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## **A Study of Service Quality, Corporate Social Responsibility, Hospital Image, and Hospital Value Creation in Medan**

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**Abstract:**

*Globalization and emerging market created fierce global competition toward healthcare services industry. Retaking public trust required an overhaul of local hospital's value creation. Value is the key concept to win the customer's heart.*

*This paper examined the value-creation based on inpatients as co-creator concept. A second-order analysis was conducted to evaluate the ten aspect of service quality as we want to evaluate each's importance factor.*

*Medical personnel is considered as the most important aspect to deliver services in healthcare industry. Hospital value improved by delivering good services and building hospital image. CSR must improve hospital image to increase hospital value.*

**Keywords:** *Value-creation, hospital image, CSR, Service Quality.*

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## **1. Introduction**

A key concept to win customers' heart is through creating the value for customers. It also has been viewed as key success factor in marketing approach (Kotler & Keller, 2012; Sheth & Uslay, 2007). According to Vargo and Lusch (2008), firm could not deliver the value itself, but offer the value to customers. Customers acted as "co-creator" while realizing the actual value. Thus, one's value can only be created by including customers' point of view. Edvardsson *et al.* (2005) proposed a perspective to view a firm's services as value creation process. Since then, services perspective become one of the root in value creation. However, it had not been analyzed in a manner to evaluate the relation between services on a firm's value. We previously stated the existence of 'creator', which refer to the firm activities, and 'co-creator', which refer to customer, as the core of create one's value. Firm's activities viewed as internal process that determine the proposition of value. Ronnback *et al.* (2009) claimed that these internal factors were the central source the destroyed value. Since the services was outsourced, the intended value was never experienced by the customer.

This study aimed to evaluate the role of both firm activities and customer in value creation process. The firm provide services and conduct corporate social responsibility (CSR) which aimed to improve the value to its customers. A corporate reputation acted as mediator in order to achieve the desired value. Globalization effect in addition to the newly emerged market of ASEAN Economic Community (AEC) pushed competition to a new level. In healthcare services industry, many people believe in services provided by a firm which perceived as the most valuable for them. In Indonesian's case, many of its people believe in services provided by other countries than local services. As result, it will be more benefit to other country than Indonesia. Thus, improving local healthcare services value become an important matter. A firm delivered value to customers in order to attract them to product or services provided by the firm. However, the crucial factor of these activities lies on customers' perspective toward the proposed value. Customer will seek for the most valuable one while deciding their product or services consumption. Value creation become more and more important to be analyzed. Local's healthcare services should create a more valuable services to regain people's trust for local services. Lubis *et al.* (2016)'s work on service dimension of healthcare services in Indonesia showed that customers perceived 10 aspects on service quality dimension. However, the previous study did not empirically analyze its impact on value creation. The current study aimed to evaluate the importance of each aspect of service quality in healthcare in addition to evaluating its impact on value creation.

## **2. Healthcare Service Quality Approach**

Service quality approach originally proposed by Parasuraman *et al.* (1985) on five dimension, (1) tangibility, (2) empathy, (3) responsiveness, (4) reliability, and (5) assurance. The basic of service delivered to customers were based on these five dimension. However, Lubis (2016) expanded the model in accordance to inpatients' perspective of hospital's service quality in Indonesia. The previous study categorized service quality based on 10 aspects, namely (1) patient educational services, (2) staff-professionalism, (3) food aspect, (4) assurance, (5) responsiveness and convenience services, (6) empathy, (7) cleanliness, (8) well-educated staff, (9) people trust-gaining services, and (10) reliable services.

The current study used the ten-dimension of hospital services quality aspect as we conduct the research in Indonesia. The first part of this study aimed to evaluate the most important aspect that constructing service quality as whole. The second part of this study evaluated the effect of service quality on both corporate images and value. Many of previous study treated service quality and corporate images as unrelated variables. However, as we speak of customers, they experienced the service delivered to them. The experience may build their perception toward hospital which will feed public with information and shape its corporate image.

