EFFECT OF SERVICE QUALITY AND PATIENT SATISFACTION ON BEHAVIORAL INTENTION

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Abstract
Service quality is an essential aspect in realizing patient satisfaction and behavioral intention in the health service industry. The behavioral intention has been identified as an essential construct in measuring organizational success and affects patient visits. This study aims to determine service quality and patient satisfaction on behavioral intention in the Husada Utama Hospital. This study was quantitative causal research to determine the effect of two or more variables. Primary data collected with a questionnaire include the perceived service quality scale, patient satisfaction scale, and behavioral intention scale. This study's sample was 150 respondents; consist of inpatients room for class 1, 2, and 3 that met inclusion criteria. The sampling method for this study was purposive sampling. Data analyzed using SEM AMOS to analyze measurement model, structural model, and hypothesis test. This study found that: service quality has a significant positive effect on patient satisfaction, service quality has a significant positive effect on behavioral intention, and there was no positive effect of patient satisfaction on behavioral intention. Service quality has a positive effect on behavioral intention, so patients' increasing behavioral intention can be done by improving the service quality. Further research needs to be conducted to analyze the effect of service quality on the behavioral intention with patient's satisfaction as a mediator; further research also needs to develop a patient's behavioral intention enhancement program.

Keywords: service quality, patient satisfaction, behavioral intention

INTRODUCTION
The health care industry is an industry that provides health services for patients who need treatment. The health service industry includes puskesmas (community health services), clinics, and hospitals. The hospital is one of the health service institutions that has an essential role in improving the public health status.

Service quality is critical in realizing patient satisfaction and behavioral intention in the health care industry. The development of an increasingly high level of competition makes hospitals more aware of the importance of providing the best
quality service to their patients. Quality of service is an essential part of a hospital's operation as regulated in Permenkes Number 43 of 2016. Service quality is a broad term and can be defined as a critical difference between patient observations and expectations of facilities and the actual actions of services received by clients provided by the hospital at a specific period and it have an effect on client or patient satisfaction and behavioral intention (Maqsood et al., 2017).

Good quality of service will convince clients to repeat service requests. Service quality that meets customer expectations will earn customer loyalty. This intention will create a clear tendency for customers as a service relative to other companies that offer the same service (Ismail & Yunan, 2016). Good service quality will have an impact on patient satisfaction. Patient satisfaction plays a vital role in estimating the quality of hospital services. Satisfaction can be considered as a consideration and a patient judgment decision on the success of the service. Patient satisfaction is one measure of the quality of care services and is a reliable tool for planning, implementing, and evaluating the hospital service system. The quality of health services refers to the level of perfection of health services, which on the one hand, can lead to satisfaction for each patient according to the average level of satisfaction of the population. On the other hand, its implementation procedures are following the established code of ethics and professional service standards. Good quality hospital services have an impact on patient satisfaction and behavioral intention.

The behavioral intention (BI) of the patient influences the number of visits to a hospital. Patient's behavioral intention is a proportion that relates to future actions. The action in question is whether the patient will choose the services of a hospital or not as a result of the shape of the patient's perception of the services of a hospital. Patients' behavioral intention is influenced by many things, including service quality and patient satisfaction (Aliman & Mohamad, 2016).

Behavioral intention has been identified as an essential construct in measuring organizational success. In the service industry, behavioral intent represents the likelihood that customers will repurchase from service providers soon and supports service providers with positive word of mouth (Clemes et al., 2020). The most common indicators of positive behavioral intention are the willingness to return and the effect of word of mouth (Lin, 2016). Behavioral intention is the behavior of consumers who are loyal or loyal to the company so that they are willing to recommend to others because they have received good service from the company (Purwianti & Tio, 2017). Studies to assess service quality (KL) perception have been carried out in the hospital sector in various countries. Donabedian (Aagja & Garg, 2010) provides criteria for so-called "good care," using a framework of structure (related to the physical environment and facilities), processes (related to interactions with service providers), and outcomes (results of interactions). Donabedian developed seven attributes of health care quality: efficacy, effectiveness, efficiency, optimality, acceptability, legitimacy, and equity. His research uses focus group interviews of doctors, administrators, and patients.

