whose implementation follows established professional standards and codes of ethics. The quality of health services focuses on the concept of health services, which consists of three principal foundations: service quality, access, and cost. The quality of health services refers to the perfection of health services in causing a sense of satisfaction in each patient. The more perfect the satisfaction, the better the quality of health services (Budhiana & Wahida, 2019), (Nasution et al., 2022).

2.2. Service Quality

According to (Safira et al., 2021) Service quality is the fulfillment of customer needs and desires and the accuracy of their delivery to balance customer expectations. Service quality can be known by comparing consumers' perceptions of the services received with the services consumers expect from a company's service attributes.

The company creates the importance of service quality so that customers feel satisfied with every service provided (Wianti et al., 2021). In general, health services organized by the public health center include curative (treatment), preventive (prevention efforts), promotive (health improvement), and rehabilitation (health recovery) services (Ramadhan et al., 2021).

Health services are essential in improving the degree of health and welfare of every human being worldwide. Everyone has the right to obtain health services, and the government is responsible for the availability of quality, safe, efficient, and affordable health efforts for all levels of society. One of these efforts is to increase the availability and equitable distribution of basic healthcare facilities, such as health centers in each region (Umam et al., 2019).

Five main dimensions explain service quality, known as service quality (servqual), namely physical evidence (tangible), reliability, responsiveness, assurance, and empathy (Along, 2020).

2.3. Public Health Center Facilities

Facilities are physical equipment to support the comfort provided by selling services to satisfy customers (Rizal, 2020). Facilities are physical equipment that must exist before a service can be offered.

Because the form of service cannot be seen, smelled, and touched, physical condition is vital as a measure of service (Rakib et al., 2022).

Facilities are also one of the most critical components in meeting patient satisfaction; the facilities in question are the provision of seating, facilities for obtaining information, as well as providing facilities for patients who are in the waiting period to be able to carry out services for their health, this facility aims to make patients not feel bored while waiting for their queue (Febriawati & Yandrizal, 2019).

In the Public health center, there are two types of hospitalization; the first is class III hospitalization which consists of a room, patient meal costs, doctor visits, supervision services, and doctor consultations. While the second hospitalization is class II, which consists of a room, patient meal costs/times/person, doctor's visits, medical supervision services, and doctor consultation. A doctor leads public health center type B on a non-full-time basis. Treatment at public health center for some people is more practical and comfortable (Febriawati & Yandrizal, 2019).

2.4. Purpose of performance measurement

Quality measurement is essential for all companies in the product and service sectors. Here are some of the objectives of measuring service quality that need to be known (Niawati et al., 2020):

a. Every service activity or action by a service provider organization needs to be measured to detect and know the actual achievements that have been achieved in relation to the organization's vision, mission, and objectives. Often organizations do not optimally achieve the expected performance, not because of the limitations or capabilities of the organization, but because the organization pays little attention to measuring its service performance so that the organization does not understand what has been achieved and what has not been achieved. As a result, organizations need clear improvement targets.

b. Measurement is fundamental to determine the achievement and ensure work patterns, standards, or service processes. With measurement, it will be known whether the measures that have been set can be carried out properly at the operational level, whether the use and utilization of resources for the service process is effective and efficient, and whether the implementers have compliance and commitment following the existing service orientation. Data and information genuinely understand the organization's learning and development process.

2.5. Community Satisfaction

Community satisfaction is the result of the community's assessment of health services by comparing what is expected according to the reality of health services received in a health service setting, besides that community satisfaction is the level of community feelings that arise as a result of the performance of health services obtained, after the community compares with what it expects (Budhiana & Wahida, 2019). Community satisfaction is an essential key to improving the quality services in health services (Kotler & Armstrong, 2018).

2.6. Importance Performance Analysis

The Importance Performance Analysis (IPA) method, first developed by John A. Martilla and John C. James, originated from the concept of Service Quality (SERVQUAL). This method contains how to translate what consumers want as measured concerning what companies must do to produce tangible and intangible products (Sirajuddin et al., 2022). Suppose the concept of Service Quality (SERVQUAL) only analyzes the gap or gap that occurs between consumer desires or expectations and the performance that the company has provided in the Importance Performance Analysis (IPA) concept. In that case, we analyze the level of importance of a variable in the eyes of consumers with the company's performance.

