

**Topic : Pharmacy**

**Identification of Patient Satisfactory Profile for Outpatient  
Pharmaceutical Service at Private and Government Hospital  
within Semarang District**

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**Abstract**

In this era of hospital rivalry in Indonesia, patient satisfaction is becoming more important than ever. A hospital has to be able to maintain its quality by meeting patient's expectation for their satisfaction. Indonesian assumption of a condition where private hospitals give better pharmaceutical care than government hospital became a basis of this study to prove scientifically from patient perspective and expectation towards pharmaceutical care in each hospital. Dr Kariadi General Hospital was chosen to represent a government hospital while St Elizabeth as a private hospital representative. Those hospitals was the top referral hospitals in Semarang district, and can be assumed reflecting the population circumstances. This study was a descriptive, cross-sectional study and data acquisition was done through questionnaire based on ServQual model and in-depth interview on 60 out-patient subjects in each hospital. Using Mann Whitney test to find out the difference of satisfactory score between hospitals, he results showed significant differences in empathy dimension ( $p = 0.014$ ) and reliability dimension ( $p = 0.000$ ). From the empathy dimension, it shows that patients feel pharmaceutical care in St Elizabeth hospital gives better concern, where from reliability dimension the patients feel Dr. Kariadi Hospital is more able to give a reliable and accurate service compared to St Elizabeth hospital.

**Keywords**

Satisfaction, Pharmaceutical Care, Hospital, Semarang

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**1. Introduction**

Patient satisfaction has often been used repeatedly as an indicator for quality measurement in health services. It is mainly because patient satisfaction might influence patient retention, clinical outcomes, and medical malpractice claims (Prakash, 2010). Meanwhile, hospital pharmaceutical practice has been in a constant gradual change. Patient satisfaction depends on the service quality. The term service refers to any kind of attempt done by the service provider to fulfil the customer's needs by giving the specific service. A good service for a patient is determined by the reality that the given service can fulfil the patient's need by using patient's perception of the received service (whether they are satisfied or disappointed, and also the service length of time). A satisfaction is started from the first time patients arrived, until the time they are discharged. A service is formed by 5 service quality principles; tangibles, empathy, assurance, reliability, and responsiveness. The established health service system in

Indonesia has a potential to make a difference in consumer's expectation and the received pharmaceutical service between private and government-driven hospitals. Based on the patient expectation and perception pattern, the management might take a strategic plan to apply an effective and efficient pharmaceutical service standard. Currently there are numerous hospital pharmaceutical installation in Indonesia incapable of giving a standard pharmaceutical service and, subsequently, unable to achieve the expected patient satisfaction toward pharmaceutical installation service. The management, including hospital management, should attempt their highest effort to achieve the highest consumer's satisfaction. Sometimes maximum effort does not give optimal result because the management does not anticipate the existence of any gaps between their and patient's perception toward the received service. Pharmaceutical service in hospital pharmaceutical installation often face similar obstacles due to their lack of understanding of what kind of service needed by the patient and what opinion the patient have towards the given service done by hospital pharmaceutical installation. These obstacles should be overcome by doing survey regarding the difference in consumer's expectation and patient's perception towards the received pharmaceutical service done by hospital pharmaceutical installation. Currently there had been no patient satisfaction analysis in outpatient setting done in Dr Kariadi central hospital's and Elizabeth hospital's pharmaceutical installation; thus whether development done by these hospitals might improve patient satisfaction or not hasn't come into light. Moreover, these hospitals has often been subjected to become sample hospitals because they are big, often become referred hospitals, have more complicated patients, and, thus, might represent population circumstances.

## 2. Material

This study used a closed questionnaire formed by SerQual model method developed by Parasuraman et al. The questionnaire involved 5 quality dimensions; tangibles, reliability, responsiveness, assurance, and empathy. The questionnaire used Likert scale to acquire quantitative data.

**Table I. Response and score based on Likert scale**

Response	Favourable score	Unfavourable score
Highly disagree	1	4
Dissagree	2	3
Agree	3	2
Highly agree	4	1

## 3. Methods

### 3.1. Design Study

This study used non-experimental design study. The discrepancy between the expected quality in each hospital and patient's expectation towards pharmaceutical care in government-driven hospital (represented by Dr Kariadi Hospital) and private hospital (represented by Elizabeth hospital) was analysed in statistical analysis where the source data had been acquired in one shot observation.

