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FACTORS AFFECTING RELATIONSHIP MARKETING IN CREATING CUSTOMER LOYALTY IN THE HOSPITAL SERVICES BUSINESS

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ABSTRACT

Manuscript type: *Research paper.*

Research Aims: *The purpose of this paper is to understand and answer problems from the variables of service quality (interaction quality, physical environment quality, & outcome quality), customer trust, customer value, and customer loyalty to hospital consumer that has applied JCI standard accreditations through green hospital concept.*

Design/methodology/approach: *The study uses a descriptive research design, with 209 valid respondents. SPSS is used to pretest the variables that well construct variables, and SEM to analyze significant construct variables and influence the construct variables.*

Research Findings: *There study findings are: 1) interaction quality, physical environment quality, and outcome quality positively influences customer trust; 2) customer trust positively influences customer value; 3) customer value positively influences customer loyalty; 4) customer trust negatively influences customer loyalty; and 5) the mediating effect of customer value positively influences customer trust and customer loyalty in high to a great extent, so it can have a full mediating effect.*

Originality/value: *The study is one of the few empirical investigations into service quality based on customer trust, customer value, and customer loyalty in the healthcare industry that implements the green hospital concept, builds long-term relationships between customers and medical staff, and the healthcare is doing the examining the mediating effects of customer value on customer trust and customer loyalty.*

Practitioner/Policy Implications: *This study can explain customer trust, customer value, customer loyalty based on hospital services quality through relationship marketing. Hospital has been applied JCI standard accreditation through green hospital build long-term relationship for their customer and good businesses for its hospital.*

Research limitation/Implications: *The research results indicate that service quality is the basic step in increasing customer trust, customer value and customer loyalty in hospital management. The findings of the study will help hospital management to 1) build relationships between medical staff and their customers, and create customer loyalty in long-term relationships, 2) to develop and implement the green hospital concept based on Joint Commission International standards within a green marketing framework.*

Keywords: Service Quality, Customer Trust, Customer Value, Customer Loyalty, Relationship Marketing, Green Marketing, JCI accreditation.

INTRODUCTION

Today, the healthcare industry, especially hospital businesses, is growing significantly in Indonesia. The industry is improving in six areas: Indonesian people's expectations for a healthy life; rival hospital business; hospital accreditation standards; relationship marketing between hospital management with their customers, and hospital standards for global accreditation (Anna, 2012; BMI Research & Healthcare, 2016; Depkes Editor, 2012; JCI, 2017; Nielsen, 2017; Siloam Hospital Editor, 2017).

Nowadays, Indonesian people needs problem solving for diseases, which has been happening through promotive and preventive action. These actions are executed to make people understand the importance of a healthy life and their needs to protect their health, because maintaining health is more difficult than curing diseases (Noviana, 2013).

Nowadays, Indonesian people needs become hospital business trend to increase their quality of service following the growth of the hospital business in Indonesia and globally. Hospital businesses in Indonesia and globally have applied JCI standard accreditation to hospital management, which shows their service quality in creating customer loyalty in long-term relationships. The Indonesian government has planned to apply the *green hospital* concept by 2020 for all hospitals in the country.

It is hoped that have national standard accreditation will improve their service quality to JCI (*Joint Commission International*) accreditation with the applied *green hospital* concept (Depkes Editor, 2012). The Indonesian government has been collaborating with the JCI organization in 26 hospitals, and the Global Green Healthy and Hospital, with three hospitals being members since 2008, both government hospitals and private hospitals. JCI accreditation can be adopted to national standard accreditation and has been applied since 2011 (Green

Hospital Editor, 2015; JCI, 2017). The goal is to improve hospital service quality, and run *green campaigns* for each hospital activity.

Dr. Lia G. Partakusuma from Fatmawati hospital and Perhimpunan Rumah Sakit Indonesia (PERSI) at the Green ICT Conference explained the criteria for green hospitals cited based on JCI Accreditation 2008 to develop hospital accreditation in Indonesia (Marketeers Editor, 2011c). The green hospital concept is part of green marketing development, whose purpose is to reduce the environmental effect of goods and services delivered by companies throughout their organizations (Marketeers Editor, 2011b). Five hospitals in Indonesia have applied the green hospital concept: Ciputra hospital, Persahabatan hospital, Prof. Dr. Soerojo hospital, Umum Pekerja hospital, and Siloam hospital (Adhi, 2010; Alexander, 2015; Asril, 2014; Chandra, 2011; Kompas Editor, 2008).

