SATISFACTION MEDIATING THE EFFECT OF NURSING SERVICE QUALITY AND HOSPITAL IMAGE ON PATIENT LOYALTY

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Abstract
This study aimed to analyze and test the satisfaction that mediated the effect of nursing service quality and hospital image on loyalty. This applied a technique of accidental sampling; and the samples were patients’ family in the Makkasau Parepare Hospital and the Lasinrang Pinrang Hospital. There were 280 respondents who were considered at least having junior-high education, treating the patients for 3 days, and taking care of the patients twice within the two observed hospitals. As the results, this study found that the service quality and hospital image affected the patients' loyalty. The better nursing service quality and the higher degree of hospital image would lead for respondents' greater loyalty. Thus, the respondents' satisfaction mediated the effect of nursing service quality on loyalty; and satisfaction would not mediate the hospital image on loyalty.

Background

The new paradigm of health-care industry necessitates hospitals to provide service quality as the needs and desires of patients. The current issue of service quality is the augmenting numbers of competitors among health-care providers. The providers are expected to improve their service quality for rising customers' satisfaction. Thus, the hospitals have to identify the variety of customers' needs as well as to develop the customers' satisfaction towards the given nursing services for establishing the customers' loyalty. In particular, the patients who feel satisfactory with a hospital's nursing service will take further actions in using its services; visit the hospital again in the future and inform others for the hospital's qualified service performance.

Loyalty has been considered as the positive attitude of customers or patients to have repeated visits in a hospital. Loyal customers tend to return for having further health care. Accordingly, this study intended to investigate the loyalty of patients in the Public Hospitals, located in Ajatappareng, Parepare, South Sulawesi, Indonesia. However, its nursing service quality and hospital image were indicated less optimal and its inpatients decreased. Accordingly, further actions need to be done for the hospital improvement; and this research results will contribute for healthcare service improvement.

Theoretical Framework
Health Service Quality

Health service quality is essential for hospital performance. Parasuraman and Zeithaml (1998) conceptualize service quality as the disparity between the factual service that customers gain and the perceived service that customers expect. The service quality as multidimensional constructs is generally based on the judgement of customers about the service provider and the interaction of customers with the services themselves (Zeithaml and Bitner, 1996). Furthermore, SERVQUAL (Service Quality) has been applied to determine a service quality within a service industry. It is an approach that draw five dimensions of service quality including physical evidence (tangibles), realibility, responsiveness, assurance, and empathy. In brief, SERVQUAL is used for healthcare service evaluation.

Hospital Image

Hospital image can be generated from customers' apprehension and experience. According to Davis (2004), the customers may consider image, identity, and reputation in different perspectiver; but they are integrated one to another. Image is how customers view about a company. Image also relates to the public's impression, feeling, and description on a company; and the impression is intended to be created towards an object, a person, or an organization (Harrison, 2001). Moreover, the image of a hospital can be derived from the customers' educational level and factual understandings about staff, products and situation of a hospital. A previous research by Kim and Suh (2002) conceptualizes a brand image with an integrated framework namely “the reputational capital” or strategic conception image. In addition, Davis (2004) analyzes the concept of image with five dimensions, such as: public awareness, favorability, corporate personality, corporate reputation, and perception of corporate behavior.

Patient Satisfaction

Patient satisfaction is important to measure the quality in health care. In the context of hospital, Dutka (2001) argues that “satisfied customer are absolutely vital to business success”. Moreover, Zeithaml et al., (2009) define patients' satisfaction as ”customers evaluation of a product or service in terms of whether that product or service has met the customer’s needs and expectations”. Accordingly, Kotler (2007) assume that satisfaction is the outlook of contentment and disappointment that people compare between the percieved achievement or products and the expected products. Then, Kotler (2000) adds that excellent industries are those which successfully satisfy and entertain their customers.

Satisfaction is also considered as one of the best indicators for future business earnings (Fornell, 1992; Kotler, 2000). It is obvious that attracting new customers is more valuable rather than keeping current customers. This fact also leads for hospitals to consider greater attention on customer satisfaction. For this, Baker and Crompton (2000) argue that inconsistency of facts between those two constructs are indeed generated from the same theoretical source, i.e.
disconfirmation paradigm. In this case, satisfaction can be viewed from two sides, i.e. performance and expectation. In this study, customer satisfaction can be influenced by the nursing quality performance and the customers’ expected services.

