Building Patient Loyalty: Brand Equity Aspects Study in Maternal and Child Polyclinic

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ABSTRACT

This research used analytic observational approach with the design of the cross sectional. This research was using purposive sampling. Data collection used the questionnaire and also data analysis used regression logistic. The results of this research show that 50.5% of respondents in aged 26-33 years. Furthermore, it explained that on significant level 95%, Variables which has correlation with the loyalty patient of Maternal and Child Polyclinic are brand image with p-value 0.024 and brand loyalty of the brand with p-value 0.05. Moreover, the coefficient of determination shows 32.8% for loyalty of Maternal and Child Polyclinic in RSIA Muhammadiyah Malang. It means that this research variables affect patient loyalty only 32.8%. A summary of this research, brand image and brand loyalty had significant correlation with loyalty patient of Maternal and Child Polyclinic while brand awareness and quality perception did not have any relative with patient loyalty.

Keywords: Brand equity, Patient loyalty, Maternal dan Child Polyclinic, Brand Image.

1. INTRODUCTION

Nowadays, there is a huge changed in hospital paradigm related the patient as a core of the hospital market [1]. Previously, hospitals challenge the physicians by offering greatly competent support staffs or advance equipment. However, nowadays issues refer that health institution are demanded for outpatients by giving more healthcare services, better conveniences, or lower price [2]. Brand elements enable patients to guide their brains and build brand equity, which can accurately illustrate the brand and the elements of distinction with others brand [4].

Since the late 1980s, the brand equity approach is fixed by several scientist, such as Keller, Aker, and others. The latest description, is stated by the American Marketing Association [5]. There are many study which involved brand equity in their service components, such as industry, hotels, banks, also the others, although it is insufficient in the healthcare services, as well as Maternal and child healthcare in particular [4]. For instance, the studies noticed at the patient’s believe, brand loyalty, brand awareness, patient’s satisfaction, relationship assurance, and others significant factors associated with healthcare services branding [6]. Other study depicted that representation of brand, value, loyalty, association (image) and awareness are the influential factors of service brand equity [7]. There was also another research on brand loyalty, brand image, brand awareness, and perception of quality inpatient purchase behaviors. Other’s study suggested that medication accessibility and opportunity need automatically upgraded, and purchasing behavior frequently observed. The questionnaire was used as a survey method for this study [4]. However, this research has a different way to explore the brand equity with all components in brand equity which will be obtained from the patients of maternal and child healthcare and all the components of brand equity will be correlated with the patient loyalty in the maternal and child healthcare.

The Maternal and child healthcare was chosen as the research focus for some reasons. First, Sustainable Development Goals (SDGs) in 2015 to 2030 has committed to decreasing the Infant Mortality Rate (IMR) as well as Maternal Mortality Rate (MMR) [8]. One of the efforts to suppress MMR and IMR in Indonesia is the Maternal and Child Health (MCH)
program. MCH services are sustainable health care which consists of the visit of first pregnant women (K1), the coverage of the fourth visit of pregnant women (K4), the coverage of MCH books, early detection of risky pregnancies by health workers, delivery by health personnel, handling obstetric complications, postnatal care, neonatal care, handling neonatal complications, toddler health services, sick toddler health services [9].

Secondly, based on the type of service, the hospital is faced with the increase and growth of the hospital especially on the MCH service which now reached 66.7% [10]. The data from RSIA Muhammadiyah Malang show that the number of patient visits over the past four years has increased by 15%. From the data on the number of outpatient unit visits, there is a polyclinic with the biggest number of patient visits in the main polyclinic, which is 32.7% of the total outpatient visits in 2017. Meanwhile, the lowest number of patient visits were maternal and child health polyclinic (MCH) of 7.7% of total outpatient visits in 2017, as many as 24,496 patients.

The patient visits in the MCH service compared to the other polyclinic showed the utilization of MCH polyclinic is still low. The poor rate of visits can possibly because many hospitals now give MCH service indicating competitions between hospitals. A branding of product makes the good on its brand be the particularly assets of business that achieved patient loyalty and qualify your health system from the competition [11]. Therefore, this research would like to determine the correlation between equity of brand (brand of image, brand awareness, brand loyalty and quality perception) and patient loyalty of MCH polyclinic.

2. METHOD

Observational analysis study with a cross-sectional design was used in this research. It used 95 respondents who were taken using purposive sampling technique that considers the research inclusion criteria, among others aged over 17 years, had visited more than once, and included in MCH patients (pregnant women, postpartum mothers, immunized parents, and consulted) The instrument used is a questionnaire with a Likert scale with a total question is 41 items, constructed by the researcher and has passed the validity and reliability test. The statement items are given a score of 1 to 4 with a positive statement scored from the highest while a negative statement is given a score from the lowest. Categorical descriptive analysis was conducted in this study.