The information obtained from data processing is depicted on an IPA diagram that shows consumer satisfaction and expectations. The IPA diagram is divided into four quadrants to analyze and suggest strategies that can be done quickly, namely Quadrant A, Quadrant B, Quadrant C, and Quadrant D. Each quadrant has a role as a service or product that is assessed. The average results of the overall calculation are then depicted in the Cartesian Diagram (Ramadhanti & Marlena, 2021).

3. Research Methodology

The research method used is descriptive quantitative based on the IPA (Importance Performance and Analysis) method. The research was conducted at the Minasa Upa Public Health Center, Rappocini District, Makassar City, South Sulawesi Province (Jl. Minasa Upa Raya No. 18). Sampling was done using the Slovin

formula. The sampled respondents were patients who had previously visited the Minasa Upa Public Health Center. The sample size of this study was 100 respondents. Data analysis techniques based on Importance Performance Analysis (IPA) by displaying a cartographic diagram comparing the satisfaction and performance of patient services at the Minasa Upa Health Center by measuring five variables, tangible, reliability, responsiveness, assurance, and empathy.

4. Result And Discussion
4.1. Questionnaire Recapitulation

Data will be collected from questionnaires distributed to 100 patients in this questionnaire data recapitulation.

Table 1. Questionnaire Recapitulation

Code	Question	Perception					Expectation				
		1	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**	**5**
		STP	**TP**	**CP**	**P**	**SP**	**STP**	**TP**	**CP**	**P**	**SP**
Tangible											
X1	Service facilities in the form of seating	2	10	5	40	43	1	1	5	41	52
X2	The waiting room and inside the health center are clean	1	8	6	42	43	1	1	5	43	50
X3	The appearance of Minasa Upa Health Center employees is clean and neat	1	5	6	45	43	1	1	6	45	47
Realibility											
X4	Health center operating hours must be on time	0	7	0	55	38	0	2	0	53	45
X5	The payment flow of the health center should be easy	1	4	10	35	50	1	2	9	36	52
X6	Services provided by Minasa Upa Health Center employees must be as promised	1	3	4	40	52	3	1	4	38	54
Responsive											
X7	Employees must be responsive in providing services to the community	2	10	5	40	43	2	2	5	42	49
X8	Employees process queue numbers quickly and straightforwardly.	1	8	6	42	43	1	1	6	43	49
X9	Staff must respond quickly to problems faced by the community	0	7	0	55	38	0	2	0	55	43
Assurance											
X10	Public health center staff must be able to handle the needs of the community	1	4	10	35	50	0	2	10	36	52
X11	There must be a match between the cost of treatment and the convenience of the community	1	3	4	40	52	1	1	4	41	53
Empathy											
X12	Public health center staff must care about community complaints	1	12	3	45	39	1	2	3	46	48
X13	Public health center staff must be friendly in serving the community	0	5	3	44	48	1	1	3	43	52

4.2. Validity Test

The validity test is carried out to determine whether the measuring instrument used produces a value by the purpose of the measuring instrument and the extent to which the data obtained can represent the entire population to be analyzed.

Table 2. Perception Validity Test

Code	r-count	r-table	Result
X1	0.542	0.256	Valid
X2	0.477	0.256	Valid
X3	0.360	0.256	Valid
X4	0.529	0.256	Valid

Code	r-count	r-table	Result
X5	0.479	0.256	Valid
X6	0.509	0.256	Valid
X7	0.542	0.256	Valid
X8	0.477	0.256	Valid
X9	0.529	0.256	Valid
X10	0.479	0.256	Valid
X11	0.509	0.256	Valid
X12	0.500	0.256	Valid
X13	0.351	0.256	Valid

Table 3. Validity Test of Expectations

Code	r-count	r-table	Result
X1	0.585	0.256	Valid
X2	0.532	0.256	Valid
X3	0.457	0.256	Valid
X4	0.537	0.256	Valid
X5	0.527	0.256	Valid
X6	0.434	0.256	Valid
X7	0.373	0.256	Valid
X8	0.583	0.256	Valid
X9	0.514	0.256	Valid
X10	0.506	0.256	Valid
X11	0.415	0.256	Valid
X12	0.237	0.256	Valid
X13	0.456	0.256	Valid

4.3. Instrument Reliability Test Results

Reliability testing carried out in this study is to determine the reliability of the questionnaire by paying attention to the reliability coefficient, which helps to know the consistency of respondents' answers.

