The Influence of Hospital Trust and Service Quality to Patient Satisfaction and Loyalty

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Keywords: Trust, Service Quality, Satisfaction, Loyalty.

Abstract: The purpose of this paper is to analyse how trust and service quality influence satisfaction that lead to patient loyalty. This research used a quantitative methodology. In total, 100 patients participated from outpatient departement in referal center hospital of Central Java, Semarang, Indonesia. The data was collected using a survey method with a questionnaire. The data was analyzed using SEM with smartPLS3.0 software. The reserach demonstrated that hospital trust has no significant impact on patient satisfaction. However, the result also found that service quality has a positive influenced on patient satisfaction and patient satisfaction has a positive influenced on loyalty. This research was performed only in one healthcare service provider in Semarang so the result is less representative of the population in general. This study could be an input towards hospital managers to generate effective strategies in their effors to improve patient satisfaction and loyalty.

1 INTRODUCTION

The presentation of high quality service is the key to success in the service industry at this time. In an era with a high level of competition, the efforts of the monitoring and improvement of the quality of service are required for improving efficiency as well as the volume of business (Meesala and Paul, 2018). The healthcare service is a vital sector that has great risks in some potential cases so the ability to create trust in the hospital rated extremely important. Trust in the healthcare service determined by many factors such as the customer's attitude toward the brand, perceived quality, reputation and conduct of customer-oriented staff (Khodadad Hosseini and Behboudi, 2017).

Service quality is an important determinant in generating customer satisfaction and Word of Mouth communications (Lang 2011). The dimensions of service quality (SERVQUAL) includes tangible, reliability, responsiveness, empathy and assurance (Parasuraman, Berry, and Zeithaml, 1993). The quality system based on these five dimensions has the potential to increase functional quality and service performance. Quality improvement is the main factor that influences the level of customer satisfaction and loyalty in service and manufacture marketing (Meesala and Paul, 2018).

The purpose of delivering quality services as well as creating trust is to result in patient satisfaction of a healthcare service provider. Patient satisfaction is an indicator of hospital success in providing medical services. According to Wilson et al (2008) patient satisfaction leads to customer loyalty, provide recommendations to other people, as well as purchases (Meesala and Paul, 2018).

1.1 Research Gaps

Patient satisfaction concept has taken a lot of attention in the healthcare service industry. Some prior studies bring up satisfaction as the main construct such as: Amin and Nasharuddin (2013), Elleuch (2008), Kessler and Mylod (2011). However, researchers from previous study prioritizing service performance as the construct to explain patient satisfaction. Specifically, most previous research shows that service quality has the biggest role in explaining patient satisfaction (Meesala and Paul, 2018).

Hospital trust pointing the patient's belief in the capability of a healthcare service provider. The literature of marketing in healthcare industry indicate trust as an important factor in determining loyalty (Sumaedi et al., 2014). In healthcare service, trust has been found as a fundamental factor in the decision-

making process (Moliner, 2009). Refers to the previous study, trust in healthcare provider has a positive influence on patient satisfaction (Benkert et al., 2006).

This review of the prior study concludes that satisfaction is influenced by many factors and cannot be determined merely through the construct of service quality. Trust also seems to be a significant construct in defining satisfaction that underlies patient loyalty in the healthcare service provider. However, the recent literature represents that there is a lack of study in explaining relationship concurrently between trust, service quality, satisfaction and loyalty based on the patient evaluation.

2 HYPOTHESES

This paper focuses on the effect of hospital trust and service quality on patient loyalty towards satisfaction. The Following hypotheses based on a review of previous literature that provides the scope of marketing study. This research proposes hypotheses as follows:

H1. Hospital trust has a positive impact on patient satisfaction.

H2. Service quality has a positive impact on patient satisfaction.

H3. Patient satisfaction has a positive impact on patient loyalty.

3 RESEARCH METHOD

This research is an observational study with the cross sectional approach. The population of this research involved patients in the outpatient department of referal center hospital of central java, Semarang, Indonesia. Patients were selected based on purposive sampling technique with several criteria, namely 17 years old and above, well communicate, has been using the healthcare service more than once with a different complaint, come for treatment in service hours and using private payment. The sample size was calculated using Slovin formula and obtained 100 respondents.

This research is using Structural Equation Modeling (SEM) with two exogenous (independent) variables i.e. trust (3 indicators) and the service quality (5 indicators), whereas endogenous (dependent) variables consists of satisfaction (5 indicators) and loyalty (3 indicators). The data

collection was executed through survey method by using a five-point Likert scale questionnaire. The data was analyzed using SEM with smartPLS 3.0 software.

3.1 Results

The characteristics of the research subject based on demographic data consist of gender, age, occupation, education, average monthly expenses, and the reason for treatment.