3. RESULTS AND DISCUSSION

General description of respondents in this study is shown in the Table as follow.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>f</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>19-25</td>
<td>19</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td>26-33</td>
<td>48</td>
<td>50.5</td>
</tr>
<tr>
<td></td>
<td>34-41</td>
<td>24</td>
<td>25.3</td>
</tr>
<tr>
<td></td>
<td>42-49</td>
<td>2</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>50-58</td>
<td>2</td>
<td>2.1</td>
</tr>
<tr>
<td>Education</td>
<td>Elementary School</td>
<td>5</td>
<td>5.2</td>
</tr>
<tr>
<td></td>
<td>Junior High School/Equivalent</td>
<td>10</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>Senior High School/Equivalent</td>
<td>36</td>
<td>37.9</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>8</td>
<td>8.4</td>
</tr>
<tr>
<td></td>
<td>Bachelor level</td>
<td>30</td>
<td>31.6</td>
</tr>
<tr>
<td></td>
<td>Master’s level</td>
<td>4</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>Doctor</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Nurse</td>
<td>2</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>Housewife</td>
<td>50</td>
<td>52.5</td>
</tr>
<tr>
<td></td>
<td>Teacher</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Tailor</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Pharmacist</td>
<td>1</td>
<td>1.1</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>8</td>
<td>8.4</td>
</tr>
<tr>
<td>Domicile</td>
<td>Klojen</td>
<td>18</td>
<td>19.0</td>
</tr>
<tr>
<td></td>
<td>Blimbing</td>
<td>4</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>Lowokwaru</td>
<td>11</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>Kedungkandang</td>
<td>21</td>
<td>22.1</td>
</tr>
<tr>
<td></td>
<td>Sukun</td>
<td>33</td>
<td>34.7</td>
</tr>
<tr>
<td></td>
<td>Malang</td>
<td>8</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Based on Table 1, the general description of research respondents indicates that the majority of 50.5% of respondents are aged 26-33 years, amounting to 37.9% of respondents with secondary education status, 52.5% of respondents are housewives, and 34.7% of respondents came from Sukun District. Research conducted by Ahmad, et al., showed that demographic characteristic influenced purchasing behavior in healthcare services. This signifies that the
demographical factor influences the perceptions of a patient to choose the desired health facilities [4].

3.1 Brand Awareness

In the brand awareness variable, there are two ways of measuring. In the first measurement with the aim of knowing how much respondents were aware of the existence of RSIA Muhammadiyah Malang City, respondents were asked to mention the name of RSIA in Malang City which was known by the respondents. The study results regarding the brand awareness measurement were first presented in the form of a brand awareness pyramid presented in Figure 1:

![Brand awareness pyramid of MCH polyclinic](image)

Figure 1. Brand awareness pyramid of MCH polyclinic

Figure 1 shows that 70.52% of respondents remember RSIA Muhammadiyah Malang City as the top of mind. However, there were 11.58% of respondents who were unaware of the existence of RSIA Muhammadiyah Malang City. Based on research that states that brand awareness is a reflection of the community to recognize and know brands that will influence the perception and behavior of patients in deciding to buy a brand [13]. It can be concluded that consumers will buy brands they know and know well [14]. Moreover, with the understanding of brand awareness can be described that a patient needs to know the brand first before deciding to do purchasing [4].

The second measurement of the brand is by using a questionnaire of three question items on a Likert scale. The results of this questionnaire indicate that 92.6% of respondents consider the awareness of the MCH polyclinic brand in RSIA Muhammadiyah Malang City is in a good category. The results of this study proved that 95.79% will make the MCH polyclinic in RSIA Muhammadiyah Malang City the first choice. This means that indirectly the brand awareness will make patients who have not known a product will feel that there is only one product which causes the patients to desire to keep wanting to use the product [15].

3.2 Brand Image

The evaluation of brand image variables consists of three components which are developed into 12 statement items. Each statement is measured using a Likert scale. The results of the study revealed that 70.5% of respondents considered the MCH polyclinic brand image in RSIA Muhammadiyah Malang City in a good category. These results indicate that the image of RSIA Muhammadiyah Malang City is positive. With this result, actually, RSIA Muhammadiyah Malang City already has a good impression in the customer’s eyes. This study is aligned with other’s study which states that the important things for corporation to success is positive brand image [17].