Table 4. Output of Perception Reliability Test

No	Indicator	CA-count	Cronbach's alpha	Result
1.	Tangible	0,7133	0,6	reliabel
2.	Realibility	0,7057	0,6	reliabel
3.	Responsive	0,7057	0,6	reliabel
4.	Assurance	0,7075	0,6	reliabel
5.	Empathy	0,7165	0,6	reliabel

Table 5. Output of Expectation Reliability Test

No	Indicator	CA-count	Cronbach's alpha	Result
1.	Tangible	0,6783	0,6	reliabel
2.	Realibility	0,6847	0,6	reliabel
3.	Responsive	0,6850	0,6	reliabel
4.	Assurance	0,6880	0,6	reliabel
5.	Empathy	0,7035	0,6	reliabel

4.4. GAP Analysis

Gap Analysis is a measurement method to determine the gap between the performance of a variable and consumer expectations of that variable. Gap Analysis is part of the Importance Performance Analysis (IPA) method.

Table 6. Level of Consumer Satisfaction Dimensions of Physical Evidence (Tangible)

Code	Dimension	Mean Perception (P)	Mean Expectation (E)	GAP (P-E)	Description
Tangible					
X1	Service facilities in the form of seating	4.12	4.42	-0.3	Dissatisfied
X2	The waiting room and inside the health center are clean	4.18	4.40	-0.22	Dissatisfied

Code	Dimension	Mean Perception (P)	Mean Expectation (E)	GAP (P-E)	Description
X3	The appearance of Minasa Upa Health Center employees is clean and neat	4.24	4.36	-0.12	Dissatisfied
	MEAN	4.18	4.39		

Table 7. Consumer Satisfaction Level of the Reliability Dimension

Code	Dimension	Mean Perception (P)	Mean Expectation (E)	GAP (P-E)	Description
	Reability				
X4	Health center operating hours must be on time	4.24	4.41	-0.17	Dissatisfied
X5	The payment flow of the health center should be easy	4.29	4.36	-0.07	Dissatisfied
X6	Services provided by Minasa Upa Health Center employees must be as promised	4.39	4.39	0	Dissatisfied
	MEAN	4.31	4.39		

Table 8. Consumer Satisfaction Level of Responsiveness Dimension

Code	Dimension	Mean Perception (P)	Mean Expectation (E)	GAP (P-E)	Description
	Responsive				
X7	Employees must be responsive in providing services to the community	4.12	4.34	-0.22	Dissatisfied
X8	Employees process queue numbers quickly and straightforwardly.	4.18	4.38	-0.2	Dissatisfied
X9	Staff must respond quickly to problems faced by the community	4.24	4.39	-0.15	
	MEAN	4.18	4.37		

Table 9. Consumer Satisfaction Level of the Assurance Dimension

Code	Dimension	Mean Perception (P)	Mean Expectation (E)	GAP (P-E)	Description
	Jaminan (Assurance)				
X10	Public health center staff must be able to handle the needs of the community	4.29	4.38	-0.09	Dissatisfied
X11	There must be a match between the cost of treatment and the convenience of the community	4.39	4.44	-0.05	Dissatisfied
	MEAN	4.34	4.41		

Table 10. Consumer Satisfaction Level of the Empathy Dimension

Code	Dimension	Mean Perception (P)	Mean Expectation (E)	GAP (P-E)	Description
	Jaminan (Assurance)				
X12	Public health center staff must care about community complaints	4.09	4.38	-0.29	Dissatisfied
X13	Public health center staff must be friendly in serving the community	4.35	4.44	-0.09	Dissatisfied
	MEAN	4.22	4.41		

4.5. Cartesian Analysis

A cartesian analysis is also part of the Importance Performance Analysis (IPA) method, which is a shape divided into four by two lines that intersect perpendicularly at points (x and y) where x is the level of customer satisfaction or perception. In contrast, y is the level of importance or expectation of all factors that affect customer satisfaction.

