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## **The Effect of Brand Equity on Service Reutilization Interest of Inpatient Instalation of Ibnu Sina Hospital, Makassar in 2015**

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### **Abstract**

The number of hospital growth now has been increased rapidly and who can get trust from customers will be win this competition. To survive in a competitive market, "brand equity" it one important key for hospital. The aim of this research was to analyze the effect of brand equity on inpatient reutilization interest at Ibnu Sina Hospital, Makassar in 2015. This research used quantitative method with cross sectional study. the sample consisted of 151 inpatients. The data were analyzed using logistic regression test with  $p=0.05$ . The results showed that there was effect of brand equity on inpatient reutilization interest at IbnuSina Hospital. There was a positive effect of brand associations, quality perception, brand loyalty and brand asset on inpatient reutilization interest. Brand loyalty variable has the most positive effect on inpatient reutilization interest. In general, all variable models can have predicted inpatient service reutilization interest by 93.4%. Brand equity can effect inpatient reutilization interest at IbnuSina Hospital, Makassar. The Hospitals have to increase the hospital marketing strategy and be concerned with the products which could be different and compete with other hospitals.

**Keywords:** brand equity; service reutilization interest.

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## **1. Introduction**

Number of hospitals in Indonesia has been increasing every year. Based on data from the Ministry of Health, in 2013 there are 468 private hospitals in Indonesia consisting of 300 public private hospital and 168 specialized ones. This number increased in 2014 to 682 private hospitals comprising 440 General Private Hospitals and 242 specialized private hospitals. In other words, the increasing number of private hospitals in Indonesia as many as 214 hospitals or approximately 45%. According to Director General of Health Efforts Ministry of health Akmal Taher, in last 10 years the growth of hospital is always increasing, for 2015 estimated growth reached 5-10% [1].

The number of private hospitals increased competition to win customers' trust. In general, this type of competition is known as triangle of competition, that is: Customer, Competitor and Corporate (the hospital). Hospitals face a variety of challenges that arise from the consumer or patient, because the users had higher demand for good service and quality. Consumer or patient is already accustomed to "spoiled" by goods or services industrial which have been first put the "customer satisfaction" as the main focus in the ministry. Therefore we must have the courage to admit that the first challenge for hospitals is how to change the paradigm in order to more focus on earnest effort to improve customer satisfaction.

Aaker [2] revealed that to survive in a competitive market, a product (both goods and services) cannot be released without the brand. Therefore, product with a brand equity can be a benchmark that must be observed by each hospital. Aaker defines the power of the brand or the brand equity as a series of brand assets and liabilities related to the name and symbol of a brand, which is able to increase or decrease the value provided by a product or service to the hospital and to customers in hospital [3]. Furthermore, Lassar defined brand equity is an improvement over the perceived utility and value of a brand which associated with a product. It can be concluded that brand equity is a consumer perceptions about the privileges of a brand compared with other brands [4].

Ibnu Sina Hospital is a private hospital in the city of Makassar, which also constantly developing to introduce the brand to be more familiar by the public, through development of the partnership is to conduct cooperation activities in medical services (insurers and other private hospitals) and cooperation in non-medical services (Banks and business) as well as doing social service, social media promotion [5].

In the last four years, the visit of Ibnu Sina hospital has decreased. Based on the visits of Inpatient unit in 2011-2014 was declined. In 2011, the number of revisited patients show a total of 4313 patients, in 2012 the number of visits is likely to increase, but not significant, which a number of 4510 patients, then the number of visits fell back in 2013 with the number of 4448 patients, and in 2014 the number of revisited decreased to 4390 patients.

The decrease in the number of visits is also affected by the increasing of other health care providers that have sprung up, giving rise to intense competition. The decrease in the number of patients become to benchmarks or indicators that the reutilization of services not performed by the patient in a hospital. The results showed that there is significant influence between the variables of reliability, empathy and physical evidence which a

dimension that compile quality of service that interest to revisit inpatient [6].

Waterman and Faulkner [7] doing research on the reaction of patients to the attributes of hospital care that affect the evaluation of service quality, willingness to recommend and willingness to return. The study assumes that patients who are satisfied will be more than happy to recommend health care providers that they use to other patients, and return to visit when they need health services. This study aims to determine the effect of each and simultaneously brand equity built by five meanings (brand awareness, brand association, perceived quality, brand loyalty, other proprietary brand assets) to revisit interest of patients in inpatient unit hospital Ibnu Sina Makassar 2015. This study aimed to analyze the effect on the brand equity interest in reutilization Inpatient services at Ibnu Sina Hospital Makassar in 2015.