The quality of service can influence patient satisfaction (KP). In the research of Cong & Mai (2016), it was found that there was an effect of service quality on patient satisfaction.
satisfaction. Among the three dimensions of service quality, the tangibles dimension has the most substantial influence on patient satisfaction, followed by medical attitudes and ethics, and finally by accessibility to health services. According to Amin & Nasharuddin (2013), customer satisfaction meets customer expectations for products and services by comparing with perceived performance. Customers judge if the perceived performance matches customer service expectations, they are satisfied. If not, they are not satisfied.

In addition to patient satisfaction, service quality influences behavioral intention to determine whether the customer will remain or leave the relationship with the service provider. Furthermore, Amin & Nasharuddin (2013) identified two dimensions to measure beneficial and unfavorable behavioral intentions. Good intent means customers will convey the positive word of mouth, repurchase intentions, and loyalty. Unfavorable behavioral intentions tend to spread negative word of mouth and pass on their negative experiences to others.

Service quality affects two factors, namely satisfaction and behavioral intention. It can be seen from the research that service quality positively influences behavioral intention (Slack et al., 2020). All service quality factors have a positive relationship with patient satisfaction. However, only three service quality dimensions (physical evidence, assurance, and empathy) show a significant behavioral intention relationship. Satisfaction has a robust positive effect on behavioral intention (Aliman & Mohamad, 2016).

Research conducted by Amin & Nasharudin (2013) shows a significant influence between service quality on patient satisfaction and a significant between service quality on behavioral intention. Different results from other studies show that service quality has a significant positive effect on patient satisfaction but harms behavioral intention (Maqsood, et al., 2017).

Based on the results of the interview, it can be seen that the reason for the patient or the patient's family to choose treatment at the hospital is because of the medical services and health facilities available at the hospital. From the results of the data obtained from the initial survey, it can be seen that those who stated that hospital service quality was good was 88%, while those who expressed satisfaction were 79% and for the behavioral intention was 79%. This result means a gap between hospital service quality and patient satisfaction, where the percentage of patient satisfaction should be approximately the same, namely 88%. The patient's behavioral intention to continue visiting and return to the hospital for further treatment at the Husada Utama Hospital in Surabaya should also be approximately the same, namely 88%. From the data results obtained, this is also strengthened based on data on patient visits at the Husada Utama Hospital throughout 2018, the day has decreased. The decrease in the number of patients could be due to the level of patient satisfaction. Based on this background, it is necessary to influence Service Quality on Patient Satisfaction and Behavioral Intention at the Husada Utama Hospital Surabaya.
RESEARCH METHODS
This type of research is causal research because it aims to determine whether or not there is an effect of service quality through admission, medical services, overall service, discharge, and social responsibility on patient satisfaction and the effect of patient satisfaction on behavior intention. Formative patient satisfaction indicators are services provided following patient expectations, the latest health care methods, effective indoor services, good technical facilities, concern for patient participation, patient satisfaction from support staff & doctors, and hospital visits for all care. At the same time, the dependent or endogenous variable (endogenous variable) is behavior intention. In endogenous latent variables, behavior intention has formative indicators, namely the word of mouth, repurchase intention, loyalty. Sampling in this study using a purposive sampling technique. The sample selection inclusion criteria in this study were: Inpatients for the period July-August 2019, Inpatients aged 17-60 years, Inpatients not in ICU care, Inpatients who did not experience strokes, Not inpatients who gave birth, Patients hospitalization for non-communicable diseases, and inpatients class 1, 2 and 3. Respondents in this study were 150 people. The size of the sample was determined using the Slovin method. Modeling in the analysis of this research is to use SEM (Structural Equation Modeling).

RESULTS & DISCUSSION
The distributed questionnaire obtained a description of the respondents, namely several 81 people (54%) of the respondents in this study were women. Even though the number of female respondents is more than male respondents, this does not mean that there are more female patients than men. The majority of respondents were more than 40 years old, as many as 49 people (32.67%). This result shows that with increasing age, the body's physiological and immune system function decreases compared to younger ages, making it possible for people over 40 years of age to be more susceptible to disease. Most of the respondents have a diploma (23.33%) and bachelor's degree (21.33%), and the majority of respondents' occupations are employees (38.67%). Employment as an employee requires regular and regular working hours so that fatigue is very likely to occur. If these conditions are not balanced with a healthy lifestyle, this will put the respondent at risk of falling ill. The number of visits showed that most of them were the respondent's first visit to the main Husada hospital (28.67%), and the third visit (27.33%). The number of visits indicates a desire to repurchase or receive care at the same place. This condition shows that the respondent feels that his expectations of receiving health care are fulfilled so that when the respondent gets sick again in the future or needs to get further care, the respondent still chooses the main Husada hospital.