The results from the study by Lien, Chen and Wang (2014) show that service quality in hospitals in Taiwan can influence the level of trust between patients and doctors and nurses. In Indonesia, the Bandung government arranged a competition to celebrate the 204th Bandung anniversary, with appreciation of public facilities which provide services to people, with categories such as good services, clean, comfortable, and facilities. Four hospitals won the competition: Hasan Sadikin hospital (1st), Santosa hospital (2nd), Rajawali hospital (3rd), and Al Islam hospital (4th) (Kuswandi, 2014). Indonesian people value hospital services that delivered to consumer, clean, comfortable, and their facilities.

However, the green hospital concept that has been applied by hospitals in Indonesia does not fulfil Indonesian needs, with high prices of medical services, information technology problems, Indonesian people's trust of medical treatment in foreign countries, and abuse of green building certification (Adhi, 2010; Djumena, 2012; Latief, 2013; Marketeers Editor, 2011a). Based on these four problems in relation to the green hospital concept in

Indonesia, marketers intend to investigate and solve the problems and implement the results in line with Indonesian needs and the hospital business.

In this research, the service quality variable is used to examine and solve the problems of the price of medical services, information technology, Indonesian people's lack of belief in medical services, and abuse of green building certification. The customer trust variable is used to examine and solve the problem of the price of medical services, Indonesian people's lack of belief in medical services, and abuse of green hospital certification. The customer value variable is used to examine and solve the problem of Indonesian people's lack of belief in medical services, the price of medical services, and abuse of green hospital certification. The customer loyalty variable is used to examine and solve the problem of abuse of green hospital certification, and Indonesian people's trust in the relationship marketing concept for medical treatment in the hospital business.

The focus of this research is on solving four problems related to the green hospital concept in Indonesia. The research objective is the consumer, who knows that hospitals have applied JCI standard accreditation through their medical services facilities. The detailed formulation of the research is as follows:

1. Does service quality based on interaction quality influence customer trust?
2. Does service quality based on physical environment quality influence customer trust?
3. Does service quality based on outcome quality influence customer trust?
4. Does customer trust influence customer value?
5. Does customer value influence customer loyalty?
6. Does customer trust influence customer loyalty?
7. Does customer trust influence the mediating effect of the relationship between customer trust and customer loyalty?

LITERATURE REVIEW

Green Marketing

The growth of the population and industrialization have put pressure on the environment, infrastructure, and the availability of resources to increase need of consumer finding environmentally (Khandelwal & Yadav, 2012). *The green marketing* concept has been developed since 1980-1990 through papers in the marketing journal *Journal of Marketing Management* (Peattie & Crane, 2005).

According to Polonsky (1994), *green marketing* is consistent from all activities that design services and facilities to satisfy human needs and wants without impacting on their environment. According to the American Marketing Association (AMA), green marketing (based on *social marketing definition*) is the development and marketing of products designed to reduce the negative physical impact on the environment or to improve its quality (American Marketing Association Editor, 2017a).

Marketers and consumers are increased their sensed to fulfil their needs for environmental of goods and services (Peattie, 2011).

Green Hospitals

The *green hospital* concept has been developed in the United States by the U.S. Green Building Council (USGBC), with standard application of *Leadership in Energy Environmental Design* (LEED) in the construction of buildings (Alexander, 2013). The concept in Indonesia has been developed by the *Green Building Council* Indonesia through *green building* standard criteria, such as reducing pollution, energy usage, and put on proper environmental to consumer (Latief, 2013). The development of *Joint Commission International* (JCI) accreditation builds on the objective of the green hospital concept to increase the service quality of hospitals and the *green concern* applied by hospitals (Marketeers Editor, 2011c).

Green hospitals have become one of the means to fulfil the medical treatment industry, appropriate to people's needs. People's needs with regard to the medical industry include satisfaction with the service, security, comfort, and the guarantee that customers will not suffer a negative impact from the service activities. PERSI respect connection with the problem is related to service quality, patient safety, and environment problems. PERSI attention and commitment towards the environmental problems in hospital have included the development of the *Green Hospital* committee since 2009 (Pdpersi Editor, 2011b).

Depkes (2012) explains that a *green hospital* is one with green insight and is responsible for the service needs of hospital customers, including a comfortable and safe hospital environment. A *green hospital* is structured with facilities such as recycling, reuse of materials, reduction in waste, and production of clean water (Pdpersi Editor, 2011a).

Standard assembling concept of JCI accreditation through the green hospital concept with its goals of patient safety, quality of care, improvement in quality, and reduction of patient risk (Green Hospital Editor, 2015; JCI, 2017).

Relationship Marketing

According to Gronroos & Annika (2002), relationship marketing fosters the relationship between the company and consumers in small scope of environment to create stable customer loyalty, provide profit for each other, and a long-term relationship. According to the American Marketing Association Editor (2017b), relationship marketing is marketing with awareness of developing long-term control or trust related to customers, distributors, suppliers, or other partners in the marketing environment.