Tabel 10 Analysis Cartesius

Attribute	Dimension	Gap	Quadrant
X1	Tangible	-0.3	I
X2		-0.22	I
X3		-0.12	III
X4	Realibility	-0.17	I
X5		-0.07	III
X6		0	IV
X7	Responsive	-0.22	III
X8		-0.2	III
X9		-0.15	III
X10	Assurance	-0.09	III
X11		-0.05	II
X12	Empathy	-0.29	III
X13		-0.09	II

5. Conclusion

The level of satisfaction based on the results of the cartesius diagram analysis, from the thirteen questions of patient satisfaction at the Minasa Upa Public Health Center in Makassar city, questions X1, X2, and X4 occupy the lowest position, namely with a level of perception below expectations so that it becomes the top priority that needs to be improved, questions X11 and X13 are in Quadrant II. Namely, the implementation has satisfied the patient's needs to be maintained questions X3, X5, X7, X8, X9, X10, and X12 are in quadrant III, so the implementation has not satisfied the patients' needs to be slightly improved, and question X6 is in Quadrant IV; namely, the implementation has not fulfilled the patient and much needs to be improved. As for the suitability value based on the results of the Gap Analysis, it can be concluded that the perceived value and the expected value have a GAP value of -0.15. This shows that the perceived value is below the expected value, meaning that service satisfaction at the Minasa Upa Public Health Center in Makassar city cannot be fulfilled.

References

Along, A. (2020). Kualitas Layanan Administrasi Akademik di Politeknik Negeri Pontianak. *Jurnal Ilmiah Administrasi Publik*, *006*(01), 94–99. https://doi.org/10.21776/ub.jiap.2020.006.01.11

Budhiana, J., & Wahida, A. Z. (2019). Penggunaan Metode Integrasi Importance Performance Analysis (IPA) dan Metode Kano dalam Mengukur Tingkat Kepuasan Pasien. *Jurnal Ilmiah SANTIKA*, *9*(2), 979–995. https://doi.org/10.37150/jsa.v9i2.1204

Eninurkhayatun, B., Suryoputro, A., & Fatmasari, E. Y. (2017). Analisis Tingkat Kepuasan Pasien Terhadap Kualitas Pelayanan Rawat Jalan di Public health center Duren dan Public health center Bergas Kabupaten Semarang Tahun 2017. *JKM (Jurnal Kesehatan Masyarakat)*, *5*(4), 2356–3346. https://doi.org/10.14710/jkm.v5i4.18314

Febriawati, H., & Yandrizal. (2019). *Manajemen dan Peran Public health center Sebagai Gatekeeper*. Gosyen Publishing.

Hariyoko, Y., Jehaut, Y. D., & Susiantoro, A. (2021). Efektivitas Pelayanan Kesehatan Masyarakat Oleh Public Health Center Di Kabupaten Manggarai. *Jurnal Good Governance*, *17*(2), 169–178. https://doi.org/10.32834/gg.v17i2.346

Kotler, P., & Armstrong, G. (2018). *Principles of Marketing* (17th ed.). Pearson Prentice Hall.