## **2. Materials And Methods**

This research was conducted at Ibnu Sina Hospital in Makassar. The study was a cross sectional study to examines the dynamics of the correlation between the independent variables (brand equity) and the dependent variable (interest reutilization) at the same time (analytic study time point approach) [8]. The populations in this study were all Inpatient in Ibnu Sina Hospital 2014 totaling 4390 patients. The sample sizes in this study were 151 people, with the technique of sampling by accidental sampling.

The sources of data in this study are primary and secondary data. Primary data were obtained from questionnaires distributed to all respondents' complete answer. Questionnaires were distributed previously been through validity and reliability test. While secondary data obtained directly from the documents associated hospitals and support for this research.

Data analysis was carried out in three phases; univariate, bivariate and multivariate analyzes. Univariate analysis is an analysis of the distribution of the percentage of single variable that includes the common characteristics of respondents is presented in a frequency distribution table. The bivariate analysis aimed to examine the effect of each independent variable on the dependent variable through the chi square test. While multivariate analysis performed logistic regression to determine the determinant or dominant variable effect in this study.

## **3. Results**

### **Univariate analysis**

The analysis was done to see the spread of the characteristics of the respondents including age, gender, quantity of visits, education level, income, class care and how to pay. Age of respondents consisted of four categories, in which mostly aged 26-45 years, ie 70.2%. Respondent largely dominated by men (60.3%), with the number of visits on average above 5 visits by 59.6%. The education level of respondents mostly graduates in university with a percentage of 23.8% and the average income of 2-5 million at 63.6%. Whereas in the class of care and type of payment for each class that class of care 1 more dominated by 39.7% and the type of payment mostly BPJS in the proportion of 89.4% (Table 1).

**Table 1:** The Distribution Frequency of Characteristic Respondent in Ibnu Sina Hospital Makassar 2015.

<b>Characteristic Respondent</b>	<b>n</b>	<b>%</b>
<b>Range of Age (Year)</b>		
17-25	16	10.6
26-45	106	7.02
46-65	29	19.2
>65	0	0
<b>Gender</b>		
Male	91	60.3
Female	60	39.7
<b>The quantity of visited</b>		
2 times	10	6.7
3 times	20	13.2
4 times	31	20.5
>5 times	90	59.6
<b>Last Education</b>		
Never School	1	0.7
Elementary school	3	2.0
Junior High School	5	3.3
Senior High School	30	23.8
University	106	70.2
<b>Revenue</b>		
<2 million	5	3.0
2 – 5 million	14	8.4
>5 million		
<b>Number of Visits</b>		
2	27	16.3
3	30	18.1
4	14	8.4
≥ 5	95	57.2
<b>Class Inpatient</b>		
VIP	34	22.5

Characteristic Respondent	n	%
Class I	60	39.7
Class II	32	21.2
Class III	25	16.6
How to pay		
General	67	6.0
BPJS	135	89.4
Corporate	7	4.6
Total	151	100.0

Source: Primary Data, 2015

### Bivariate analysis

The bivariate analysis is using chi square test to see how brand equity built by five meanings: brand awareness, brand association, perceived quality, brand loyalty, and other proprietary brand assets to re-visit interest.

The effect of brand awareness to reutilization interest shown that Respondents have a good perception on the first statement about Ibnu Sina Hospital is the first hospital that arise in the minds of the respondents to give an answer agreed by (64.2%). In the second statement, respondents perceive that Ibnu Sina Hospital is an alternative prime choice when choosing health care (73.5%). In the third statement, most respondents agree that advertisement of hospital remind respondents to the Ibnu Sina hospital (53.0%). Statement 4, respondents perceive that the respondents may identify Ibnu Sina Hospital just by looking at the symbols, logos or any other attribute agreed ranges (58.9%). In statement 5 most respondents stated that Ibnu Sina Hospital can be recognized easily agree ranged from 68.2%. Based on statistical test using chi square test values obtained  $\rho = 0.319$ , because the value of  $\rho > \alpha$  value (0.05). This means there is no effect of brand awareness to intention reuse of inpatient in Ibnu Sina Hospital Makassar in 2015 (Table 2).

The effect of brand association to reutilization interest indicates that respondents have a good perception that either the first statement of Ibnu Sina Hospital always provide quality health care by providing answers to agree at (82.1%). In the second statement, respondents perceive that doctor in Ibnu Sina Hospital always work professionally (82.8%). In the third statement, most respondents agree that nurses in Ibnu Sina Hospital always work professionally (82.1%). Statement 4, respondents perceive that service of prescription at the pharmacy quickly agreed ranges (80.1%). Results of statistical test using chi square test values obtained  $\rho = 0.022$ . Therefore, the value of  $\rho < \alpha$  (0.05). This means that there is the effect of brand Association against the interest of reutilization in inpatient unit of Ibnu Sina Hospital Makassar in 2015 (Table 2).