### **2.1 Corporate Social Responsibility Approach**

Previous work on CSR claimed a four-level of CSR act which grouped to two groups (Schermerhorn, 2016). The first one cooperate with law while the other consists of persuasion area which be more voluntary act. Today's social-environment strongly reacted to CSR activities. As far as reputation is concerned, CSR will be more likely to improve hospital's corporate image as long as they conduct the act of CSR. Previous works showed a strong relationship between CSR and corporate image (Gazzola, 2014; Susanto, 2012; Giannakopoulou *et al.*, 2016; Hapsoro and Suryanto, 2017; Pena-Miguel *et al.*, 2017). However, CSR may also affecting the organization to lose its public image (Ihlen *et al.*, 2012). As people become more aware to ethical behavior, social responsibility factor become a bigger factor to be considered as strategic tools. Brandão *et al.* (2012) claimed that CSR in hospital governance helped to generate the desired value. In today's competitive market, a good CSR practice will improve hospital value for a long term as it is practically improve its effectiveness and efficiency while delivering services. However, Gherghina & Vintia's study (2016) showed that there is no effect of CSR on hospital value in form of stakeholder-related CSR but environment-related CSR. Srivastava *et al.* (2012) warned that CSR could damage corporate value if not managed well.

### **2.2 Healthcare Image Approach**

The concept of corporate image had been widely suggested by many studies. In accordance with Bromley's work (2001), corporate image can be viewed as collective thought or a distribution of opinion among stakeholders about one's

entity. Corporate image may also be defined as the reflection of one's organization from time to time over the eyes of stakeholders and expressed through their thought and words (Miles and Covin, 2000; Tsitsakis *et al.*, 2014). Many scholars used the definition of embodiment of people's experience on organization's services (Fombrun, 1996), however there is no unambiguous definition yet. Based on previous work, the corporate images lies on people's thought. Public's thought of the corporate gave the signal of its capabilities and desired performance in future. It represent corporate attributes as whole and will affect people's behavior toward the organization (Dolphin, 2004). Corporate images become important to create hospital's value based on customer's perspective.

### **2.3 Healthcare Value**

Value, in general, is defined as assessment of trade-off between cost and benefit or cost-benefit function (Day, 1990; Zeithalm 1988). People tend to evaluate something to be more valuable as they gain more (mostly monetary gain) from other (Gronross and Helle, 2010). Value creation is considered as process to improve the customers' well-being which related to create a better-off situation for the customers. The term of 'customers' made it clear that fulfill every customers' value is hard to achieve. One person's value to other is different. For example, one may viewed a luxury bed in hospital as value while other do not see its benefit. Previous works showed that value-creation related to customers' experience toward the value proposed by organization.

## **3. Data and Methodology**

A number of 150 inpatients from three private hospital in Medan were participated in this study. The study used questionnaires to collect the inpatients' thought related to service provided by the healthcare, hospital image, CSR program, and hospital value. The questionnaires were built based on operational variables (Table 1). The study was conducted from January to March 2017.

**Table 1.** *Operational Variables*

| <b>Variable Name</b>            | <b>Type of Variable</b> | <b>Description</b>   |
|---------------------------------|-------------------------|--|
| Healthcare Value                | Dependent               | Inpatients' perceived value of healthcare services based on financial performance, effectiveness, and efficiency services. |
| Service Quality                 | Independent             | A multi-dimensional approach of delivering healthcare services   |
| Corporate Social Responsibility | Independent             | Inpatients' opinion toward the healthcare's CSR program  |
| Healthcare Image                | Independent, Mediator   | Healthcare's reputation on inpatient's mind  |

The data were analyzed using second-order construct analysis using SmartPLS. The study evaluated the 10-dimension of service quality to determine the service quality construct. Bootstrap analysis was used to test the significance of each path.

### 3.1 Model Specification

The study aimed for evaluate the construct of service quality and evaluate the factors to improve healthcare value. We proposed the path model based on our objectives (Appendix 1). We also formulated the model to improve healthcare value as follow:

$$\text{Value} = \beta_1 \text{SERVQUAL} + \beta_2 \text{CSR} + \beta_3 \text{IMAGE} + \varepsilon \quad (1)$$

Where Value represent the healthcare overall perceived value, SERVQUAL represent the perceived service delivered by the healthcare, CSR represent the perceived CSR program, and IMAGE represent the healthcare reputation.

### 3.2 Validity and Reliability Model

The structural model's validity was evaluated through convergent and discriminant validity. The convergent validity model was based on each constructs' average extracted variance (AVE) value which should be at least 0.5 (Table 2). The model's discriminant validity was based on Fornel-Lacker Criterion (Hair *et al.* 2014). The model's reliability was based on internal consistency reliability. The value of each constructs' composite reliability should be more than 0.7 (Table 2 and Appendix 2).