Service Quality

Service quality is the evaluation by consumers of overall long-time service and rating of the performance of the service provider

(Hoffman & Bateson, 2001). Since 1985-1988, Parasuraman et al. have developed a measurement of service quality called the SERVQUAL model, with five dimensions: reliability, dependability, interaction capability, assurance and empathy. The SERVQUAL model rates service quality in order to differentiate between consumer expectations and perceptions (Parasuraman et al., 1985; Parasuraman et al., 1988).

According to Brady & Cronin (2001), the service quality model has been developed based on three main dimensions: interaction quality, physical environment quality, and outcome quality. The Brady & Cronin model bases the evaluation of service quality based on three main dimensions. Interaction quality is a functional quality which indicates the interaction between employee and consumer. Physical environment quality is the influence from the surrounding environment that showed toward service to consumer. Outcome quality is technical quality related to facilities that consumers receive for evaluation after services have been delivered (Lien et al., 2014; Wu et al., 2016).

A previous study found that interaction quality and outcome quality positively influence trust, but that physical environment quality non-significantly and negatively influences patient trust in 15 general hospital in Taiwan (Lien et al., 2014). In the green hotel business in Taiwan, interaction quality, physical environment quality, access quality, and administration quality positively influence green experiential quality, but outcome quality negatively influences green experiential quality (Wu et al., 2016). Based on previous studies, this study argues that in the healthcare industry and services business, service quality will positively affect customer trust in hospital business services. It is therefore hypothesized that:

H1: Interaction quality positively influences customer trust.

H2: Physical environment quality positively influences customer trust.

H3: Outcome quality influences customer trust.

Customer Trust

Consumer trust is the expectation of consumers that service providers will be reliable and trustworthy when delivering their promises (Sirdeshmukh et al., 2002). According to Chen et al. (2015), green trust is the willingness to depend on a product, service or brand based on the belief in or expectation of its credibility, benefit and skill, including its level of being environmental friendly.

A previous study found that trust in an original hospital positively influenced trust in allied hospitals in 15 general hospital in Taiwan (Lien et al., 2014). In the retail services business in the USA, FLE (Frontline Employee) trust positively influences value (Sirdeshmukh et al., 2002). In the electronic product business in Taiwan, perceived green value positively influences green trust (Chen, 2013). Based on previous studies, this study argues that in the healthcare industry and services business, customer trust will positively affect their trust in hospital business services. The study therefore hypothesizes that:

H4: Customer trust positively influences customer value.

Customer Value

Value is the consumer perception of profit minus costs to maintain a relational bond with service providers (Parasuraman et al, 1988). According to Woo and Kim (2015), customer value is the difference between the total profit and total sacrifice perceived by consumers when they buy goods or services.

According to Sweeney & Soutar (2001), there are three dimensions of value consumption: emotional value, functional value and social value. Emotional value is the feel/preference stage in customer experience, or the anticipation experience when customers consume a company's goods or services. Functional value is the value connected with practical gain or user technical obtained from goods or services. Social value is need gives from product

skills to improve the individual social concept (Sweeney & Soutar, 2001).

A previous study found that value positively influenced loyalty in the retail business in United States of America the USA (Sirdeshmukh et al., 2002). In the electronic product business in Taiwan, perceived green value positively influences green loyalty (Chen, 2013). Based on previous studies, this study argues that in the healthcare industry and services business, customer value will positively affect customer loyalty in hospital business services. It is therefore hypothesized that:

H5: Customer value positively influences customer loyalty.

In this study, customer value is predicted to influence the mediating effect of customer trust on the customer loyalty relationship. Perceived value for consumers is an important factor that influences purchase intention, satisfaction, and loyalty to specific service providers (Brady & Robertson, 1999; Cronin, Brady & Hult, 2000)

A previous study found that value positively mediating effect of trust with loyalty relationship as partial mediating effect in the retail business in the USA (Sirdeshmukh et al., 2002). In the electronic product business in Taiwan, green trust positively mediating effect of green perceived value with green loyalty relationship as partial mediating effect (Chen, 2013). Based on previous studies, this study argues that in the healthcare industry and services business, customer value will positively mediating effect between customer trust with customer loyalty in hospital business services. The study hypothesizes that:

H7: Customer value positively influences mediating effect of the relationship between customer trust and customer loyalty.

