Analysis of The Level of Patient Satisfaction with Pharmaceutical Services In Xyz Regional Hospital Bandung Indonesia

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Abstract

Hospitals are health facilities that provide various services, one of which is pharmaceutical services. Pharmaceutical services are an activity organized to maintain and improve the health of patients. Patient satisfaction is an important indicator in achieving conformity with expectations in health services in hospitals. The level of patient satisfaction can be seen from good service. The purpose of this study is to determine and evaluate the level of patient satisfaction with pharmaceutical services at the XYZ regional hospital in Bandung, West Java. In this study, the application used in SPSS to process data with the methods used, namely the Importance Performance Analysis (IPA) method and the Customer Satisfaction Index (CSI). This method is used to identify the level of importance of each service attribute and the priority of improvements that must be made by a hospital to determine the level of patient satisfaction. IPA analysis shows that the point included in quadrant I (high importance and low satisfaction) is R6, namely complete available drugs but in reality, the drugs are not available so this statement is considered important by patients because it has facts that are not yet appropriate and need to further improve their performance so that the service is more satisfying. Meanwhile, based on the results of the CSI analysis, it is known that the overall value of the respondent's satisfaction level for all attributes is 83.9%. So based on the satisfaction index patients are satisfied with pharmaceutical services at the XYZ Bandung Regional Hospital.

Keyword: Patient Satisfaction; IPA; CSI; Hospital

1. Introduction

Health is one of society's main needs. The increasing standard of living of the community is directly proportional to the community's need for health services. This encourages the implementation of health care efforts that are comprehensive, integrated, equitable acceptable, and affordable to the entire community, one of the regional public health services is the XYZ hospital in the Bandung region of West Java Indonesia. Regional hospitals are healthcare institutions owned by local governments as a form of need and service to the community. One form of service in regional hospitals is outpatient pharmaceutical installation or what is called pharmaceutical services. According to Permenkes Number 73 of 2016 states that the existence of pharmaceutical services is divided into two parts, namely service standards, including activities consisting of the management of consumable medical materials, pharmaceutical preparations, medical devices, and clinical pharmacy activities. Pharmaceutical services can improve the quality of health in the community. Therefore, pharmaceutical services are an important guarantee for improving the satisfaction and quality of life of the community. Patient satisfaction is the achievement or conformity with patient expectations of health services. The level of patient satisfaction with pharmaceutical services is one method of evaluating the quality of services provided at the pharmacy. Evaluation of the level of satisfaction in patients can be done by using direct interview techniques (Kemenkes RI, 2016). Meanwhile, according to Tjiptono et al (2004) in the Marketing Scale, several methods can be used by every institution to measure and monitor service user satisfaction with service quality/services, including the Servqual model which consists of an assessment of 5 dimensions, which include: (1) Realibility or the capacity to deliver a service on time, correctly, and adequately (2) Responsiveness, or the staff's willingness to assist clients and offer services in a timely manner, (3) Assure, including staff members' expertise, demeanor, and dependability in addition to their absence of risk, danger, or uncertainty, (4) Physical proof, such as actual facilities, personnel, equipment, and communication channels; and (5) empathy, which includes ease of relationship-building, effective communication, personalized attention, and comprehension of each customer's demands (Parasuraman et al, 1988). The research will be conducted at XYZ Hospital in Bandung Regency, West Java in the pharmaceutical services section. The RSUD is located in a rural area in Bandung Regency. The existence of these services facilitates service to patients. Based on this, the researcher considers it necessary to examine patient service satisfaction. besides the importance of evaluating pharmaceutical services to ensure the feasibility and quality of pharmaceutical services at RSUD XYZ Bandung, West Java. RSUD XYZ Bandung region has never conducted a comprehensive patient evaluation, even though satisfaction evaluation is an important effort to see changes that occur and develop a better pharmaceutical service development plan. In addition, evaluation of pharmaceutical services to patients can be done to assess the performance of the patient service program whether it is good and optimal. One method of analyzing the measurement of patient satisfaction levels includes the use of the Customer Satisfaction Index (CSI) and Importance Performance Analysis (IPA) which is a quantitative analysis in the form of a percentage of user satisfaction in a service user satisfaction survey. The CSI method is used to determine the overall level of service user satisfaction by looking at the level of performance and the level of importance (expectations) of the product or service attributes, while Importance Performance Analysis (IPA) is to see patient perceptions of pharmaceutical services that compare the level of expectations (Y) with the level of satisfaction (performance) (X) results in the form of perceptions in 4 (four) quadrants (Siyamto, 2017).

2. Literature Review

2.1 Customer Satisfaction

One indicator of a hospital's quality is the caliber of its pharmaceutical services, which is positively correlated with patient happiness. Quality is a form of condition related to products, services, people and the surrounding environment that are qualified and exceed expectations

(Arab *et al*., 2012). The quality of health services is related to the satisfaction of health services (consumers / patients) (Mosadeghrad, 2013).