### 3.2. Population and Sample

The population of this study was all patients taking their prescribed medicine in hospital pharmaceutical installation in Dr Kariadi Central Hospital and Elizabeth Hospital, both were in out-patient setting, between September and October 2011. The subject of this study were patients receiving purposive sampling-based pharmaceutical care and fulfill inclusion criteria as mentioned below:

- a. Have been receiving pharmaceutical care service at least twice in Dr Kariadi hospital's pharmaceutical installation or in Elizabeth hospital's pharmaceutical installation

- b. Took the prescribed medicine in pharmaceutical installation, whether in Dr Kariadi Hospital or in Elizabeth Hospital, during the study time and working time as non-insurance covered patients.
- c. At least 17 years of age and at least have a senior high school degree when the questionnaire were given.
- d. Willing to fulfil the questionnaire and were able to communicate well.

Using Lemeshow calculation, 49 respondents were needed for this study. However, at the end of this study 60 respondents were involved for each hospital.

### 3.3. Location and Time of Study

This study was held in Dr Kariadi Hospital and Elizabeth Hospital; both were in Semarang city, between September and October 2011.

## 4. Results

Descriptive analysis done in this study were aimed to show respondent characteristics based on sex, age, education level, occupation, and residence area. The result is as below:

**Table II. Description of Respondent Characteristics in this Study based on Sex, Age, Education Level, Occupation, and Residence Area**

Dr Kariadi Hospital			Elizabeth Hospital		
Description	Sum	Percentage	Description	Sum	Percentage
Sex:			Sex:		
Male	21	35 %	Male	16	27 %
Female	39	65 %	Female	44	73 %
<b>Total</b>	<b>60</b>	<b>100 %</b>	<b>Total</b>	<b>60</b>	<b>100 %</b>
Age (Years):			Age (Years):		
17-20	5	8 %	17-20	5	8 %
21-25	12	20 %	21-25	13	22 %
26-30	3	5 %	26-30	11	18 %
31-35	8	13 %	31-35	10	17 %
36-40	5	8 %	36-40	3	5 %
41-45	9	15 %	41-45	6	10 %
46-50	7	12 %	46-50	5	8 %
>50	11	18 %	>50	7	12 %
<b>Total</b>	<b>60</b>	<b>100 %</b>	<b>Total</b>	<b>60</b>	<b>100 %</b>
Education Level:			Education Level:		
High school	25	41,67 %	SMA	29	48,33 %
Diploma	9	15,00%	Diploma	5	8,33 %
Bachelor	25	41,67 %	Bachelor	23	38,33 %
Master	1	1,67 %	Master	3	5 %
<b>Total</b>	<b>60</b>	<b>100 %</b>	<b>Total</b>	<b>60</b>	<b>100 %</b>
Occupation :			Occupation :		
Student	12	20 %	Student	15	25 %
Entrepreneur	8	13 %	Entrepreneur	10	17 %
Private worker	12	20 %	Private worker	14	23 %
Civil government worker	5	8 %	Civil government worker	3	5 %
Teacher	1	18 %	Teacher	6	10 %
Housewife	7	12 %	Housewife	10	17 %
Retirement	5	8 %	Retirement	2	3 %
<b>Total</b>	<b>60</b>	<b>100 %</b>	<b>Total</b>	<b>60</b>	<b>100 %</b>
Residence Area			Residence Area		
Semarang	36	60 %	Semarang	48	80 %
Outside Semarang	24	40 %	Outside Semarang	12	20 %
<b>Total</b>	<b>60</b>	<b>100 %</b>	<b>Total</b>	<b>60</b>	<b>100 %</b>

Based on Table II it can be seen that the most distinctive difference was that more respondents from outside Semarang went to Elizabeth Hospital compared to Dr Kariadi Hospital.

Zarei, A., et al (2012) mentioned on his research that SERVQUAL is a valid, reliable, and flexible tool for monitoring and measuring services quality of private hospitals and enabling the hospital manager to identify particular areas which need improvement by analysing patient's perspective. ServQual analysis in this study showed that both hospitals had negatif gaps in all dimensions, which have a meaning that respondents expectation were higher compared to their perception. However, from more detailed information it was found that, according to respondents, information accuracy given by Dr Kariadi Hospital Pharmacy were higher compared to the expected service. They felt that information given from Dr Kariadi Hospital were reliable. Meanwhile, ServQual analysis for Elizabeth Hospital samples showed that respondents felt they have reached the expectation in terms of pharmacist concern regarding patient's condition during taking medicine, drug administration, and pharmacist willingness in answering patient's questions. Positif gaps in Elizabeth Hospital samples were found in the punctuality of pharmaceutical installation open time, accuracy in handing over the medicine, and medicine stock in pharmaceutical installation.

Patient expectations towards pharmaceutical service were influenced by many factors such as information they have from their surroundings, their previous experiences regarding having pharmaceutical services, and their impression towards organizations responsible for the services. Zarei, A., et al (2012) found that quality improvement efforts should be focused on creating good relationship between patients and hospital practitioners, also considering hospital practitioners to be responsive, credible, and empathetic to the patients.