Customer Loyalty

Loyalty is the commitment level to repurchase goods or services consistently in the future (Oliver, 1999). Consumer loyalty has been

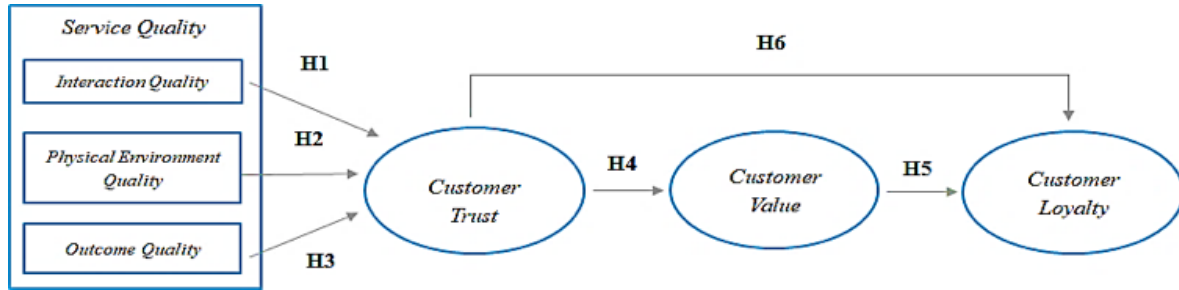


Figure 1. Research model

indicated by the intention to display different behavior with motivation signs to develop relations with local companies, including allocation of their profit for specific provider services, positive word-of-mouth, and repurchases of services (Zeithaml et al., 1996). Green loyalty is the intention level to repurchase influenced by a strong environmental attitude and sustained commitment to objectives such as goods, services, companies, brands, and groups (Chen, 2013).

In this study, customer trust is shown to influence customer loyalty. A previous study has found that trust positively influences loyalty in the retail business in the USA (Sirdeshmukh et al., 2002). In the hospitality industry in Spain, green trust positively influences green loyalty (Martínez, 2015). In the electronic product business in Taiwan, green trust also positively influences green loyalty (Chen, 2013). Based on previous studies, this study argues that in the healthcare industry and services business, customer trust will positively affect customer loyalty in hospital business services. It is therefore hypothesized that:

H6: Customer trust positively influences customer loyalty.

RESEARCH METHOD

Research Framework

The study uses descriptive research to explain the hypotheses. The research framework consists of three dimensions of service quality

(interaction quality, physical environment quality, and outcome quality), customer trust, customer value, and customer loyalty. The mediating effects of customer value on customer trust and customer loyalty are investigated. The conceptual framework is shown in Figure 1.

Research Sample

The research is empirically based on primary data collected from all types of hospitals located in Indonesia. The survey was conducted from October 27, 2017 to November 19, 2017. A background explanation of JCI standard accreditation is given within the online questionnaires to ensure that the respondents understand the content and answer the questions correctly. The samples were collected by the judgmental sampling and snowball sampling techniques, through which the participating respondents were asked to recruit more potential participants from within their networks. The participants could answer the survey questions based on their experience of hospital services in Indonesian hospitals. The samples were collected through an online survey using Google forms, which needed a minimum of 200 responses to run the SEM (*Structural Equation Model*) method, based on Malhotra (2010). This research obtained a total of 352 samples (211 responses were samples which are 209 valid samples and 2 invalid samples, while 141 responses were not used as samples because not meet the requirement). The respondents that knew about standard accreditation for hospitals based on JCI, as well as service quality, and

Table 1. Demographic Profile of Samples

Variable	N	(%)	Variable	N	(%)
Hospital with JCI accreditation			Payment		
Yes	211	60	Private/family	79	38
No	141	40	Company	29	14
			Assurance	34	16
			BPJS	64	31
			Other payment type	3	1
Type of hospital visited			Gender		
Government	62	30	Male	73	35
Private	147	70	Female	136	65
Purpose of hospital visit			Age		
Medical examination	58	28	< 21 years	28	13
As patient	44	21	21 – 25 years	88	42
As patient's family	63	30	26 – 30 years	49	24
Visitor to patient	34	16	31 – 35 years	15	7
Patient references from other hospitals	3	2	> 35 years	29	14
Surgery	3	1			
Other purpose	4	2			
Frequency of hospital use a year			Occupation		
1 time	64	31	Student	10	5
2 – 3 times	82	39	College university	83	40
3 – 4 times	25	12	Employee	76	36
4 – 5 times	6	3	Entrepreneur	16	8
> 5 times	32	15	Housewife	24	11
Medical facilities			Average annual expenditure (rupiahs)		
Polyclinic	94	45	≤ 1.000.000	37	
Medical checkup	45	22	1.000.000 – 3.000.000	81	18
Pharmacy	2	1	3.000.000 – 5.000.000	51	39
Emergency	18	9	6.000.000 – 8.000.000	19	24
Endoscopy	6	3	8.000.000 – 10.000.000	5	9
Physiotherapy	6	3	> 10.000.000	16	2
Radiology	1	0.5			
Hemodialysis	1	0.5			8
Laboratory	6	3			
Rehabilitation medic	13	6			
Other facilities	17	8			

Note: N = Total Respondents, % = Data Percentages

had experience of using hospital service facilities were considered able to participate in the study.