Furthermore, the results of this study proved on the elements of the appropriate brand association known as much as 97.90%. The respondents stated that the MCH polyclinic in RSIA Muhammadiyah Malang City had paid attention to the patient's safety and 93.68% of the MCH polyclinic in RSIA Muhammadiyah Malang City had paid attention to the safety of their patients. This can be the strongest indicator to form the favorability of brand RSIA Muhammadiyah City Malang association in the minds of patients. This situation can be said to be an intrinsic advantage of RSIA Muhammadiyah which can later be developed and is a strategy in the face of competition [18]. However, there were 12.63% of respondents who stated that the MCH polyclinic service in RSIA Muhammadiyah Malang City was not the best in Malang City, and 10.53% stated that the existing officers were deemed to be less fast and responsive in handling patient needs. The hospital business is a value business or trusty business. Therefore, the core of marketing the hospital in building a strong patient trust and in the end will create a brand image which will benefit the society [18].

In the component of brand association strength as much as 97.90%, the respondent stated that MCH polyclinic at RSIA Muhammadiyah Kota Malang offers an affordable service fee. However, as much as 22.10% of respondents stated that the MCH polyclinic in RSIA Muhammadiyah Malang City did not have sophisticated and modern medical equipment. If the value of brand association strength would be increased in people's minds, RSIA Muhammadiyah Malang City can upgrade the medical equipment used to provide services to patients. In line with Kumar's research stated that it is very important for hospitals to manage medical equipment investments so that they are always efficient. The medical equipment for diagnostic, supervision, and therapeutic is an essential component for the hospital to be able to give a sustainable and good quality service [19].
In the component of uniqueness of brand association as much as 98.95% of the respondents stated that the service motto "My Service, My Worship, Fast, Affordable, and Quality" makes patients feel comfortable. A motto becomes a uniqueness that can distinguish one brand from another. Industries need to have uniqueness of their product rather than other's industries product if they want to be a commander [20]. However, 14.73% respondents considered that the blue color on the RSIA Muhammadiyah Malang City building cannot give a calm feeling to the patients.

3.3 Perception of Quality

The perception of quality consists of five components which are physical form, reliability, guarantee, responsibility, and empathy [21]. The five components were developed into 19 questionnaire statement items. Each statement is measured using a Likert scale. The results of the study revealed that 80% of respondents stated that the perception of the quality of the MCH Polyclinic RSIA Muhammadiyah Malang City was in a good category. The areas which important to manage are patient’s perception about quality and outcomes healthcare services in hospital [22]. There is a research which revealed that there are some advantages of good quality services. First, it creates the formulation of concordant relationship between the hospital staff and patient. Second, provide the construct of customer loyalty for healthcare service providers [23]. Other’s research also argued that the quality healthcare influenced patient’s satisfaction. Concurrently, healthcare services level affected customer’s satisfaction in public hospital [23]. Therefore, customer’s satisfaction influences loyalty of patients. This opinion is supported by other’s study which argued that established study in two hospitals in Taiwan explained that patient satisfaction has a positive effect on loyalty [17].

MCH polyclinic at RSIA Muhammadiyah needs to concern about all perception of quality dimensions which are considered very important for the patients. The focus of the MCH RSIA Muhammadiyah Polyclinic is aimed at attributes that are still lacking by the patient. These attributes are considered very important for patients. This is in line with the other’s research, which states that contribute to the component of brand equity, out of which perception of quality contributes the highest to brand equity with a maximum number of factor loading [24].

The category result obtained an attribute considered as lacking in the component of physical form, as much as 6.3% of the respondents considered that the healthcare facilities are less attractive. In the component of reliability, 3.1% of the respondents considered the staffs do not do a proper act at the specified time. In the collateral component, each of 1.1% of respondents considered that health workers could not be trusted to serve and maintain the personal secrets of patients and health workers could not give a sense of security and comfort. In the component of responsibility, 10.6% of respondents considered that health workers did not provide clear and easily understood information. In the component of empathy, 11.6% of the respondents considered that the healthcare staffs do not have enough time to communicate with the patients.

There is a study revealed that in strengthening a perceived service quality, patients indicate that hospital management should focus on staff behavior, assurance, and tangibility [7]. The strongest indicator to measure the perception of quality is the swift administration and fast and appropriate patient checkup [18]. Besides that, a research stated that the perception of quality among patients centered on service [22]. However, the condition of the facility and medical equipment are also indicators of quality for them. The common aspects that healthcare providers are the concerns with are usually having the right medical team and treating patients. The research also stated that there were other aspects of service that were also important to patients such as the registration and discharge process, the interpersonal skills of the hospital staffs or the condition or environment of the facility. Without improvement to the processes deemed important to patients would result in negative outcomes. Customer care personnel would need to spend additional time to build the confidence and trust of patients again [22].

3.4 Brand Loyalty

Brand loyalty in the healthcare sector means loyalty of consumers who continue to choose the services from the same healthcare providers (or provider), who have a positive influence on them [4]. The brand loyalty variable consists of five components. Five components were developed into 5 questionnaire statement items. There are two ways in measuring of brand loyalty, the first measurement shown in the brand loyalty pyramid which can be seen in Figure 2.