**Patient Loyalty**

Loyalty often relates to customers’ devotions. Drawing to Palmatier et al. (2006), loyalty is the combination results or the multidimensional relations of interests, attitude, sales achievements, and customer behaviour. Then, Zeithaml (2000) divides three indicators for loyalty, such as: (1) continuous communication on word-of-mouth, (2) no desire moving to competitors, and (3) buying more products. While Auh (2005) argues that loyalty can be viewed as the willingness to repurchase and maintain repeated services even though prices for the goods or services have been increased.

In this study, customer loyalty refers to patients' encouragement to revisit into a hospital for obtaining further health-care services. It may take some time to establish patient loyalty. This can be started with a process in using hospital services and in repeating the services. Accordingly, Zeithaml et al., (2009) convey that the ultimate goal of company success is through good relationships between a healthcare provider and its customers. In turn, such affiliation will develop patients' strong loyalty that can be indicated on how they say positive things, recommend friends, and continue purchasing. In brief, there will be mutual connections between hospitals and patients.

**Effect of Service Quality on Loyalty**

Kotler (2007: 175) describes loyalty as the faithfullness or the strong commitment for repeat purchase of goods and services in the future, eventhough there are situational influence and marketing efforts leading for behaviour change. Parasuraman and Zeithaml (1988) propose five dimensions of service quality, i.e. tangibles, reliability, responsiveness, assurance, and emphaty that have impacts on expectation and realities. If customers get services beyond their expectation, they will state that the services are qualified; in turn, they will feel satisfactory. In contrast, if customers feel the service does not meet with the expectatation, so they will state it as unqualified service. Then, this will influence the customer satisfaction as well as the customer loyalty. Accordingly, this study hyphotesized:

H1: Nursing service quality affects the loyalty of inpatients in the Public Hospitals, Ajatappareng, South Sulawesi.

**Effect of Hospital Image on Loyalty**

Kotler and Armstrong (1997) argue that customers feel satisfactory with a product that meet what they want and expect. If a brand image is stronger and has made customers satisfactory, so the customers will generally repurchase a product and inform others the positive
impacts on buying the product. Hence, brand image have positive impact on loyalty and brand image; and customer satisfaction can affect loyalty (Selnes, 1993). Furthermore, this study hypothesize:

H2 : Hospital image affects loyalty of inpatients in the Public Hospitals, Ajatappareng, South Sulawesi.

**Effect of Service Quality on Loyalty through Satisfaction**

Service quality obviously has direct impact on satisfaction (Kitapci & Dortyol, 2014). Then loyalty can be derived from customer satisfaction. According to Reynolds and Beatty (1999), when customers have experienced higher social advantages on a product or service, so they can be more dependable to the seller. Thus, customer satisfaction has precise relation with loyalty. When customers have satisfied with a product or service, they can be as more loyal customers. Furthermore, this study hypothesize:

H3 : Satisfaction mediates the influence of nursing service quality on loyalty of inpatients in the Public Hospitals, Ajatappareng, South Sulawesi.

**Effect of Hospital Image on Loyalty through Satisfaction**

Loyalty has close connection with satisfaction. Kotler (2000), Andreassen and Lindestad (1998), and Stephen (2007) indicate positive influence between image on customer satisfaction. Reynolds and Beatty (1999) also explain that customers feel satisfied when with sellers experience greater social and functional benefits. While Stephen et al., (2007) find that image has positive effect on customer loyalty. Thus, the higher perspective of image that emerge is expected to give positive impact on customer loyalty.

Moreover, image has linkage with loyalty. Chao-Chan (2011) argues that hospital brand image has direct and indirect effect on patient loyalty. Similarly, Hellier and Philip (2002) state that customer satisfaction and customer loyalty provide unsignificant relations. For this, satisfaction involves perceptions or impressions towards performance and expectations. The customers will be satisfied if the service performance is beyond their expectation. Then, this study hypothesize:

H4 : Satisfaction mediates the effect of hospital image on loyalty of inpatients in the Public Hospital, Ajatappareng, South Sulawesi.
Figure 2

Research Method

This study aimed to analyze and test the satisfaction that mediated the effect of nursing service quality and hospital image on loyalty. Population of this study were all inpatients' family in the Public Hospitals within Ajatappareng area, Parepare, South Sulawesi, Indonesia. The sample frame used 740 inpatients that were cared in the hospitals within 1 month. Then, Slovin formula was applied to consider the number of samples. The total samples were 260 respondents that were proportionally allocated in two public hospitals of which each took 130 respondents. Therefore, the technique used to take the samples was non probability sampling with accidental sampling. So they were considered at least having junior-high education, treating the patients for 3 days, and taking care of the patients twice within the two observed hospitals.