The test was carried out after the measurement model stage and analysis of the validity and reliability of the variables forming indicators, and the subsequent analysis is the analysis of Structural Equation Modeling (SEM). The structural model stage serves to ensure the model follows the data and ensures that there is an influence between the variables studied. The structural model testing is carried out with the
Maximum Likelihood estimation. Analysis of data processing results at the structural model stage was carried out by conducting a model feasibility test and a causality significance test. The results of the structural model test can be seen in Figure 1.

![Figure 1](image)

**The Structural Model**

Figure 1 on the analysis of the study's structural model shows that the model has met the criteria, except for the Chi-Square value. The following is the structural model suitability index data against the recommended goodness of fit value:

<table>
<thead>
<tr>
<th>Goodness of Fit Indices</th>
<th>Nilai Indeks</th>
<th>Cut – Off Value</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>X2 Chi Square</td>
<td>72.298</td>
<td>Small expected</td>
<td>Poor fit</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>1.763</td>
<td>≤ 2.00</td>
<td>Good fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.72</td>
<td>≤ 0.08</td>
<td>Good fit</td>
</tr>
<tr>
<td>GFI</td>
<td>0.916</td>
<td>≥ 0.90</td>
<td>Good fit</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.865</td>
<td>≥ 0.90</td>
<td>Marginal fit</td>
</tr>
<tr>
<td>TLI</td>
<td>0.944</td>
<td>≥ 0.90</td>
<td>Good fit</td>
</tr>
<tr>
<td>CFI</td>
<td>0.958</td>
<td>≥ 0.90</td>
<td>Good fit</td>
</tr>
</tbody>
</table>

The model suitability test results in Table 1 show that the values of CMIN / DF, RMSEA, GFI, AGFI, TLI, and CFI have values that meet the criteria and are included in the excellent fit category. The AGFI value is at a marginal value with the criteria 0.8 ≤ AGFI <0.9. The AGFI value is in the marginal fit category, but this value is close to
the recommended value so that the model can still be declared fit and fit for use. The marginal value is a condition for the suitability of the measurement model under the criteria for absolute fit and incremental fit, but it can still be continued in further analysis because it has a value close to the excellent fit criteria.

The RMSEA index in this study was 1.763 and included a good fit. The RMSEA can be used to compensate for the chi-square statistic in a large sample (Hair et al., 2010). The chi-square value shows a value of 72,298 with a degree of freedom (DF) of 41. The recommended suitability index for the chi-square value is small; this means that the chi-square value has not met the recommended value. Joreskog and Sobron (1996) stated that chi-square could not be used as the only measure of the overall fit of the model; this is partly due to the chi-square characteristic sensitive to the sample size. Chi-square test (X2), if the number of samples is large enough, that is, less than 200 samples, then chi-square must be accompanied by other testing instruments (Hair et al., 2010).

If the sample size used is larger, the chi-square value will also increase and lead to rejection of the model. This result will still happen even though the difference between the sample covariance matrix and the model covariance matrix is minimal or small. The chi-square value also has a close relationship with the DF value; the size of the DF value will also affect the chi-square value's size. The CFI and TLI values in this study fall into the excellent fit category. The TLI and CFI indices in model testing are highly recommended because they are relatively insensitive to sample size and less influenced by model complexity.

The model feasibility test has several criteria, and the model is said to be feasible if at least one of the feasibility test methods is met (Hair et al., 1998). In this study, there are five eligibility criteria for a model that has a good fit value and one eligibility criterion for a model that has a marginal fit value, so that even though the chi-square value does not meet the recommended value, the model in this study is considered feasible and can be continued for further analysis.

