

# Analysis of Administration Service Quality at Primary Health Care in Sungai Penuh City

Ardi Sutra

Faculty of Nursing, Andalas University  
Limau Manis, Padang, West Sumatera, Indonesia

Leni Merdawati

Faculty of Nursing, Andalas University  
Limau Manis, Padang, West Sumatera

Hafni Bachtiar

Faculty of Medical Sciences, Andalas University  
Jalan Perintis Kemerdekaan, Sawahan Timur, Padang  
Timur, Jati, Padang, West Sumatera, Indonesia -  
25171

**Abstract:-** The good quality of administration services at the primary health care will provide satisfaction to the patient as a customer. Therefore, it is important for the public health centre to ensure that the services provided meet the patient's expectations. The purpose of this study is to assess service quality of administration services of the primary health care where importance performance analysis model is used. **Methods:** This study is descriptive analytical with quantitative approach and data is analyzed by using univariate, and then applied into important performance analysis matrix. The sample consisted of 222 patients by using simple random sampling technique. **Results:** Service quality indicates that the gap in all five dimensions and the highest perception was in empathy dimensions and the highest expectation was in reliability. The mean score of perception and expectation was 3.72 and 4.90, respectively. Also, according to findings, reliability, responsiveness and assurance were in Quadrant (I), tangible was in Quadrant (II) and empathy was in Quadrant (III). **Conclusion:** This primary health care was unable to fulfill patients' expectations in overall quality of service.

**Keywords:-** Perceptions and expectations, gaps, service quality.

## I. INTRODUCTION

In developing countries, the primary health care is the fundamental of the health care system in providing the service in order to maintain and promote of health status of community. "Primary health care is essential health care based on practical scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self-reliance and self determination. It forms an integral part of both the country's health system of which it is the central function and main focus and of the overall social and economic development of the community. It is the first level of contact of individuals, the family, and community, with the national health system bringing health care as close as possible to

where people live and work and constitutes the first element of a continuing health care process" [1].

Recently, providing a good quality of service is the important point and one of the strategies to achieve goal, therefore, many organizations are looking for advantages by giving good products and provide a high quality of services to the customers [2].

Patients as recipients of services in the health sector have specific expectations and needs that healthcare providers are able to learn and understand their needs and expectations [3]. In addition, in recent years quality in healthcare is becoming more popular than ever because it is one of the most topics frequently mentioned in health care areas and health institutions trying to document the quality of their organizational services [4]. Furthermore, Davis and Colleagues [5] explain that measuring of the healthcare quality is the one of necessity a for health care industry to compete with other. In many aspects, service production in other industry is significantly different from the healthcare industry for instance, in term tools of quality assessment, the most common approach in healthcare is by using the customers perception related to the service provided by healthcare organisation [6].

According to Parasuraman and Zeithaml [7] the SERVQUAL model was introduced to evaluate between patient's perception and expectation on service quality. This model is also as known as the gap analyzer method and usually used in assessing the quality of services [8]. In several countries researchers have been conducted to review quality gap not only in hospitals but also other healthcare service [9]. However, recognising of the patient's expectation and respondents perception in regard to the quality of service can lead to facilitate the providers in prioritizing and making strategic to allocate the resources in order to minimize the gap [10].

In this study, where five dimensions including tangibility, reliability, responsiveness, assurance and empathy were assessed to measure quality of service. A principle aspect in quality of service is evaluating the present level of performance and developing appropriate strategies for continuous quality improvement as known as

importance performance analysis (IPA). This model is based on a four quadrant matrix to identify the services and develop strategic planning to determine improvement opportunities and also to look our strenghts and weakness of organisation. This study aims to evalute quality of administration service in primary health care using an IPA technique.

**II. MATERIAL AND METHODS**

*Study design and setting:* This descriptive analytic study was conducted from April to Mei at primary health care in Sungai Penuh City in 2018.

*Sampling:* The sample consisted of 222 patients by using simple random sampling technique with a confidence interval 95% and margin of error 5%.

*Survey instrument:* Data collected through SERVQUAL questionnaire standard contains 19 items in five dimensions i.e. reliability (5 questions), responsiveness (4 question), assurance (4 question), empathy (4 question) and tangibility (2). A five points Likert scale in scoring system with 1 refers to “strongly disagree” and 5 refers to “strongly agree”.

*Statistical analysis:* Quadrant I represent a priority needed immediate respond, quadrant II refers to high performance but low important, quadrant III refers to low performance and low importance and quadrant IV no necessity improvement.

*Research ethics:* This study was approved by the committee of the medical research ethics of the Dr. M Djamil Hospital (Number: PE.47.2018).