Table 1: The characteristic of respondents.

Characteristic	Percentage
Gender	
Male	46,0
Female	54,0
Ages	
18-23 YO	15,0
24-29 YO	12,0
30-35 YO	21,0
36-41 YO	17,0
42-47 YO	13,0
48-53 YO	10,0
≥54 YO	12,0
Education Backgrounds	
Elementary School	10,0
Junior High School	15,0
Senior High School	40,0
Diploma/ Bachelor Degree	30,0
Post Graduate Program	5,0
Occupations	
College Students	11,0
Official Employee	20,0
Entrepreneurship	30,0
Government Employee	5,0
Others	34,0
Average Monthly Expenses	
<IDR 2,000,000	43,0
IDR 2,000,000-IDR 4,000,000	36,0
IDR 4,000,000-IDR 6,000,000	11,0
>IDR 6,000,000	10,0
Visitation Reasons	
Their own accord	50,0
Recommendation from others	7,0
Reference from health workers	43,0

3.2 Partial Least Square – SEM Analysis

3.2.1 Measurement Model

Evaluation of the *outer* model aims to determine the *goodness of fit* by examining validity and reliability

test of the indicators. The validity of the construct is assesed based on convergent validity and discriminant validity test to find out the accuracy of the measurement model. Convergent validity testing aims to determine the validity between item and construct using outer loading score. Table 2 shows that the outer loading score of all items was> 0.6 which is surpass the accepted value (Ghozali, 2014). Other validity examination for contruct items using discriminant validity test by comparing AVE score and square root AVE of constructs. Tabel 2 demonstrates the result of discriminant validity test based on Fornell and Larckers's (1981) criteria. All constructs have AVE score higher than 0.5 and square root AVE are greater than AVE score. Thus, the discriminant validity test was accepted.

Reliability test was performed to explore measurement model consistency. Tabel 2 shows that all constructs have composite reliability (CR) score >0.6, surpass the accepted value (Ghozali, 2014). This result indicates the measurement model has sufficient composite reliability, convergent validity and discriminant validity (Ghozali, 2014).

The evaluation of the inner model aims to observe the R-square score that indicates the predictive value of a measurment model. Tabel 2 shows that patient satisfaction has the R-square score 0.553 which means exogenous constructs (trust and service quality) affect satisfaction as much 55.3% whereas about 44.7% of satisfaction was influenced by other factors outside this study. Moreover, the R-square score of loyalty is 0.340. This result explains that patient satisfaction affects loyalty up to 34%, whereas about 66% of loyalty construct was influenced by other variables outside this study.

3.2.2 Structural Model

Analyzing the structural model was performed to test the hypotesis of this study. The result was examined using the bootstrapping technique with 1,000 resampling method to determine the path coefficient's significance. The first hypothesis was examined between hospital trust and patient satisfaction. The result shows that hospital trust has a positive (0.200) but not significant (t = 1,483) to affect patient satisfaction. Thus, H1 was not supported. Thereafter, we examined the second hypo-

Table 2: Validity and reliability test.

Variables	Outer Loading	CR	AVE	Square root AVE				R^2
Trust		0.891	0.731	**0.855**				
Benevolence	0.810							
Honesty	0.879							
Competence	0.874							
Service Quality		0.909	0.551	0.668	**0.742**			
Reliability	0.822							
Responsiveness	0.837							
Assurance	0.853							
Emphaty	0.846							
Tangible	0.722							
Satisfaction		0.859	0.668	0.820	0.734	**0.818**		0.553
Satis1	0.795							
Satis2	0.769							
Satis3	0.705							
Satis4	0.727							
Satis5	0.711							
Loyalty		0.774	0.535	0.442	0.583	0.511	**0.731**	0.340
Loy1	0.684							
Loy2	0.812							
Loy3	0.691							

*CR = *Composite Reliability;* AVE = *Averange Variance Extracted*

Table 3: Path coefficient test.