Table III showed the discrepancy in patient expectation of Dr Kariadi Hospital as a government-driven hospital representative and Elizabeth Hospital as private hospital representative.

**Table III. Difference in Patient Expectation Score in Dr Kariadi Hospital and Elizabeth Hospital**

No	Hospital	Median	Total Score	Mann Whitney Test	Conclusion
1	Dr Kariadi Hospital	3	5102	0,063	Non-significantly differ
2	Elizabeth Hospital	3	5006		

In general, patient expectation in Dr Kariadi Hospital is higher than in Elizabeth Hospital, even though the difference was not statistically significant. This difference was due to patient's dimensional pattern of priorities.

Table IV showed the results of significance test on score difference regarding every dimension between those hospital as follow:

**Table IV. Significance Test Result in Score Difference regarding every Dimension in Dr Kariadi Hospital and Elizabeth Hospital**

No	Dimension	Dr Kariadi Hospital Score	Elizabeth Hospital Score	Mann Whitney Test	Conclusion
1	<i>Tangibles</i>	963	956	0,922	Non-significant
2	<i>Empathy</i>	884	924	0,014	Significant
3	<i>Assurance</i>	1240	1226	0,557	Non-significant
4	<i>Reliability</i>	1039	964	0,000	Significant
5	<i>Responsiveness</i>	975	936	0,058	Non-significant
Total		5101	5006	0,064	Non-significant

Despite the difference in every dimension score, only empathy and reliability dimension that differy significantly between Dr Kariadi Hospital and Elizabeth Hospital. In empathy dimension, patient expectation in Elizabeth Hospital were higher than those who went to Dr Kariadi Hospital, while in reliability patient expectation were by much higher in Dr Kariadi Hospital than in Elizabeth Hospital.

Empathy dimension in service refers to the willingness to give attention, give concern to the consumers, being sensitif towards consumer's expectation, and always make an attempt to fulfill the consumer's need. Patient's expectation in Elizabeth hospital as a private hospital were higher compared to those who seek for help in Dr Kariadi Hospital. Meanwhile, reliability dimension refers to the ability to do service accountably and accurately as advertised or promised. Those who went to Dr Kariadi Hospital had higher expectancy in this dimension compared to those who went to Elizabeth Hospital as private hospital.

Glober and Rivers (2008), mentioned that generally consumers seek the best care with the lowest cost. In the setting of health service this condition is seldom found. Mission, target, and financial support in an institution allows them to hire the best doctors, nurses, supporting staffs, and to get the most sophisticated tools and technology to attract patients. Meanwhile, patients have to choose between these options, and, unfortunately, it often sacrifice on option to get the other option.

According to Undang-Undang No 44 in Year 2009 regarding hospital, the service cost in government-driven hospital is decided by Health Minister or local government, while in private hospital the hospital director make the decision (Anonym, 2009). It can be said that private hospital might make decision regarding service cost deliberately. In accordance with Glover and Rivers, many patient in private hospital ready to sacrifice higher cost in order to get a more comfortable service, thus, in turn, they will have higher expectation in empathy dimension which is the willingness to give attention, give concern to the consumers, being sensitif towards consumer's expectation, and always make an attempt to fulfill the consumer's need.

Rama et al. (2011) defined patient satisfaction as patients' emotions, feelings and their perception of delivered healthcare services, while other authors defined patient satisfaction as a degree of congruency between patient expectations of ideal care and their perceptions of real care received. Lin et al. (2004) showed that ServQual might be used for satisfactory study in the setting of outpatient clinic. They have found out that assurance and empathy dimensions were the highest priorities according to the patients (cit Lin et al. 2009). Lin et al. (2009) also found out that the highest gap belongs to reliability, assurance, and empathy dimensions. Their study also showed that patients expected the doctors to give more time in doctor-patient discussion. Moreover, a study held in Bangladesh by Syed in 2007 found out that tangibles dimension were one of the most important factor in health service (cit Lin et al., 2009). This statement might explain that the assumed important factors might differ in one place and another.

## **Conclusion**

1. Patient expectation in Dr Kariadi Hospital is higher than in Elizabeth Hospital due to patient's dimensional pattern of priorities, even though the difference was not statistically significant.
2. Empathy and reliability dimension are different significantly between Dr Kariadi Hospital and Elizabeth Hospital.
3. On empathy dimension, patient expectation in Elizabeth Hospital were higher than those who went to Dr Kariadi Hospital, while on reliability patient expectation were by much higher in Dr Kariadi Hospital than in Elizabeth Hospital.

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