**III. RESULT**

The participants of this study were 222 patients, of whom 55,4% were male and 44,6% were female. A half of respondents age of 45-59 years old by 54,5%, while 27,9% education level was elementary school and 35,1% were farmers. The characteristic of respondents in this study are shown in table 1.

Table 1. Characteristic of respondents

Age			Gender			Education			Occupation		
Age	n	%	Sex	n	%	Level	n	%		n	%
18 - 25	10	4,5	Male	123	55,4	Elementary School	62	27,9	Farmers	78	35,1
26 - 44	43	19,4				Secondary School	32	14,4	Company employees	12	5,4
45- 59	121	54,5	Female	99	44,6	Senior High School	57	25,7	House wife	40	18
60 - 69	48	21,6				Diploma	49	22,1	Entrepreneur	21	9,5
						Bachelor	22	9,9	Students	4	1,8
									Government employees	48	21,6
									Traders	19	8,6

Source: Author (2018)

Service quality gaps perception (P) – expectation (E) can been shown in table 2 which present the mean scores of the patients’ perceptions and expectations in the five dimensions based on the Servqual approach.

Table 2. Item score for perception, expectation and gap of service quality

Dimensions and items	Perception	Expectation	Gap Score (P-E)
<b>Reliability</b>			
1. Sympathetic to patient	3.69	4.90	-1.21
2. Staffs can be relied upon in providing services	3.68	4.91	-1.23
3. Punctual service delivery	3.68	4.94	-1.26
4. Accurate in keeping record	3.69	4.93	-1.24
5. Reasonable waiting time	3.70	4.91	-1.21
<b>Means score of reliability</b>	<b>3.69</b>	<b>4.92</b>	<b>-1.23</b>
<b>Responsiveness</b>			
6. Provides quick respond and uncomplicated service	3.68	4.89	-1.21
7. Staff always willing to help	3.68	4.91	-1.23
8. Respond to patient request promptly	3.69	4.91	-1.22
9. Easy to find out staff/attendance	3.69	4.92	-1.23
<b>Means score of responsiveness</b>	<b>3.69</b>	<b>4.91</b>	<b>-1.22</b>
<b>Assurance</b>			
10. You can trust to staff	3.67	4.90	-1.23
11. feel safe during service	3.72	4.91	-1.19
12. Staffs are polite	3.73	4.91	-1.18
13. Staff have adequate support to respond patient's complain	3.68	4.91	-1.23
<b>Means score of assurance</b>	<b>3.71</b>	<b>4.91</b>	<b>-1.21</b>
<b>Empathy</b>			
14. staff should have individuals attention	3.67	4.87	-1.2
15. Giving personal attention	3.62	4.82	-1.2
16. know what patient needs	3.68	4.90	-1.22
17. Staff have interest at heart	3.64	4.85	-1.21
<b>Means score of empathy</b>	<b>3.65</b>	<b>4.86</b>	<b>-1.21</b>
<b>Tangibility</b>			
18. Staff wearing clean dressed and appear neat	3.89	4.92	-1.03
19. Staff guide patients service flowchart	3.80	4.90	-1.10
<b>Means score of tangibility</b>	<b>3.85</b>	<b>4.91</b>	<b>-1.07</b>
<b>Total means score of five dimensions</b>	<b>3.72</b>	<b>4.90</b>	<b>-1.19</b>

Source : Author (2018)

Important Performance Analysis (IPA) matrix illustrated that reliability; responsiveness and assurance were placed in quadrant I, tangibility was placed in quadrant II, and empathy was placed in quadrant III.