The relationship between constructs in the hypothesis is shown by the regression weights' value (Hair et al., 1998). In this study, there are three hypotheses proposed. Hypothesis testing is performed using the t-value with a significance level of 0.05. The t-value in the AMOS program is the Critical Ratio (CR) value in the Regression Weight of the fit model. If the CriticalRatio (C.R) value is $\geq 1.967$, alternatively, the probability value ($P$) $\leq 0.05$, then the research hypothesis is accepted. The effect of service quality and patient satisfaction on behavioral intention can be analyzed; it can be seen in Table 2.
The quality of health care is one of the most critical topics in healthcare today. Service quality is a critical difference between patient observations and facility trust and the actual action of services received by clients provided by the hospital at a specific period, and it affects client or patient satisfaction and behavioral intention (Maqsood et al., 2017). Patient satisfaction plays a vital role in estimating the quality of hospital services. Satisfaction can be considered as a consideration and a patient judgment decision on the success of the service. This study found that service quality has a significant positive effect on patient satisfaction with a C.R value of 3.808 and p <0.05. This result means that increasing patient satisfaction can be done by improving the quality of service. The results of this study are following previous research conducted by Cong & Mai (2014), it was found that there was an effect of service quality on patient satisfaction. The research conducted by Amin & Nasharudin (2013) and research by Maqsood et al. (2017) found a significant influence between service quality and patient satisfaction. Previous studies have seen that service quality is an antecedent of patient satisfaction (Parasuraman et al., 1991; McDougall & Levesque, 2000). Naidu (2009) found that there is a significant relationship between service quality and patient satisfaction. Patients will feel satisfied when the quality of hospital services match their expectations and requirements; the higher the level of conformity with expectations, the greater patient satisfaction (Chahal and Kumari, 2010).

Forero & Gomez (2017) suggest that satisfaction is a function of disconfirming the performance of expectations. Many literature reviews show that quality and service satisfaction are different constructs. Differences based on service quality are a form of attitude that represents a long-term overall evaluation, whereas satisfaction represents a short-term, transaction-specific measure. The model that has been widely developed is the evaluation of service quality as a cognitive antecedent of the affective satisfaction construct (Oliver, 1997). Many researchers categorize customer satisfaction as an affective construct and not a cognitive construct (Olsen 2002). So, customers can evaluate objects only after they have interpreted the objects. Therefore, satisfaction is a post-purchase evaluation of a product or service, compared to expectations before buying (Kotler & Keller, 2015). Until now, many research efforts on customer satisfaction and service quality still have ambiguity about whether the evaluation of service quality directly affects behavioral intention or whether satisfaction is an antecedent of service quality (Brady et al., 2001). Numerous studies on service quality

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>KP &lt;--- KL</td>
<td>.451</td>
<td>.105</td>
<td>3.808</td>
<td>***</td>
</tr>
<tr>
<td>BI &lt;--- KL</td>
<td>.354</td>
<td>.109</td>
<td>3.300</td>
<td>***</td>
</tr>
<tr>
<td>BI &lt;--- KP</td>
<td>.157</td>
<td>.135</td>
<td>1.328</td>
<td>.184</td>
</tr>
</tbody>
</table>
and customer satisfaction have not addressed the nature of the relationship between the two (Choi et al. 2004).

Patients evaluate satisfaction with the services received by referring to several factors, including product/service quality, service quality, emotional factors, price, and cost. Based on the descriptions of respondents' answers, it was found that the level of service quality and patient satisfaction in this study was included in the high category. Service quality is evaluated with five dimensions: admission, overall service, medical service, discharge process, and social responsibility. Efforts to increase patient satisfaction can be made by improving the quality of service in these five dimensions. Improving service quality can be done by re-evaluating the service flow and standard operating procedures (SOP) so that services from the admission process to the discharge process can run effectively. Quality of service can also be done by providing excellent service training to improve health workers' soft skills and attitudes in providing services. Patient satisfaction is one of the essential goals considered by the hospital. Good quality of service will make patients feel satisfied, and this will also affect the patient's behavior in the future whether to repeat requests (repurchase) for treatment in the future. Patient satisfaction is very dependent on the quality of service following the needs and requirements of the patient. The better the suitability of services to patients' needs and requirements, the healthier the quality of service and, therefore, the more patient satisfaction and loyalty (Maqsood et al., 2017).

Behavioral intention is the behavior of consumers who are loyal or loyal to the company so that they are willing to recommend to others because they have received good service from the company (Purwianti & Tio, 2017). In the health sector, the interaction between patients and hospitals is one of the main factors determining patient loyalty. Behavioral intention is influenced by several factors, one of which is service quality.

In this study, the results show that service quality significantly affects behavioral intention with a C.R value of 3,300 and a p-value of <0.05. This result means that if the quality of hospital services is good, it will affect patients' behavioral intention to make return visits. The description of the patient's answers indicates that service quality and behavioral intention are in the high category.