The participants could choose government hospitals or private hospitals that had JCI standard accreditation as their preferred choice for medical treatment in Indonesia.

The patient category was hospital customers who had used and were familiar with hospitals which had applied JCI accreditation standards. The non-patient category was hospital customers who had received recommendations from customers who had been patients in the hospital, such as patient references from other hospitals, medical examinations, families of patient, surgery, visitors to patient, and others.

The research object was government and private hospitals which had applied the *green hospital* concept through international standards based on JCI accreditation.

Survey Instrument

This research used Google forms to ensure respondents answered all the questions correctly, and in an easy way using their mobile phones and notebooks. An online questionnaire was developed and adapted from previous marketing studies; it was then shared to social media such as Whatsapp, Line, and Facebook. The questionnaire was pre-tested on 35 respondents who had experience of hospital services in Indonesian hospitals. The feedback from the respondents showed that the instructions and questions needed to be modified to ensure the respondents understood correctly. The questionnaire was tested with the SPSS program by validity analysis and reliability analysis to ensure that the operational variables were well developed. After development was complete, the survey could start to obtain the primary data using the online questionnaire. A total of 26 operational variable items were investigated by a six-point Likert scale, ranging from “1 = strongly disagree” to “6 = strongly agree”.

RESULTS AND DISCUSSION

Demographic Profile of the Samples

Table 1 shows the respondent data, such as hospital with JCI accreditation; type of hospital visited; purpose of hospital visit; frequency of hospital use; medical facilities; payment; gender; age; occupation; and average annual expenditure.

The data show that 60% of respondents knew about hospitals with JCI accreditation, and that 70% chose private hospitals. The biggest purpose of respondents to JCI hospital standard were family of patient (30%), chosen medical facilities were polyclinics (45%), frequency of hospital use 2-3 times a year, and their chosen payment for all type of hospital was private (38%). 65% of respondents were female, who were familiar with hospitals with JCI accreditation, aged 21-25 years old (42%), their occupation was college university (40%), and their average expenditure was 3 to 5 million rupiahs (24%) based on Table 1.

Structural Model

The data in Table 2 show that the t-values for each variable are significant (> 1.96 ; SEM standard) and no question needs to be deleted for model fit. The SFL value for each variable is valid ($> 0.50 / > 0.70$; SEM standard) for model fit. The CR value and VE value for each variable do not need model re-specification as they pass the validity test ($CR \geq 0.70$; SEM standard), and reliability test ($VE \geq 0.50$; SEM standard).

Model Fit Test

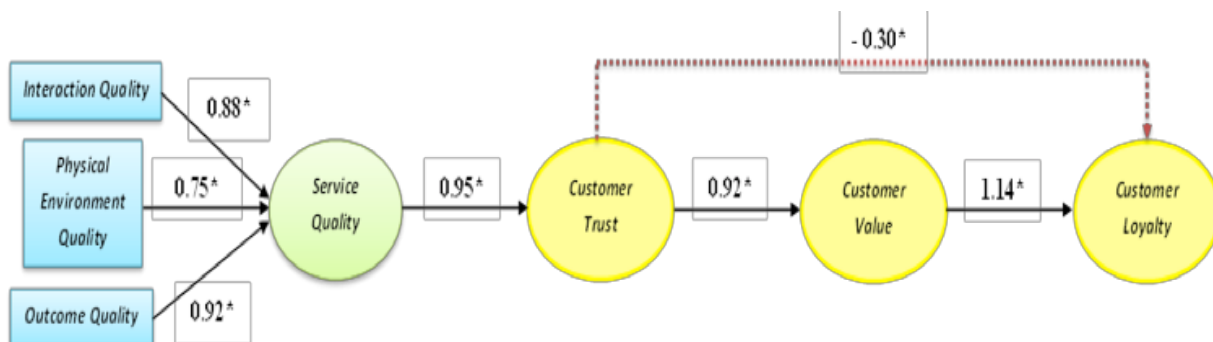
The data in Table 3 show that the overall fit test results of the research model have three categories of model fit: *poor fit*, *marginal fit* and *good fit*. In *poor fit*, there are two GOFI measurements in the category, the *p-value* and AGFI. In *marginal fit*, there is one GOFI measurement in the category, GFI, while in *good fit* there are 10 GOFI measurements