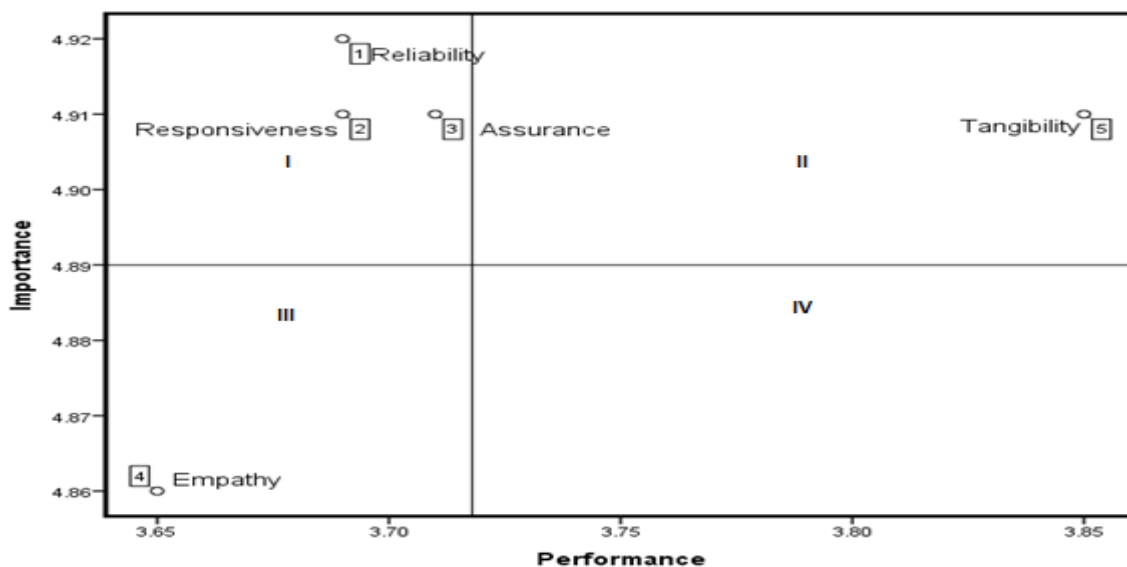


Fig 1:- Importance Performance Analysis matrix

#### IV. DISCUSSION

Based on findings, the high expectation of mean score was ranged from 4.94 for (item; Punctual service delivery) to 4.82 for (item; Giving personal attention). The total means score of patients expectation was 4.90. Between five dimensions, the highest expectation related to the reliability dimension where mean score was about 4.92 and the lowest expectation related to the empathy dimension where mean score was approximately 4.86. Furthermore, the mean score of perception was ranged from 3.89 for (item; Staff wearing clean dressed and appear tidy) to 3.62 for (item; Giving personal attention). In addition, the total means score of patients perception was 3.72. Among all dimension of service quality, the tangibility was the highest where means score about 3.85 and the lowest perception related to the empathy where means score was 3.65.

The result of paired t test shows that significant the gap between perception and expectation for all items with ( $p < 0,001$ ). The total means score between perception of patients and expectations of patients are statistically different. Thus, the service quality of primary health care at Sungai Penuh City between respondents' perception and their expectation are negative gap. Similar to our study, some researchers explained a negative result among the five dimensions of service quality between perception and expectation [11]. Based on the study analysis in all five dimension illustrated that the reliability score (-1.23) and tangibility score (-1.07) were the highest and lowest negative gap, respectively. Our study result supported by Hekmatpo et al [12] described that the tangibility is the lowest gap in their studies. Furthermore, according to Al Damen [13] the reliability is one of the significant influence respondent's satisfactions, while Mohebifar, et al, [14] explained there was a significant gap in assurance dimension in some healthcare facilities in Iran. Another study, also show that the assurance is an important dimension of public health care service quality, followed by responsiveness and empathy [15].

Furthermore, other results of study is consistent with Papanikalaou and Zygiaris [16] research conducted at primary health care centers in Greece, where the empathy dimension is the largest gap compared to other dimensions. In addition, research conducted by Aghamolaei, et al, [15] revealed that the empathy dimension is a low patient

#### REFERENCES

- [1] Declaration of Alma-Ata. (1978). International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978.
- [2] McMelland, A E., M.M.T. Iverson and R. J. Beninger. (2014) The effect of quetiapine (seroquel TM) on conditioned place preference and elevated plus maze test when administered alone and in combination with (+) amphetamine. *Psycho Pharmacol.*, 231:4349-4359.
- [3] Rezaei, S., Karami Matin, B., Moradi, K., Bijan, B., Fallahi, M., Shokati, B., & Saeidi, H. (2016). Measurement of Quality of Educational Hospital

expectation but responsiveness is a very significant patient expectation. Meanwhile, according to Tjijtono and Chandra [18] stated that service attributes can be divided into 3 (three) categories: basic needs, performance needs and attractive needs. In the category of basic needs, customers are not satisfied if these needs are not met but, if met, it will not lead to customer satisfaction despite high attribute performance. Meanwhile, in the category of performance needs, the level of customer satisfaction is positively associated with the level of fulfillment, so the higher the level of fulfillment, the higher the level of customer satisfaction.

Based on the figure 1, the result showed that the primary health care should keep up more attention to reliability, responsiveness and assurance in order to maintain and fulfill the patient's expectation due to this dimension was placed in quadrant I. It means that the primary health care should put priorities in this area because by maintaining this dimension will increase patient's expectation. Therefore, allocated any resources at this point is improving dimension of service quality. Similar to our study, Wu, et al, [18] described the reliability and assurance were placed to be in quadrant I "concentrate here" which refers to high important and at the same time patient low satisfaction of these dimension. Result finding also showed that the tangibility was considered to be in quadrant II "keep up good work" which refers to the important and at the same time performance of this dimension acceptable by patient.