**Table 2.** Validity and Reliability Criteria

| Construct                               | AVE   | Composite Reliability |
|---|-------|-----------------------|
| Assurance                               | 0.528 | 0.848                 |
| Cleanliness                             | 0.737 | 0.892                 |
| Corporate Image                         | 0.554 | 0.944                 |
| Corporate Social Responsibility         | 0.945 | 0.990                 |
| Empathy                                 | 0.685 | 0.867                 |
| Food Aspect                             | 0.852 | 0.945                 |
| Healthcare Value                        | 0.624 | 0.965                 |
| Patient Educational Services            | 0.596 | 0.937                 |
| Patient Trust                           | 0.707 | 0.950                 |
| Reliable Services                       | 0.627 | 0.833                 |
| Responsiveness and Convenience Services | 0.676 | 0.892                 |
| Staff-Professionalism                   | 0.691 | 0.929                 |
| Well-Educated Staff                     | 0.580 | 0.846                 |

Table 2 showed that the proposed model and indicators had been fully passed the validity and reliability model and may be analyzed furthermore with the estimate analysis

### 3.3 Estimate Result

The first part of second-order construct analysis was to evaluate the importance of each aspect of service quality in healthcare services. We evaluated the importance

based on regression weight of each construct while explaining the service quality construct. Table 3 summarized the regression weight of service quality construct.

**Table 3. Service Quality Construct**

| <b>Construct</b>                        | <b>Regression Weight</b> |
|---|--------------------------|
| <b>Service Quality</b>                  |                          |
| Well-Educated Staff                     | 0.917                    |
| Staff-Professionalism                   | 0.900                    |
| Patient Educational Services            | 0.886                    |
| Food Aspect                             | 0.787                    |
| Responsiveness and Convenience Services | 0.784                    |
| Empathy                                 | 0.742                    |
| Reliable Services                       | 0.686                    |
| Assurance                               | 0.670                    |
| Patient Trust                           | 0.517                    |
| Cleanliness                             | 0.094                    |

Table 3 showed that the most important aspect of delivering services in healthcare industry is the staff or medical personnel. They play major role to improve service experienced by the inpatients. The medical personnel have to be well-educated and professional to their role. The other aspect was related to the food provided by hospitals. Many of current inpatients commented that the food was far from enjoyable. Based on our result, inpatients pay less attention toward hospital's cleanliness. The second part of our study was to evaluate the value-creation based on co-creator, inpatients, point of view. The proposed model suggested hospital's reputation as mediating variables, thus there should be direct, indirect, and total effect. Table 4 summarized the path coefficient of our proposed model.

**Table 4. Direct, Indirect, and Total Effect**

| <b>Independent Variable</b> | <b>Dependent Variable</b> | <b>Mediator</b> | <b>Direct Effect</b> | <b>Indirect Effect</b> | <b>Total Effect</b> |
|-----------------------------|---------------------------|-----------------|----------------------|------------------------|---------------------|
| SERVQUAL                    | IMAGE                     | IMAGE           | 0.729*               |                        | 0.729*              |
| CSR                         |                           |                 | 0.195*               |                        | 0.195*              |
| SERVQUAL                    | VALUE                     | IMAGE           | 0.405*               | 0.348*                 | 0.752*              |
| CSR                         |                           |                 | -0.088               | 0.093*                 | 0.005               |
| IMAGE                       |                           |                 | 0.447*               |                        | 0.447*              |

*\*Significant at level 5%*

Table 4 showed that both service quality and corporate social responsibility positively affecting hospital's reputation. The effect of service quality on corporate image is dominant. According to the definition of corporate image as we stated before, inpatients' experience or interaction with the service provided by the hospital played major role shaping the hospital's image. The better service provided and experienced by inpatients, the better corporate image will be born. Corporate social responsibility also helped to form the corporate image. As the social environment

sensitive to CSR practice, the slightest act of CSR may improve corporate image. Both service quality and CSR provided 67.2% explanation of the corporate image's variance ( $R\text{-squared} = 0.672$ ). Our result showed that in order to improve hospital's value, the hospital should pay more attention on creating reputation and delivering a good services to inpatients. CSR, however, can only indirectly improving the value through the hospital's brand image. The most important aspect is delivering the service. Inpatients interact with services and assess the value based on their experience toward them. The concept of customer or inpatients as co-creator also supported based on our study. Our model explained 64.3% of hospital value's variance with  $R\text{-squared}$  of 0.643.