Luthfia, A. R., & Alkhajar, E. N. S. (2019). Praktik Pelayanan Publik: Public Health Center Sebagai Garda Terdepan Pelayanan Kesehatan. *Decision: Jurnal Administrasi Publik*, *1*(2), 71. https://doi.org/10.23969/decision.v1i2.1802

Muazansyah, I., & Sudirman, I. (2019). Kualitas Pelayanan Rawat Jalan Public Health Center Tanjung Palas Berdasarkan Metode Importance Performance Analysis. *JPSI (Journal of Public Sector Innovations)*, *3*(2), 75. https://doi.org/10.26740/jpsi.v3n2.p75-83

Nasution, I. F. S., Kurniansyah, D., & Priyanti, E. (2022). Analisis pelayanan pusat kesehatan masyarakat (public health center). *KINERJA*, *18*(4), 527–532. https://doi.org/10.30872/jkin.v18i4.9871

Niawati, W., Berliana, N., & Marisdayana, R. (2020). Analisis Kualitas Pelayanan Terhadap Kepuasan Pasien Di Public health center Kenali Besar Kota Jambi. *Journal of Healthcare Technology and Medicine*, *6*(2), 826. https://doi.org/10.33143/jhtm.v6i2.1039

Purwanto, I., & Sugiarto, D. (2022). Importance Performance Analysis dalam Pengukuran Kepuasan Pasien pada Public health center melalui KepPA. *Explore: Jurnal Sistem Informasi Dan Telematika*, *13*(2), 152. https://doi.org/10.36448/jsit.v13i2.2541

Rakib, M., Baharuddin, S. M., Hastutik, S., Sumarsih, Djampagau, H. R. D., Marhawati, Augustinah, F., Saragih, R., Purba, L. R. S., Keke, Y., Kusuma, Rr. C. S. D. K., Rizki, J., Hilal, N., & Rofiq, M. A. (2022). *Strategi Pemasaran Bisnis* (H. F. Ningrum, Ed.). Media Sains Indonesia.

Ramadhan, F., Muhafidin, D., & Miradhia, D. (2021). Kualitas Pelayanan Kesehatan Public Health Center Ibun Kabupaten Bandung. *JANE - Jurnal Administrasi Negara*, *12*(2), 58. https://doi.org/10.24198/jane.v12i2.28684

Ramadhanti, E., & Marlena, N. (2021). Analisis Strategi Kualitas Layanan Menggunakan Metode Importance Performance Analysis (IPA). *FORUM EKONOMI*, *23*(3), 431–441. https://doi.org/10.30872/jfor.v23i3.9698

Rizal, A. (2020). *Buku Ajar Manajemen Pemasaran Di Era Masyarakat Industri 4.0*. Deepublish.

Safira, R. N., Wolok, T., & Juanna, A. (2021). Pengaruh Kualitas Pelayanan Terhadap Pasien KIS di Public health center Kota Selatan. *Jurnal Ilmiah Manajemen Dan Bisnis*, *4*(2), 116–120. https://doi.org/10.37479/jimb.v4i2.11591

Umam, C., Muchlisoh, L., & Maryati, H. (2019). Analisis Kepuasan Pasien Terhadap Mutu Pelayanan Kesehatan Rawat Jalan dengan Metode IPA (Importance Performance Analysis) di Public health center Bogor Tengah Kota Bogor Tahun 2018. PROMOTOR *Jurnal Mahasiswa Kesehatan Masyarakat*, *2*(1), 7–19. http://ejournal.uika-bogor.ac.id/index.php/PROMOTOR/article/view/1784/1227

Wahyudin, N., Masriyatun, M., & Yusnita, M. (2022). Kualitas Pelayanan Public health center Lubuk Besar Dengan Pendekatan Importance Performance Analysis (IPA) dan Customer Satisfaction Index (CSI). *Jurnal Aplikasi Bisnis Dan Manajemen*. https://doi.org/10.17358/jabm.8.3.891

Wianti, W., Yuniarti, P., & Susanto, A. (2021). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pelanggan Pada PT Adira Dinamika Multi Finance Kantor Cabang Petojo Utara Jakarta. *(J-ADBIS) Jurnal Administrasi Bisnis*, *1*(2), 75–80. https://doi.org/10.31294/jab.v1i2.665

Yesinda, I. S., & Murnisari, R. (2018). Pengaruh Fasilitas dan Kualitas Pelayanan terhadap Kepuasan Pasien Jasa Rawat Jalan pada Public health center Kademangan Kabupaten Blitar. *Jurnal Penelitian Manajemen Terapan*, *3*(2), 206–214. https://journal.stieken.ac.id/index.php/penataran/article/view/436/519