Table 2. Structural Model Test Result for Study

Construct Variable	Measurement Indicator	t-value	SLF
<i>Interaction quality:</i> CR = 0.90; VE = 0.70	1. Staff in this hospital are polite from time to time	14.81	0.85
	2. Staff performance in this hospital displays appropriate services	16.58	0.91
	3. As generally deliver medical services, hospital staff show good response to customer needs	15.56	0.87
	4. The hospital tries to implement environmentally friendly services	10.97	0.69
<i>Physical environment quality:</i> CR = 0.94; VE = 0.79	1. I believe the physical environment and hospital buildings have been maintained to neat and clean standards	16.91	0.91
	2. The facilities owned by the hospital are kept clean and comfortable	17.32	0.92
	3. In general, the hospital environment makes me feel comfortable	15.57	0.87
	4. I am impressed by the environmental quality around the hospital	15.25	0.86
<i>Outcome quality:</i> CR = 0.89; VE = 0.68	1. The medical services provided by medical staff have restored my health	15.78	0.89
	2. My condition has improved after receiving medical treatment at this hospital	16.75	0.92
	3. The hospital makes their customer needs a top priority	11.13	0.70
	4. I always have a better experience when treated at this hospital	12.72	0.77
<i>Customer trust:</i> CR = 0.91; VE = 0.73	1. My opinion is that this hospital gives professional services and is reliable	16.94	0.92
	2. My opinion is that these hospital services are dependable and meet required standards	16.08	0.89
	3. My opinion is that medical staff at this hospital met my expectations in delivering the best services for my condition	15.29	0.86
	4. My opinion is that this hospital has maintained its service commitment	12.11	0.74
<i>Customer value:</i> CR = 0.88; VE = 0.60	1. I consider that the medical cost at this hospital are appropriate for its services	11.37	0.71
	2. I consider that the time spent at the hospital using its service facilities was appropriate	12.42	0.76
	3. I consider that medical staff's efforts at the hospital were appropriate for their services	14.46	0.84
	4. I consider that the hospital services were a good experience	14.66	0.85
	5. My opinion is that this hospital has benefited me with its services	11.32	0.71
<i>Customer loyalty:</i> CR = 0.85; VE = 0.55	1. I always use this hospital's medical services	8.05	0.55
	2. My opinion is that the costs for this hospital's service facilities meet my expenditure level	9.85	0.64
	3. I prefer to choose this hospital's medical services rather than those of another because of its service commitment	12.92	0.79
	4. I will recommend this hospital to my friends, family, and partner	14.59	0.86
	5. I will use this hospital again as its medical services are appropriate for my needs	13.45	0.81

Table 3. Model Fit Test for Study

Model Fit Measure	Model Fit Criterion	Index Value	Model Statement	Model Fit Measure	Model Fit Criterion	Index Value	Model Statement
<i>Absolute Fit Indices</i>				<i>Incremental Fit Indices</i>			
χ^2/df ($\chi^2 = 191,41, df = 115$)	Less value	1.66	Good fit	NNFI	≥ 0.90	0.99	Good fit
<i>p-value</i>	> 0.05	0.001	Poor fit	NFI	≥ 0.90	0.98	Good fit
NCP (42,23 – 118,48)	Between interval	76.41	Good fit	AGFI	≥ 0.90	0.76	Poor fit
GFI	> 0.90	0.82	Marginal fit	RFI	≥ 0.90	0.98	Good fit
Standardized RMR	≤ 0.05	0.050	Good fit	IFI	≥ 0.90	0.99	Good fit
RMSEA	≤ 0.08	0.057	Good fit	CFI	≥ 0.90	0.99	Good fit
ECVI (saturated model = 147)	Less than saturated model	1.29	Good fit				



Note: *estimates (β), **t-value > 1.96

Figure 2. Study Model Structure

category, namely *statistic chi-square*, NCP, *standardized RMR*, RMSEA, ECVI, NNFI, NFI, RFI, IFI, and CFI.

Based on the results from the combination of GOFI measurements and model fit category, the overall model fit test is generally a good model.

As shown in Figure 2, the structural model results mean that six hypotheses are accepted, and one is rejected based on *t-value* and *estimate* (β) measurement. The accepted hypotheses are H1, H2, H3, H4, H5, and H7, while the rejected hypothesis is H6.

Variable interaction quality is significant and positively influences customer trust ($\beta = 0.88$;

t-value = 10.01), so H1 is confirmed. With this variable, the most significant influence indicator is the polite attitude of hospital staff. This is supported by the study results of Wu et al. (2016), who showed that good interaction with hotel staff in a *green hotel* in Taiwan was the most important indicator of a quality environmentally friendly experience. This result supports H1, with a positive influence on the 1st research hypotheses.