The results of previous research conducted by Amin & Nasharudin (2013) found that service quality significantly affects behavioral intention. This result is also consistent with the research results by Amin & Isa (2008) which found a significant relationship between the quality of health services and behavioral intention. These findings indicate that if the patient has a good perception of service quality and is satisfied with the service received, it will simultaneously increase patient loyalty. Bitner et al. (1990) found a significant relationship between perceptions of service quality and behavioral intention on the dimensions of the word of mouth and repurchase intention. Dabholkar et al. (1996) found a positive relationship between perceived service quality and the likelihood of recommending a product or service.

Different research results were found by Maqsood et al. (2017), which stated that service quality hurt behavioral intention. Behavioral intention is an essential construct
in determining organizational success. Several studies have modeled service quality as an antecedent to behavioral intention and found a significant relationship between service quality and behavioral intention (Bitner et al., 1990; Boulding et al., 1993; Zeithaml et al., 1996). Behavioral intention represents the possibility of a return visit by the patient (repurchase intention) and positive comments and recommendations (word of mouth). The quality of service perceived by patients will encourage the intention to return to the hospital in the future. Ghorbanzadeh et al. (2019) support the view that customer experience determines behavioral intention and that a positive experience will encourage satisfied customers to reuse/revisit service providers.

The concept of patient satisfaction is developed based on the patient's affective response to the overall experience (Wu et al., 2008). Patient satisfaction is measured by the patient's satisfaction with the doctor; the patient feels that the overall health care service is better than what the patient expected, and the patient's overall satisfaction with the hospital's services.

In this study, the results showed that patient satisfaction did not significantly positively affect behavioral intention with a C.R value of 1.328 and a p-value of 0.184. This result means that patient satisfaction at the hospital does not affect the level of patient behavioral intention to make a return visit. The description of the patient's answer indicates that patient satisfaction and behavioral intention are in the high category. This study's results are different from the results found by Jandavath & Byram (2016) and Truong et al. (2020), who found that patient satisfaction has a significant positive effect on behavioral intention. Not many previous studies have examined the direct effect of patient satisfaction on behavioral intention. Research finds that service quality affects patient satisfaction, which positively affects behavioral intention, such as loyalty (Naidu, 2009).

In this study, it is suspected that patient satisfaction does not significantly positively affect behavioral intention because many indicators do not meet the criteria for validity and reliability, so they must be aborted. Ten indicators measure patient satisfaction, and only four indicators are left that meet the validity and reliability criteria. The four indicators only measure satisfaction in terms of conformity of services with patient expectations, technical facilities, and patient satisfaction of staff and doctors. This result is thought to be one of the factors causing the finding that there is no effect of patient satisfaction on behavioral intention.

CONCLUSION
This study found that service quality has a significant positive effect on patient satisfaction at the Husada Utama Hospital Surabaya. The results of this study are following previous research conducted by Cong & Mai (2014), it was found that there was an effect of service quality on patient satisfaction. The research conducted by Amin & Nasharudin (2013) and research by Maqsood et al. (2017) found a significant influence between service quality and patient satisfaction. So this research strengthens the research results of Maqsood et al. (2017) and can be applied to other similar studies.
The results of this study also found that service quality has a significant positive effect on behavioral intention. The results of previous research conducted by Amin & Nasharudin (2013) found that service quality significantly affects service quality. This result is also consistent with the research results by Amin & Isa (2008), which found a significant relationship between the quality of health services and behavioral intention. However, this study's results are not in line with research conducted by Maqsood et al. (2017), which states that service quality hurts behavioral intention. This study also found that the patient satisfaction variable did not have a significant positive effect on behavioral intention. This study's results are different from the results found by Jandavath & Byram (2016), who found that patient satisfaction has a significant positive effect on behavioral intention. Not many previous studies have examined the direct effect of patient satisfaction on behavioral intention. Research finds that service quality affects patient satisfaction, which positively affects behavioral intention, such as loyalty (Naidu, 2009).

There are several limitations in this study, namely: Patients are only limited to class 1, 2, and 3 patients, so they cannot compare behavioral intention with patients from VIP class. Significant abortion indicators can affect the final results of data processing. The covariance matrix is not positive definite, which means that the value of the covariance matrix is not necessarily positive, this is due to the nature of the data, but as long as it still provides a convergent solution (the results of the running are out), it means that it is possible to interpret it. From these limitations, it is recommended that further studies with patient satisfaction models as the mediating variable; and involve respondents from several different hospitals.

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