2.2 Pharmaceutical Services

Pharmaceutical services in a hospital are a form of responsibility and direct service to patients (patient oriented) related to pharmaceutical preparations (drug oriented) with the aim of achieving maximum therapeutic results to improve the quality of life of patients. A pharmaceutical worker competency activity is complemented by direct practice in the field of work and the existence of supporting factors such as self-learning motivation so that the level of confidence increases to be able to provide services in accordance with their profession. The purpose of the regulation of pharmaceutical service standards in pharmacies is to improve service quality and ensure patient safety(Kemenkes RI, 2016).

3. Material and Method

In this case, a non-experimental descriptive-analytical research design with a cross-sectional approach was used, namely research that describes and calculates the level of patient satisfaction with outpatient pharmaceutical services at XYZ Bandung Regional Hospital, West Java Province in 2024 for a certain period. Data collection was carried out using purposive sampling.

The sample size was calculated using the formula (Lwange & Lemeshow, 2001):

$$n = \frac{Zw^2{}_{1-a/2}\ Pw(1-Pw)}{dw^2}$$

$$n = \frac{1{,}96^2 \text{ x } 0{,}5 \text{ x } 0{,}5}{(0{,}05)^2}$$

$$n = 384{,}01 \sim 384$$

Remarks :

n : The number of samples taken

a : Generalization error. The value is set by the researcher

Zw : Standardized Value of alpha. Obtained from the Z-table

Pw : Proportion of categories to be points of interest, obtained from previous studies (if not known then 50% or 0.5)

Q : 1-*Pw*

dw : Research precision, which is the acceptable prediction error of the proportion.

3.1 Design Study

Flow method analysis

1. Validity and Reliability

   A validity test is a test to measure valid instruments used to collect valid data. The variable is said to be valid if the r count is positive and r count > r table, and vice versa (Sugiyono,2010). Reliability testing is a test to see whether an instrument, when used

several times to measure the same object, will produce the same data, a variable is said to be reliable if it provides a Cronbach Alpha value >0.60 (Ghozali, 2009).

2. Customer Satisfaction Index (CSI)
   The Customer Satisfaction Index (CSI) analysis method is used as a step to determine the overall level of satisfaction of service users by looking at the level of performance and level of importance (expectations) of product or service attributes (Tjiptono et al, 2004).
   The CSI value is obtained from the equation:

$$CSI = \frac{\sum_{k=1}^{p} WSi \times 100\%}{HS(4)}$$

   WSi = Weight Score
   HS = High Scale

3. Importance Performance Matrix
   This analysis is used to calculate the average level of patient expectations and performance (Reliability, Responsiveness, Assurance, Empathy, and Tangible). The data that will be generated is in the form of a Cartesian diagram containing 4 quadrants. The 4 quadrant model has a function to measure the relationship between patient perceptions and priority levels of pharmaceutical service quality in each dimension of patient satisfaction. The following is an explanation of the performance level of expectations (Supranto, 2001) :
   a) Quadrant A: contains several statements that are considered important for the patient but whose facts are not following the patient's level of expectations. The performance of statements from this quadrant must be further maximized to satisfy patients.
   b) Quadrant B: contains several statements that have high levels of performance and expectations. It contains several factors which, according to the patient's opinion, are important and are in line with the patient's expectations, so this opinion must be maintained for the future because the results are very satisfactory.
   c) Quadrant C: This quadrant has less important value for patients because the administrator does not need to prioritize improving the quality of performance.
   d) Quadrant D: this quadrant has a low level of hope according to the patient but has a good level of performance, so the patient will think it is excessive.

It should be possible for anyone to repeat the trials using the method's comprehensive information. All in all, this part offers all the methodological information future researchers will require to reproduce your study. Please provide a brief description of the research design, samples, tools, methods, and data analysis.

3.2 Data Analysis

The validity test of the questionnaire was taken from the data of the distribution of questionnaires to 384 respondents (patients) who received pharmaceutical services at the outpatient pharmaceutical installation of XYZ Bandung West Java Hospital, West Java Province with a total of 19 questionnaire items, where questions from each dimension, namely

the Responsiveness dimension, Tangible dimension, Reliability dimension, Assurance dimension, and Empathy dimension. the following results are presented in Table 1.

Questionnaire items	R-count expectation	R-count performance	R-table (α = 5%)	Remarks
1A	0.692	0.542	0.1966	Valid
1B	0.872	0.778	0.1966	Valid
1C	0.844	0.874	0.1966	Valid
1D	0.602	0.706	0.1966	Valid
2A	0.771	0.674	0.1966	Valid
2B	0.961	0.752	0.1966	Valid
2C	0.661	0.568	0.1966	Valid
2D	0.672	0.624	0.1966	Valid
2E	0.714	0.654	0.1966	Valid
3A	0.890	0.895	0.1966	Valid
3B	0.804	0.814	0.1966	Valid
3C	0.601	0.691	0.1966	Valid
3D	0.501	0.621	0.1966	Valid
4A	0.680	0.711	0.1966	Valid
4B	0.891	0.861	0.1966	Valid
4C	0.814	0.784	0.1966	Valid
5A	0.762	0.762	0.1966	Valid
5B	0.674	0.574	0.1966	Valid
5C	0.681	0.583	0.1966	Valid

The reliability test is the suitability of the measuring instrument to what is measured, so that the measuring instrument can be trusted or reliable. The following are presented in table 2 of the reliability test results.