#### 4. Conclusion

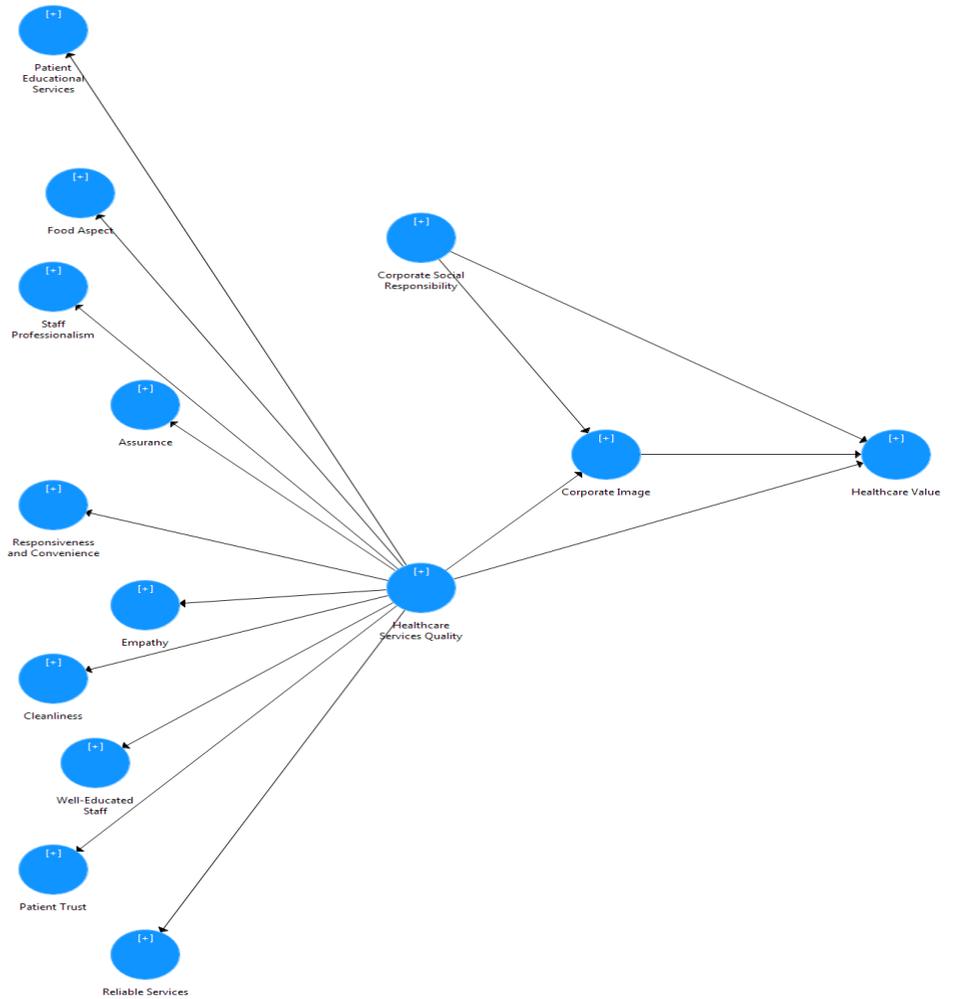
This paper gave a deep insight of healthcare services quality. Based on 10-aspect of services quality, most important aspect perceived by the inpatient was related to human resource. In order to deliver a better service quality, healthcare should improve their staff for both knowledge and how to care with their customers. Cleanliness did not serve as important factor for inpatients. The inpatients rather indifferent with their room's cleanliness as long as they get a better services and happy with the staff. This paper examined the new paradigm delivering healthcare services quality, CSR program, and healthcare corporate image to create corporate value. PLS bootstrap indicated that improving healthcare corporate value could be reached by improving healthcare services and corporate images. CSR program did not directly affect corporate value. However, CSR did improve its corporate images which indirectly built the corporate value. Thus, corporate should be aware that CSR will do nothing unless public perceived it well while improving corporate image in public's mind.

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**Appendix 1. Research's path model**



**Appendix 2. Composite Reliability Model**