The physical environment quality variable is significant and positively influences customer trust ($\beta = 0.75$; t-value = 7.57), so H2 is confirmed. With this variable, the most significant influence indicator is a comfort-inducing environment. This is also supported

by the study results from Wu et al (2016), who showed that the best physical environment hotel facilities in a green hotel in Taiwan was the biggest influence indicator for a quality environmentally friendly experience. This result supports H2, with a positive influence on the 2nd research hypotheses.

The outcome quality variable is significant and positively influences customer trust ($\beta = 0.92$; t-value = 10.08), so H3 is confirmed. With this variable, the most important influence indicator is the quality of the experience of medical treatment in the hospital. This is supported by the study results from Lien et. al. (2014), who showed that medical services which restored patients' condition in Taiwan hospitals was the most influential indicator of customer trust. This result supports H3, with a positive influence on the 3rd research hypotheses.

The customer trust variable is significant and positively influences customer value ($\beta = 0.92$; t-value = 6.32), so H4 is confirmed. With this variable, the most significant influence indicator is professional services and reliability. The results from Chen et al. (2015) show product that environmental friendly dependable to *green product* in Taiwan become the biggest indicator of green perceived quality. Chen et al.'s (2015) results support H4, with a positive influence on the 4th research hypotheses.

The customer value variable is significant and positively influences customer loyalty ($\beta = 1.14$; t-value = 4.12), so H5 is confirmed. With this variable, the most influential indicator is that hospital services give a good experience. The study results from Chen (2013) show product that environmental friendly produces profits for electronic product companies in Taiwan, being the biggest indicator of green loyalty. Chen's (2013) results supported H5, with a positive influence on the 5th research hypotheses.

The customer trust variable is non-significant and negatively influences customer loyalty

($\beta = -0.32$; t-value = -1.42), so H6 is not confirmed. This hypothesis shows that customers do not trust hospitals which have applied JCI accreditation standards through the green hospital concept if they are not comparable with their hospital values (indicators within the customer value variable, such as medical costs, time medical services, staff efforts, customer experience, and customer benefits). Respondent had low trust because their trust did not meet their expectations. The consequence is that customers do not trust hospitals which simply claim to follow the green hospital concept and claim JCI accreditation standards without meeting these, including people's expectations of medical services in Indonesia. This is supported by the results of a study by Kalafatis et al. (1999), who showed that companies which claimed to be green, and exaggerated the value of their green products were not trusted by customers.

In this study, the relationship between customer trust and customer loyalty needs mediation from customer satisfaction to build a significant and positive influence on H6. The results from a study by Hur et al. (2015), show that satisfaction is significant and positively influences loyalty in the hybrid car industry in the USA. Customer satisfaction is an important criterion for customer loyalty (Gronroos & Annika, 2002).

The customer value variable is significant and positively influences the mediating effect of the relationship between customer trust and customer loyalty ($\beta = 0.92$ and 1.14 ; t-value = 6.32 and 4.12), so H7 is confirmed. With this variable, there are two main influencing indicators, the quality of the experience when receiving medical treatment in the hospital, and hospital services which give a good experience. This is supported by results from Sirdeshmukh et al. (2002), who show that value positively influences trust with loyalty through partial mediation.

Customer benefit including patient and non-patient use of hospitals with JCI standards,

Table 4. Direct, Indirect and Total Effect of Customer Value

<i>Direct Effect</i>	0
<i>Indirect Effect</i> Degree of CT → CV → CL	0.92 x 1.14 = 1.0488
<i>Total Indirect Effect</i>	1.0488
<i>Total Effect</i>	1.0488

includes the interaction quality of medical staff which gives the perception of experience and safety, fast health process restored, trust in medical staff quality, guarantees of non-standard medical services, and guarantees from the danger of hospital waste, so the relationship between customers and the hospital becomes a good bonding long-term one.

Mediating Effect of Customer Value

Finally, the mediating effect measurement of customer value between customer trust and customer loyalty based on Table 4. In Table 4, the direct effect of customer trust on customer loyalty is -0.30 , so it can be 0.

The indirect effect of customer trust and customer loyalty on customer value is 1.0488, so customer value has a full mediating effect. The customer value variable becomes a complete connection between the customer trust variable and customer loyalty, but customer trust cannot directly influence customer loyalty (Hair et al., 2010). As a result, H7 is confirmed.