The effect of perceived quality to reutilization interest shows that there are 137 respondents who intend to reutilize Ibnu Sina hospital and one respondent stating that he or she has no intention to revisite. Meanwhile, from the 10 respondents who rate poorly to perceived quality of Ibnu Sina Hospital, 8 respondents who intend to

reutilize the hospital and two respondents were not interested to return. Statistical test results obtained by value  $\rho = 0.002$ . Therefore, the value of  $\rho < \text{value } \alpha (0.05)$ , this means that there is an effect on the perceived quality reutilization interest inpatient Ibnu Sina Hospital Makassar in 2015 (Table 2).

**Table 2:** Bivariate Analysis Independent Variable Effect of Re-Interest Inpatient unit Ibnu Sina Hospital 2015

Independent Variabel	Re-interest				Total	p
	Interest		Not Interest			
	n	%	n	%		
Brand Awareness						
Strong	84	98,8	1	1,2	85	0,319
Weak	63	95,5	3	4,5	66	
Brand Association						
Strong	139	98,6	2	1,4	141	0,022
Weak	8	80,0	2	20,0	10	
Perceive Quality						
Strong	137	99,3	1	0,7	138	0,002
Weak	10	76,9	3	23,1	13	
Brand Loyalty						
Strong	139	98,6	2	1,4	141	0,022
Weak	8	8,0	2	20,0	10	
Other Proprietary Brand Asset						
Strong	141	99,65	0,5	0,35	141,5	0,001
Weak	6	60,0	4	40,0	10	

Source: Primary Data, 2015

The effect of brand loyalty to reutilization interest shows that there are 141 respondents who strongly associated brand loyalty of Ibnu Sina Hospital, there were 139 respondents who intend to reuse the hospital and two respondents stated not interested in returning. Meanwhile, of the 10 respondents who rate poorly on brand loyalty of Ibnu Sina Hospital there were 8 respondents who intend to reuse the hospital and two respondents were not interested to return. Results of statistical test using chi square test values obtained  $\rho = 0.022$ . Therefore, the value of  $\rho < \text{value } \alpha (0.05)$ , this means that there is the effect of brand loyalty to the interest reutilization in inpatient of Ibnu Sina hospital Makassar in 2015 (Table 2).

The influence of other proprietary brand assets to revisit interest shows that 141 respondents who strongly linked other proprietary brand assets of Ibnu Sina Hospital, overall 141 respondents interested in reutilization the hospital and no respondents who declare to not return. From 10 respondents who rate poorly to other proprietary brand assets Ibnu Sina Hospital there were six respondents who intend to reutilize the hospital and 4 respondents were not interested in returning. Results of statistical test using chi square test values obtained  $\rho = 0.001$ . Therefore, the value of  $\rho < \text{value } \alpha (0.05)$ , this means that there is the effect of other proprietary brand

assets to interest reutilization of inpatient Ibnu Sina hospital Makassar in 2015 (Table 2).

### Multivariate Analysis

The results of the multiple logistic regression analysis showed that brand loyalty variables are the factors that most affect of reutilization interest of inpatient unit in Ibnu Sina hospital ( $\rho = 0.993$  and wald = 5.997). Multivariate analysis obtained by value overall percentage 93.4%, which means that overall independent variables can affect the reutilization interest of inpatient unit of Ibnu Sina hospital in 2015 amounted to 93.4% (Table 3).

**Table 3:** Multivariate Analysis Most Influence Variable of Re-Intesert in Ibnu Sina Hospital 2015

Variabel	B	S.E	Wald	P	Exp (B)	Overall Percentages
Brand Association	31,300	3.088	,000	0,992	3,920	93,4 %
Perceived Quality	14,508	1,732	,000	0,993	4,508	
Brand Loyalty	15,607	1,732	,000	0,993	5,997	
Other Proprietary	61,278	4,875	,000	0,990	4,101	
Brand Asset						

Source: Primary Data, 2015

### 4. Discussion

The results showed that brand awareness is not really influence on the reutilization of health services at the Ibnu Sina Hospital. It is because the majority of respondents were not familiar with the brand and logo of Ibnu Sina Hospital. Although these respondents actually utilize health services at Ibnu Sina hospital repeatedly. The concept of brand awareness is the ability of consumer to identify (recognize or recall) a brand with detail to make a purchase. Brand awareness is the first step for any consumer of every product or new brand offered through advertising. It was supported by the statement that advertising creates awareness of a new brand, and consciousness itself will generate a desire to buy, and after that a brand will get the way to achieve the desired goal [9].