Research Results

The respondents of this study were described in some categories taken with a technique of accidental sampling. They were patients' family in the Makkasau Parepare Hospital and the Lasinrang Pinrang Hospital. The majority of respondents were between 41-50 years old (78 people; 30%) and married (171 people; 65.8%). The 34.2% of respondents were private employees; and 50.4% or 131 respondents had high school education.

Prior the calculation, assumption test was conducted to ensure that the established structural model could be used; and the testing results of indexed value for goodness of fit generated structural model as follow:
Table 1

Value of Goodness of Fit and Cut off Value Structural Model

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Result of Model Test</th>
<th>Critical Value</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probability</td>
<td>0.338</td>
<td>≥ 0.05</td>
<td>Fit</td>
</tr>
<tr>
<td>Cmin/DF</td>
<td>1.045</td>
<td>≤ 2.00</td>
<td>Fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.013</td>
<td>≤ 0.08</td>
<td>Fit</td>
</tr>
<tr>
<td>GFI</td>
<td>0.942</td>
<td>≥ 0.90</td>
<td>Fit</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.926</td>
<td>≥ 0.90</td>
<td>Fit</td>
</tr>
<tr>
<td>TLI</td>
<td>0.996</td>
<td>≥ 0.95</td>
<td>Fit</td>
</tr>
<tr>
<td>CFI</td>
<td>0.997</td>
<td>≥ 0.95</td>
<td>Fit</td>
</tr>
</tbody>
</table>

The testing result showed that all criteria of goodness of fit have provided a good index (fit), so the model can be interpreted further. The following is the measurement result of coefficient SEM or standardized value on each effect of variable.

Table 2

Coefficient value of SEM effects between variables

<table>
<thead>
<tr>
<th>Causality Relationships</th>
<th>Std. Estimate</th>
<th>SE</th>
<th>CR</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Service (X₁) → Patient Satisfaction (Z)</td>
<td>0.399</td>
<td>0.122</td>
<td>5.016</td>
<td>0.000</td>
</tr>
<tr>
<td>Hospital Image (X₂) → Patient Satisfaction (Z)</td>
<td>0.066</td>
<td>0.105</td>
<td>0.960</td>
<td>0.337</td>
</tr>
<tr>
<td>Nursing Service (X₁) → Patient Loyalty (Y)</td>
<td>0.205</td>
<td>0.119</td>
<td>2.824</td>
<td>0.005</td>
</tr>
<tr>
<td>Hospital Image (X₂) → Patient Loyalty (Y)</td>
<td>0.429</td>
<td>0.122</td>
<td>5.789</td>
<td>0.000</td>
</tr>
<tr>
<td>Patient → Patient Loyalty</td>
<td>0.290</td>
<td>0.080</td>
<td>3.869</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Discussions

The causality testing results demonstrated that the better the nursing service quality, then the loyalty would be higher. This was because the better service quality was what patients generally expect for. Some patients occasionally paid less attention on the hospital costs, but on the maximum quality of nursing service. If an aspect of service quality has been completed by a hospital, the customers' sense of dependence toward its health care service will arise. When people need a health service, they will remember the hospital which have given them good services. Then, the patients justify the good service as qualified service; in turn, they become loyal to the hospital.

Furthermore, this study result was consistent with research results by Bloemer and Ruyter (1997) as well as by Zeithaml (2009). They found that service quality had close connection with customer loyalty. In the context of health care provider, Kitapci and Dortyol (2014) showed the dimension of hospital service quality having positive relation with customer loyalty. This can be assumed that the quality of products or services is an important thing for costumers. There is a connection between service quality and value that customers feel and gain. In brief, a qualified service will increase the value from customers for achieving satisfaction that, in turn, improves the customer loyalty.