Our study had limitation the finding result only based on the primary health care at Sungai Penuh City, so other studies should located to other areas to increase the result of generalizability when pilot project study done.

#### V. CONCLUSION

The result of this study showed that the gap emerge in all of dimension was statistically significant difference between patients' perception and expectation. Also this study explained the IPA approach as a tool which applicable in current situation of primary health care viewed from the perspective service quality dimension. Moreover, by applying IPA matrix model can also help the planner and managers of primary health care to improve service quality based on customers' perspective.

- Services by the SERVQUAL Model: The Iranian Patients' Perspective. *Electronic Physician*, 8(3), 2101–2106. <http://doi.org/10.19082/2101>.
- [4] Muhammet Gul, Ali Fuat Guneri & Burcu Derin. (2014). Evaluation of Service Quality Criteria for a Private Medical Center By Using Servqual and Demantel Methods. *Journal of Engineering and Natural Sciences*, (212), 240–253.
- [5] Davis BA, Kiesel CK, McFarland A, et al. (2005). Evaluating instruments for quality: testing convergent validity of the consumer emergency care satisfaction scale. *J Nurs Care Qual*;20(4):364e8.

- [6] Ranjbar ezatabadi, M Bahrami, H Zare Ahmadabadi, M Arab, S Nasiri and H Hataminasab. (2012). Analysis of SERVQUAL in Shahid Sadoghi hospital, Yazd, Iran. *Journal Hormozgan Medical journal*. 16(4), 340.
- [7] Parasuraman A, Zeithaml VA, Berry L. (1985). A Conceptual model of service quality and its implications for future research. *J Mark*. 49:41–50.
- [8] Brooks R, Linggs I, M. (1999). International Marketing and customer driven wave front. *Serv Ind J*, 19(4): 49-67.
- [9] Mahmood Nekoei-Moghadam, Mohammadreza Amiresmaili, (2011) "Hospital services quality assessment: Hospitals of Kerman University of Medical Sciences, as a tangible example of a developing country", *International Journal of Health Care Quality Assurance*, Vol. 24 Issue: 1, pp.57-66, <https://doi.org/10.1108/09526861111098247>.
- [10] Parasuraman A, Zeithaml VA, Berry L. (1985). A Conceptual model of service quality and its implications for future research. *J Mark*. 49:41–50.
- [11] Gorji, H. A. ; Tabatabaei, S. M. ; Akbari, A. ; Sarkhosh, S. ; Khorasan, S. (2013). Health Services Management Department, School of Health Management and Information Sciences, Tehran University of Medical Sciences, Tehran, Iran. *Journal of Health Administration (JHA)*.16 (51),7-18
- [12] Hekmatpo DM, Sorani A, Lashgarara BA. (2012). Survey on the quality of medical services in teaching hospitals of Arak University of Medical Sciences with SERVQUL model in Arak. *AMUJ*; 15(66):1e9.
- [13] Al-Damen, R. (2017). Health Care Service Quality and Its Impact on Patient Satisfaction “Case of Al-Bashir Hospital.” *International Journal of Business and Management*, 12(9), 136. <http://doi.org/10.5539/ijbm.v12n9p136>.
- [14] Mohebifar, R., Hasani, H., Barikani, A., & Rafiei, S. (2016). Evaluating Service Quality from Patients’ Perceptions: Application of Importance–performance Analysis Method. *Osong Public Health and Research Perspectives*, 7(4), 233–238. <http://doi.org/10.1016/j.phrp.2016.05.002>.
- [15] Aghamolaei, T., Eftekhaari, T. E., Rafati, S., Kahnouji, K., Ahangari, S., Shahrzad, M. E., Hoseini, S. H. (2014). Service quality assessment of a referral hospital in Southern Iran with SERVQUAL technique: Patients’ perspective. *BMC Health Services Research*, 14(1), 1–5. <http://doi.org/10.1186/1472-6963-14-322>.
- [16] Papanikolaou, V., & Zygiaris, S. (2012). Service quality perceptions in primary health care centres in Greece. *Health Expectations*, 17(2), 197–207. <http://doi.org/10.1111/j.1369-7625.2011.00747.x>.
- [18] Tjiptono. F. dan Chandra. G. (2016). Service, Quality dan Satisfaction. 4 Edition. Published; ANDI Yogyakarta.
- [19] Wu HH, Tang YT, Shyu JW. (2010). A case of applying Importance performance analysis in identifying key success factors to develop marketing strategies. *Qual Quant*; 44(6): 1207e18.