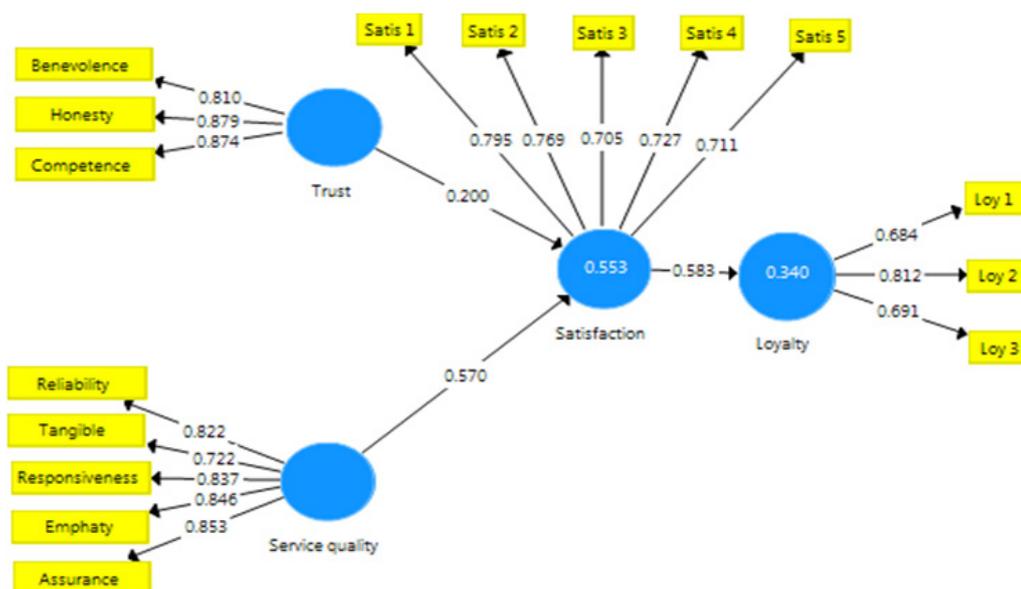| Hypotheses	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Hospital Trust-> Patient Satisfaction	0.200	0.188	0.135	1.483	0.139
Service Quality-> Patient Satisfaction	0.570	0.585	0.132	4.329	0.000
Patient Satisfaction-> Loyalty	0.583	0.593	0.063	9.197	0.000

Figure 1: PLS output of hospital trust and service quality to patient satisfaction and loyalty.

tesis between service quality and patient satisfaction. Tabel 3 shows that service quality has a positive (0.570) and significant (t = 4.329) effect on patient satisfaction. The third hypotesis was tested to determine the relationship between patient satisfaction and loyalty. The result indicates that patient satisfaction has a positive (0.583) and significant (t = 9.197) effect on patient loyalty. Both second and third hypotesis was significant at $p<0.05$ thus, H2 and H3 were supported.

4 DISCUSSION

This research proposed a hierarchical model to find out the relationship between trust, sevice quality, patient satisfaction and loyalty. The Structural Equational Model (SEM) was used to examine the path model. The outcome confimed that hospital trust has no significant impact on patient satisfaction. Thus, H1 was rejected. This result indicates that increasing hospital trust does not ensure a higher level of satisfaction. According to this result, the prior study suggested that trust has no influence on satisfaction (Khodadad Hosseini and Behboudi, 2017; Laura, 2016).

Afterward, the result for the second hypotesis demonstate that service quality has a positive and significant effect on patient satisfaction. Thus, H2 was supported. This finding confirms the prevoious study conducted by (Naidu, 2009). Similarly, Amin (2013) has found that admission, medical service,

overal service, discharge, and social responsibility have a significant impact on satisfaction. If a provider could fullfill the expected service then the customer would be satisfied (Parasuraman, Zeithaml, and Berry, 1985).

Meanwhile, the third hypotesis stated that patient satsfaction has a positive influnce on patient loyalty. The outcome shows that H3 was supported. This finding was suitable for previous research in which satisfaction has an important role in patient loyalty (Elleuch, 2008; Kessler and Mylod, 2011). If satisfaction from the product or received service was beyond expectation then customer tends to reuse the same product or service (Lee and Kotler, 2009).

5 CONCLUSION

Patient satisfaction has already been discovered as the main concept in the prior marketing study. Some previous study concludes satisfaction was built from service quality (Lang, 2011) (Amin and Zahora Nasharuddin, 2013), whereas other literature declare trust as an important construct in generating satisfaction (Benkert et al., 2006) (Shan et al., 2016). However, in this study trust has no significant influence in resulting patient satisfaction to the healthcare service provider. Moreover, the outcome of this research shows that service quality has a significant impact on patient satisfaction. Also patient satisfaction has a positive influence on patient loyalty.

5.1 Implication

The outcome of this study has a strong implication for hospital management. Particularly, the results offer a new perspective for improving strategies in hospital marketing for both patients and hospital managers. In order to develop patient satisfaction and loyalty, this literature suggests hospital managers consider patient perspective in conducting routine evaluations of service quality. Patient evaluations of service quality could be an input toward management to revise service sectors, which were yet infallible.

5.2 Limitation and Future Research

This study has several limitations. The data was collected only in one healthcare service provider in Semarang, Indonesia so the result may not represent the population in general. Thus, the findings need to be futher examined in other healthcare service providers to confirm their constancy. Information acheived from patients interview may not be free of subjectivity.

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