The result of causality test showed that the stronger the hospital image, then the loyalty would be higher. Image is an intangible asset or the good will of hospital which has a positive effect from public or users over the hospital. When a hospital has a good image, it can generate trust, confidence, support, and loyalty from the community. This study was consistent with the research result by Chao-Chan Wu (2011) showing the hospital brand image has direct effect on patient loyalty. This is similar with another research by Andreassen (2000) about customers' orientation. He argued that image was an important factor that connected customer satisfaction and loyalty; and image was expected to be the essential factor for loyalty. Then, Bloemer and Ruyter (1997) also proved that image influenced customer loyalty. While Kotler and Armstrong (1997) confirmed if a brand image was more intense and its product was satisfactory, then the customers generally repurchased the goods and talked positive things of the brand to others. Moreover, image had a direct effect on loyalty. So the good image of a hospital leads community to return. When the community needs health problems, they will not think twice for where they should go for having health care. Based on their own experience as well as the given information, the community will return to use the hospital's nursing service.

The results of causality test also indicated that nursing service quality had an effect on satisfaction; and in turn, satisfaction had an effect on loyalty. Hence, nursing service quality had an effect on loyalty through two equally significant channels, so that the quality of nursing service could influence the loyalty of patient, either directly or through the mediation of patient satisfaction. Then, satisfaction partially mediated the influence of nursing service quality on patient loyalty.

This finding was consistent with Kitapci and Dortyol's (2014) argumentation that hospital
service quality had positive relation with patient satisfaction. In accordance with the impact of satisfaction on loyalty, Bowen and Chen (2001) stated that customer satisfaction had a close relation with customer loyalty. While Bloemer and Ruyter (1997) investigated the influence of service quality on satisfaction and loyalty of customers. They agreed that the linkage model of service quality, satisfaction, and loyalty are very convenient, and that they are assets for service provider in building a loyal customer base.

The result of causality test showed that satisfaction could not mediate the effect of hospital image on loyalty, so hospital image could not affect patient loyalty through the mediation of patient satisfaction. The influence of hospital image on loyalty was through two channels, but one of them was insignificant. Thus, this finding was not in line with the result by Chao-Chan Wu (2011) showing hospital brand image had direct and indirect effects on patient loyalty. Similarly, Stephen et al., (2007) argued that the effect of image on customer satisfaction contributed to advantages for customers owing to interpersonal relations as well as buying experience into customer satisfaction. The customers also feel more satisfactory when they consider for higher social and functional benefits. Moreover, Anderson et al., (1994) assume that customers will be more faithful or more loyal if they have been satisfied with goods or service. Hence, their buying interest as well as their loyalty will increase. Accordingly, of Cronin and Taylor (1992) find that consumer satisfaction bring a potential effect on customer loyalty. So the higher customer satisfaction is expected to extend positive impact on customer loyalty. For this, the research by Bowen dan Chen (2001) state that satisfactory customers become loyal customers.

In this study, however, satisfaction on hospital service that was felt by the participated patients could not mediate image level to be higher. However, it was obvious that the patients were very loyal to visit the hospital for treatment. Indeed, the return of patients for having their health care was not determined by the hospital image through customer satisfaction on having previous health care.

Conclusion

The quality of nursing service affected the inpatient loyalty of public hospitals in Ajatappareng region. This meant that the better nursing service quality will increase the level of inpatient loyalty. The quality of health care service influenced loyalty through the mediation of inpatient satisfaction in the hospitals, Ajatappareng region. In other words, nursing service quality had an impact on satisfaction. Therefore, satisfaction has been a partial mediation for the influence of nursing service quality on patient loyalty. Additionally, the hospital image did not affect loyalty through the mediation of satisfaction for inpatients in the hospitals, Ajatappareng region. Yet the influence of hospital image on loyalty was derived from two channels that one of them was insignificant.

Overall, the results of this study brought practical implications that patient satisfaction could be improved through nursing service quality. Otherwise, patient loyalty could also be increased through nursing service quality, satisfaction, and hospital image development. When the quality of health care service was good, then the patients would feel satisfactory. In turn, the patient satisfaction advanced patient loyalty. Furthermore, the intense image of hospital was not
in relation to patient satisfaction, but more likely in accordance with the growth of patient loyalty.

Daftar Pustaka


