

Improvement Priorities: Public Hospital Service Quality

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Abstract. Patients' satisfaction in public hospitals in Jakarta is decreased due to the increase participant of outpatients using national health insurance. One of the principle influenced satisfaction is services. The purpose of this research is to get priority improvement of service quality dimension. ServQual method is used to obtain the patient's perception and expectation gap on hospital services. Analytical Hierarchy Process (AHP) is used to obtain the dimension importance weight. Five experts were involved on choosing the appropriate service dimension. Questionnaires were given to 400 patients. Results showed that the largest gap on overall services dimension and sub-dimension are cleanliness, comfort of check room and bathroom. The weight of importance is included, results show the priority improvement of trust dimension and sub-dimension doctor is checking the patient's condition correctly.

1 Introduction

Indonesia seeks to realize a global commitment to develop Universal Health Coverage (UHC) for its entire population through the National Health Insurance (BPJS) program which has started since January 1, 2014 which aims to provide health protection for the citizens.

Based on data from social security system, there was an increase of 17% national health insurance participants from 133 million people in early 2015 to 156 million by the end of 2015. This indicates that 62% of Indonesians have become participants. Data from social security service, satisfaction decreased in 2014 to 2015 from 81% to 78.9%.

2 Service Quality

Service quality is a concept that has attract many interest and debates in literature research because it is difficult to define and measure it in the absence of the overall consensus published for both [1]. Service quality can help an organization to achieve or exceed customer expectations [2]. Service quality is what Customer receives (technical dimension) and how customers receive it (functional dimension) [3].

Measuring the quality of hospital services and understanding patients' perceived quality is important [4]. Fulfilling the needs of patients and making health care standards is an important thing to achieve high quality [5], so identifying and understanding what is meant

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by quality dimension is important to the customer becomes important for the quality of service.

3 Patients' Satisfaction

In the Donabedian quality measurement model, patient satisfaction is defined as the assessment of patient report results, while the process and structure of the service can be measured by patient experience [6]. Jenkinson C et al. (2002) and Ahmed et al. (2011) indicates that patient satisfaction largely represents attitudes toward service or aspects of service [7, 8]. Satisfaction itself is an important factor affecting loyalty [9]. However, according to Dachyar (2011), if there are complaints from customers, it does not affect the loyalty of these customers [10].

4 Methodology

To measure the quality of service and determine the priority of improvement, used SERVQUAL method and Analytical Hierarchy Process (AHP).

Service quality can be measured using SERVQUAL which is a tool to measure service quality [11]. This tool is used to measure the quality of service by using the concept of gaps and service quality dimensions. The original SERVQUAL consists of 22 statements using the Likert scale with seven points to the service quality dimensions of tangibles, assurance, empathy, assurance, reliability [2], but to measure the quality of public hospital services, there are tools developed by Aagja (2010), which is called PubHosQual.

The PubHosQual Difference with ServQual consists of the validity of the content. 4 of the 5 ServQual dimensions are included in PubHosQual and there is also another dimension independent of the ServQual dimension (excluding empathy related social responsibility). The advantage of PubHosQual is with the inclusion of considerations regarding services in the hospital sector.

Analytical Hierarchy Process (AHP) is an effective method used in complex multi-criteria decision making, in which this method can help decision makers in setting priorities and making best decisions [12]. AHP is a measurement theory used to solve the ratio scale of discrete and continuous pairwise comparisons [13].

5 Data Collection

The original theory of ServQual created by Parasuraman consists of 5 attributes, namely tangibles, reliability, responsiveness, assurance, and empathy. ServQual has been applied in various sectors but influential factors may vary from one sector to another, so it is necessary to re-examine the factors for the perception of service quality in each sector [14]. In hospitals, patients often find it difficult to assess the technical quality of medical services accurately so that many researchers create a quality service framework that can measure the quality of care in hospitals. From various literatures, collected the dimensions of service quality which then conducted an assessment by experts to find out whether the dimensions obtained from the literature in accordance with the conditions or dimensions of service quality in Indonesia, especially regional public hospitals in Jakarta.

Expert assessment is done using questionnaire using Likert scale 5 (five) points to get service quality dimensions that are suitable for public hospitals in Indonesia and is screened using geometric mean. From the results of expert assessment, 20 sub-dimensions are produced by experts which means in accordance with the conditions of hospitals in Indonesia. 20 Sub-dimensions received from experts come from 7 dimensions of hospital service

quality, namely; Registration, medical services, overall service, administrative completion, social responsibility, trust and treatment process. The dimensions that are used can be seen in table 1.

5.1 Pilot Testing

In the early stages of data retrieval, pilot testing was conducted with 40 respondents representing or having similarities with the target respondents to check the validity of the questionnaire that has been designed. After the initial questionnaire was distributed, the results of the questionnaire tested its validity and reliability. Validity test aims to determine whether the questionnaire is valid or not and reliability test aims to determine whether the scale used consistently or not.

The questionnaire can be declared valid if the KMO value (Kaiser-Meyer Olkin) reaches at least 0.5 [15]. For this study, each dimension in the questionnaire is more than 0.5 so it can be declared valid. Questionnaire can be stated reliable; Reliable, consistent, and relevant if it has a Cronbach's Alpha value of more than 0.6 or greater because it can be said to be sufficient to measure scale and reliability [16]. All of the questions came out reliable and valid.