RESULT AND CONCLUSION

The results from the research mean that six hypotheses are accepted as research models, and one hypothesis is rejected. High cost problem can be explained by the fact that hospital staff give better service experience, including medical services, facility services, and building relationships with customers for long-term benefit. The information technology problem can be explained such as build better facilities for medical services and medical facilities. Indonesian people's lack of

trust can give solution by the fact that hospital staff give the best service quality, give better medical information, show better standard medical treatment, and build relationships for better competitive advantage. The green hospital concept explained services standard such as best medical services, guarantee medical standards, safe medical equipment, and building a green environment for better relationships in the long term.

Customer trust directly to problem of loyalty cannot be explained by H6 because medical experience is not comparable with the hospital value indicator, based on non-standard medical services, safety, waste danger, hospitals just claiming they follow JCI and green hospital standards, so customers' expectations were not met, including those of medical experience and facilities.

Customer trust toward mediating customer value can build customer loyalty by research hypothesis (H7) such as best experience when medical treatment in the hospital, and hospital services giving good experience. Overall, the indicator on H7 can build good loyalty to their customer trust using relationship marketing for the best experience of medical treatment and good experience of medical services.

Limitations of the Study

This study has a limited research area, focussing on patients and non-patients, and not yet covered all respondents in Indonesia, so the results are less comprehensive for hospital business. The study covered a limited number of respondents who were familiar with hospitals with JCI standard accreditation. The respondent still general customer so it must be

patient that used and knew hospital with JCI standard. This study has limited to collaborate with hospital management and customers and employs limited variables, such as service quality, trust, value, and loyalty.

Suggestions for further study

This study result can explain Indonesian people not trust, so hospital management can build relationships with their customers and medical staff using relationship marketing, JCI accreditation and the green hospital concept.

Further research could focus more on prime hospital customers who have used and are JCI standard accreditation as familiar with hospitals that have applied JCI standard accreditation as patients. Researchers can collaborate with hospital management and customers to build more personal experience so that customers can make direct suggestions. Other research could involve other variables as factors which influence the relationship between customer trust and customer loyalty

through the mediating variable of customer satisfaction.

Managerial Implications

This study can give hospital managerial implications such as it can be applied the green hospital concept in all hospitals in Indonesia in collaboration with B3 waste developers, including government and private firms, so that they can prevent the danger of hospital waste contamination in the environment, based on the results of physical environment quality (H2), customer trust (H4), customer value (H5), & customer loyalty (H7).

Green marketing strategies through *green hospitals* can be improved by improvement in interaction quality (H1) and outcome quality (H3) with hospital customers, so these hospitals have different competitive advantages (H4, H5) compared to other hospitals through relationship marketing (H7) programmes and become good relationship at long-term benefit.

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APPENDIX

Questioner

Screening question

1. What your perception about hospital that used/visited already applied good standard hospital services? Yes/No
2. What did you always use hospital that own national standard accreditation with some type? Government (go on questioner no. 3) / Private (go on questioner no. 4)
3. If you used government hospital, please choose one hospital! Persahabatan; Umum Pekerja; Dr. Sardjito; Jantung Harapan Kita; Fatmawati; and other hospital, explain one hospital
4. If you used private hospital, please choose one hospital! Ciputra; Hermina; Saint Carolus; Siloam Asri; Medistra; and other hospital, explain one hospital
5. Did you visit that hospital for some period for the last 3 – 6 months? Yes/No
6. What did your purpose visit to its hospital? Medical examination; patient; as patient's family; visitor to patient; patient references from other hospitals; surgery; and other purpose
7. How many frequencies did you visit to its hospital each year? 1 time; 2 – 3 times; 3 – 4 times; 4 – 5 times; > 5 times
8. Which medical facilities did you visit? Polyclinic; Medical checkup; Pharmacy; Emergency; Endoscopy; Physiotherapy; Radiology; Hemodialysis; Laboratory; Rehabilitation medic; and other facilities
9. Which payment types you choose in hospital? Private/family; Company; Assurance; BPJS; and other payment type

Part 1

Interaction quality variables questioner based on Table 2

Part 2

Physical environment quality variables questioner based on Table 2

Part 3

Outcome quality variables questioner based on Table 2

Part 4

Customer trust variables questioner based on Table 2

Part 5

Customer value variables questioner based on Table 2

Part 6

Customer loyalty variables questioner based on Table 2

Profile of samples

1. Gender: Male/Female
2. Age: < 21; 21 – 25; 26 – 30; 31 – 35; >35
3. Occupation: Student; College university; Employee; Entrepreneur; Housewife
4. Average annual expenditure (rupiahs): ≤ 1.000.000; 1.000.000 – 3.000.000; 3.000.000 – 5.000.000; 6.000.000 – 8.000.000; 8.000.000 – 10.000.000; > 10.000.000