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Dimension	Cronbach Alpha expectation	Cronbach Alpha performance	Limitations	Remarks
Tangible	0.912	0.941	0,6	Realiable
Reliability	0.851	0.872	0,6	Realiable
Responsiveness	0.884	0.843	0,6	Realiable
Assurance	0.892	0.823	0,6	Realiable
Emphaty	0.912	0.904	0,6	Realiable

because all dimensions have a value > 0.6, it can be said that all dimensions are reliable. because all dimensions have a value > 0.6, it can be said that all dimensions meet the reliability requirements.

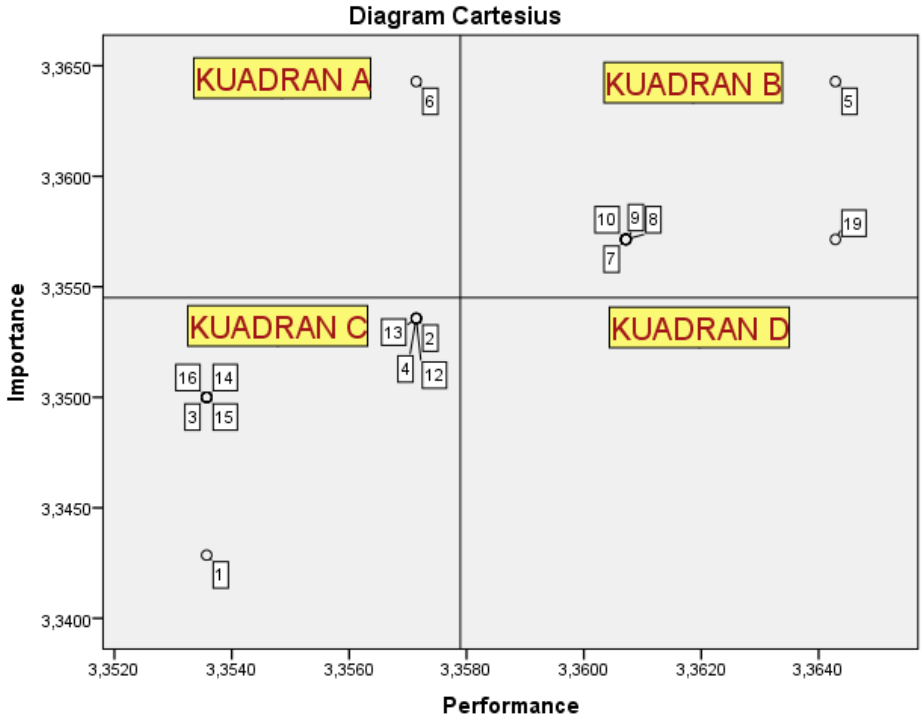
4. Result

Then the satisfaction test will be carried out with the CSI method as a whole can be said to be Satisfied. The level of patient satisfaction is based on the Customer Satisfaction Index (CSI) interpretation table above in Bhote, (1996). as follows:

Id	Value CSI (%)	Remarks (CSI)

1	81-100%	Very Satisfied
2	66-80,99%	Satisfied
3	51-65,99%	Satisfied Enough
4	35-50,99%	Less satisfied
5	0-34,99%	dissatisfied

Based on the analysis of CSI calculations using SPSS calculation tools, it is known that the Customer Satisfaction Index (CSI) value obtained from the study is 85.12%, so according to the patient satisfaction index, patients are very satisfied with the services at XYZ Bandung Hospital, West Java. After conducting validity tests, reliability tests and Customer satisfaction index analysis, the matrix will be grouped into 4 quarters with Importance Performance Analysis.
Figure 1.



The statements on the five dimensions of pharmaceutical services at the XYZ Bandung regional hospital are displayed in Figure 1. Statement 6, which claims that medicine is available in its entirety, is actually not available in its entirety and is therefore in quadrant A. This statement is significant to patients because it contains information that falls short of their expectations and necessitates further improvement in order to meet their needs. Quadrant B contains statements 5, 7, 9, 10, 11, and 19, namely with a statement that the level of performance has high expectations, and contains several kinds of factors which in the opinion of patients are important and are in accordance with patient expectations so it is mandatory to maintain for the next time because the results are very satisfying, then for statements 1,2,3,4,12,13,14, 15 and 16 are included in quadrant C, which has a value that is less important to patients because the organizers do not need to prioritize improving the quality of performance and for statements 11, 17 and 18 are included in quadrant D, which has a low level of expectation according to patients but has a good level of performance, so patients will not assume excessively.

5. Conclusion, Implication, and Recommendation

The findings of the patient satisfaction percentage at RSUD 6 indicate that, although the drug is available in its entirety, it is not in quadrant A because of facts that fall short of the patient's expectations. As a result, the statement is deemed significant for the patient because it provides information that must be further improved in order to meet the patient's needs.

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