5.2 Data Sample

In this study, the determination of the number of samples is done using convenience sampling method. The determination is based on the total population. Patients using 95% confidence level. Based on the number of outpatient patients in hospital age, the minimum sample size was 385. The questionnaire was distributed to 432 outpatients at a local general hospital located in Jakarta. Respondents consisted of 74% women and 26% men. with an average age of 39 years. The majority of respondents were patients who had visited more than 5 times (66%).

6 Result and Discussion

Data processing calculated the gap value between patient's perception and expectation in outpatient department (Servqual Dimension). There are seven service quality dimensions with 20 subcriteria, it was found that all subcriteria is of negative value with subcriteria hospitals have clean washrooms, clean rooms/wards without foul smell being the largest negative gap score which is -1.17. The large negative value of the gap between perception and expectation in the sub-dimension hospitals have clean washrooms and speed of service and make patients spend hours for queueing. Improvement priorities can be seen in table 1.

Table 1. Improvement Priority Rank of Dimension

Dimension	Gap Score (A)	Weight (B)	Weighted Gap Score (A*B)	Rank
Trustworthiness	-0.73	0.25	-0.18	1
Clinical Care Process	-0.68	0.23	-0.15	2
Overall Service	-0.91	0.12	-0.11	3
Social Responsibility	-0.76	0.12	-0.09	4
Medical Service	-0.61	0.13	-0.08	5
Discharge	-0.75	0.08	-0.06	5
Registration	-0.79	0.07	-0.05	6

In data processing, we need AHP to calculate the weight of service quality dimension (PubHosQual) and ranking of each subcriteria. The weighting results show that the most important dimension is the trustworthiness but this dimension has the main priority to be improved with the gap value of -0.18.

The weighting results show that the most important sub-dimension is confidence in the doctor who treated me in hospital but this sub-dimension has the main priority to be improved with the gap value of -0.10. Improvement priorities for sub-dimension can be seen in table 2.

Table 2. Improvement Priority Rank of Dimension

Dimension	Sub-dimension	Gap Score (A)	Weight (B)	Weighted Gap Score (A*B)	Rank
Registration	Hospitals will give prompt admissions to their patients	-0.96	0.04	-0.04	7
	The employees handling admission in hospitals should be polite	-0.61	0.02	-0.01	18
Medical Service	Hospitals will have knowledgeable and experienced physicians	-0.47	0.10	-0.05	6
	Hospitals will have knowledgeable and experienced nurses	-0.75	0.04	-0.03	11
Overall Service	Materials associated with the service (such as pamphlets or statements) will be visually appealing in a hospital	-0.74	0.01	-0.01	20
	Hospitals have clean washrooms, clean rooms/wards without foul smell	-1.18	0.01	-0.01	19
	When patients have problems, excellent hospitals will show a sincere interest in solving it	-0.83	0.02	-0.02	17
	Hospitals will give prompt service to customers	-1.02	0.03	-0.03	10
	Hospitals will always be willing to help patients	-0.79	0.03	-0.02	15
	Hospitals have the patient's best interests at heart	-0.92	0.02	-0.02	14
Discharge	Patients of hospitals will be given prompt discharge	-0.73	0.03	-0.02	13
	Employees of Hospitals will explain the discharge process to the patients and family members	-0.77	0.05	-0.04	9
Social Responsibility	Hospitals should provide equal treatment stemming from the belief that every one, big or small, should be treated alike	-0.74	0.03	-0.03	12
	Hospitals should provide good service at a reasonable cost, but not at the expense of quality	-0.66	0.03	-0.02	16
	Employees of hospital should have a sense of responsibility, i.e. they are regular, punctual, sincere, and without going on strikes	-0.87	0.06	-0.05	5
Trustworthiness	Hospital provided services as promised and on time	-0.80	0.10	-0.08	2
	Confidence in the doctor who treated me in hospital	-0.65	0.15	-0.10	1
	Explanation provided by doctor about health status, medical tests	-0.71	0.07	-0.05	4

Dimension	Sub-dimension	Gap Score (A)	Weight (B)	Weighted Gap Score (A*B)	Rank
Clinical Care Process	Description offered by the doctor about treatment procedures and outcomes	-0.66	0.10	-0.06	3
	Medical advice and instructions provided by doctor	-0.67	0.06	-0.04	8

7 Conclusion

In this study, we got 7 dimensions of hospital service quality and 20 sub-dimensions suitable with the condition in Indonesia, especially in regional public hospital.

Hospital service experts consider that the dimension of trustworthiness is the most important dimension in the quality of hospital services and Confidence in the doctor who treated me in hospital to the most important sub-dimension. From the results obtained, the overall service dimension is the dimension with the greatest negative gap value for hospital service quality. Hospitals have clean washrooms, clean rooms/wards without foul smell is a sub-dimension with the greatest negative gap value and for the result of the combined gap and weight value, it is found that trustworthiness is the priority dimension of improvement and confidence in the doctor who treated me in hospital becomes a sub-dimension of priority improvement.

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