This research was inconsistent with case studies on solid soap toilet which states that the more consciousness (awareness) of consumers for brand of a product, the stronger consumers purchase decisions. In the case of solid soap brand "Lux" in Semarang showed that brand awareness give positive influence on purchase decisions. Furthermore, in the case of a purchase 'Gtman', hypothesis testing using T test showed that the variables of the brand awareness was shown significantly influence the purchase decision variable, also not in line with this research [10].

Brand equity is verry important for firma included hospital [11, 12]. The results showed that the respondents decided to use the services provided by Ibnu Sina hospital because the hospital was able to meet their needs. It

was supported by the specialist services provided by the hospital is complete according to the needs of respondents, other support services such as laboratory, radiology and pharmacy, precise as needed. These results were supported by a study on the effect of brand equity and service quality on customer loyalty at Syarif Hidayatullah Hospital that suggests the coefficient of brand equity is partially significant effect on customer loyalty [13]. That also consistent with Sciulli and Missien [14] research which shows that partially the brand association affect customer loyalty significantly.

This research proves that the perceived quality has a positive influence on brand equity. It happens because the perceived quality is a component of brand value that therefore high perceived quality will encourage consumers to prefer the brand compared to brands of competitors. The high perceived quality indicates that consumers have found differences and advantages of the product with a similar product after a long period of time.

This research was consistent with research Yoo and research Dawar & Parker, they found that brand equity mainly determined by the perceived quality, more research is also consistent with the results of research conducted by Agarwal & Teas, who conducted the research between countries [15-17].

This research was the brand loyalty the attitude of respondents to inpatient unit in Ibnu Sina hospital, ranging from feeling like respondents to inpatient unit in Ibnu Sina hospital, the satisfaction derived from inpatient unit in Ibnu Sina hospital as well as the commitment to use inpatient unit Ibnu Sina hospital. Over all it can make a grow of closeness and actions of the respondent to repurchase / interested back to inpatient unit Ibnu Sina hospital, which is one of customer loyalty. The closeness exists for respondents' experience in getting services. Of course, it was a positive experience that respondents perceived after using and get the satisfaction from inpatient unit Ibnu Sina hospital.

The satisfaction can be derived from the fulfillment of the expectations of respondents to inpatient unit services. It was consistent with the theory expressed by Aaker, which reveals that brand loyalty is closely linked to the consumer experience in using a brand [15]. If consumers have a positive experience while using a brand, consumers will tend to be a loyal customer. It was consistent with the results of research Fachriza, analyzes the effect of brand equity on customer loyalty in the product wrangler jeans, showed that partial brand loyalty affect customer loyalty significantly [18]. It is also same with Hsu et. al found in privat hospital [19].

Based on the results of the study showed the influence of other Proprietary Brand Asset against the return of interest 151 respondents indicated that linked pointed out, there were 149 respondents intend to reuse and 2 respondents were not interested. While 2 respondents felt that the weak of brand loyalty, two respondents expressed no interest to reuse. The study also found that Brand Loyalty is the most influential factor on the interest of re-utilization of inpatient unit Ibnu Sina hospital. Overall all the independent variables can affect the interest of re-utilization of inpatient unit Ibnu Sina hospital in 2015 amounted to 93.4)%.

## **5. Conclusion and Suggestion**

Based on the results of research, the variables that affect of re-visit interest were the brand association, perceived quality, brand loyalty, and other proprietary brand assets, which have a significant effect on the re-



visit interest. Moreover, brand loyalty was the most influencing variable on the re-visit interest. Some suggestions can be submitted to the Hospital Management; to pay attention on the independent variables that influence the dependent variable, which in this research were brand awareness, brand association, perceived quality, brand loyalty and other proprietary brand assets have give effect to the interest reutilization of Inpatient unit services at Ibnu Sina hospital in 2015 in the form of hospital internal policies. To increase brand awareness, the hospital must increase the role of marketing. The hospital should be concerned with the introduction of superior products that can be offered differently by other hospitals. The hospital needs to consider a measure of customer engagement to the hospital, to make improvement of health care. The results of this study can be used as information and analysis reports that can be used by the hospital management to gain an insight into the importance of the role of Brand Equity in increasing customer visits thus aggravating the words of mouth and repurchase intention.

### **Conflict of Interest**

Author declare no conflict interest.

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