![Figure 2. Brand loyalty pyramids of MCH polyclinic](image-url)
Based on Figure 2, the highest level of brand loyalty achieved by MCH Polyclinic RSIA Muhammadiyah is 94% respondents in the category of satisfied buyer. According to other’s study satisfied patients prefer the same hospital for treatments, whether the same or different and may recommend it to friends and family. In this way, patients who are loyal create a solid basis financially for the future, because even the following discharge, they still may be affirmative towards the same healthcare organization through positive word of mouth, donations or other forms of co-operation [4].

Meanwhile, the lowest pyramid level of brand loyalty was in the category of switcher buyer as much as 17.0% of the respondents. It states that the pyramid of loyalty is in strong condition because it forms a pyramid of reverse brand loyalty. Supported by the other’s study, they consider perception of quality as a cognitive construct which results in effective response towards a brand. Finally, this affective response determines the consumer behavior, and they may lead to product purchase and brand loyalty. Through wide research, have confirmed that highly loyal buyers tend to stay loyal if their attitude towards a brand is positive. In addition, the ability to convert a switching buyer into a loyal buyer is higher if the buyer has a favorable and positive attitude towards the brand [25].

Besides that, the second measurement of brand loyalty stated that the most of the respondents, amounting to 53.7% of respondents said the brand loyalty of the MCH Polyclinic RSIA Muhammadiyah was in a good category. In line with other studies, a variable such as trust the service of the hospital, positive feeling about the hospital, better quality compared to other hospitals, not switching to another hospital if there is a price variation indicates high levels of brand loyalty thus contributing to Brand equity of hospital. The research also showed that the sub-dimension Loyalty aspect, which includes trust about the service, positive and clean environment, and switching aspect, belongs to the Brand loyalty component of the Brand Equity of the hospital [24].

There was also a component considered as lacking with 29.5% of respondents stated that they did not agree on the statement to like the MCH polyclinic because the symbol that was owned by RSIA Muhammadiyah was included in the liking the brand category. This is related to several attributes in the quality perception component that are considered lacking. In line with other research that findings factors significant relating to perception of healthcare quality as well as brand loyalty. A good patient’s perception of brand loyalty indicated the patient’s priority to utilize the same or different medical care from the same hospital in the future also. Such customers divide their positive experiences about hospital health services with their friends and families and suggested the hospital to them [7].

### 3.5 Patient Loyalty

The patient loyalty consists of five component based on a theory (27). The five components were then developed into five-item questionnaire. The results showed that 55.8% of respondents stated that the patient loyalty in the MCH Polyclinic of RSIA Muhammadiyah Malang City was in a good category. Patient loyalty will be good if a product is considered capable of giving the highest satisfaction so that patients are reluctant to switch to other brands. In line with research that states that the patient Satisfaction was positively related to loyalty and it had a significant effect on loyalty [26]. The results of this study are proven by 89.4% will continue to use the RSIA Muhammadiyah MCH service regularly. The patient tends to revisit hospital for further treatment after they experienced appropriate treatment, established assurance and getting personal care from employees [28].

In order to find out the correlation between variables of brand awareness and brand image to patient loyalty at MCH polyclinic analyzed using a logistic regression statistic testing which can be seen in Table 2 as follow.

#### Table 2. The correlation analysis of brand awareness, brand image, perception of quality, brand loyalty and patient loyalty of mch polyclinic

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>p-value</th>
<th>OR (Exp(B))</th>
<th>R² (Nagelkerke)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Awareness</td>
<td>1.027</td>
<td>0.398</td>
<td>2.792</td>
<td></td>
</tr>
<tr>
<td>Brand Image</td>
<td>1.528</td>
<td>0.024</td>
<td>4.607</td>
<td>0.328</td>
</tr>
<tr>
<td>Perception of Quality</td>
<td>-0.944</td>
<td>0.209</td>
<td>0.389</td>
<td></td>
</tr>
<tr>
<td>Brand Loyalty</td>
<td>1.529</td>
<td>0.005</td>
<td>4.612</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>-4.419</td>
<td>0.002</td>
<td>0.012</td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 2, it indicates that the brand image obtained a p-value of 0.024 < (α =0.05), which means that there is a significant correlation between brand image and MCH polyclinic patient loyalty on the trustworthy aspect as much as 95%. The value (Exp. (B)) of 4.607 indicates that a person who has a good brand image will be 4.607 times more loyal than someone with a bad brand image. The results of this study are in line with the results of research that shows...
that corporate image has a positive effect on consumer loyalty [17] [29]. A favorable hospital brand image can stimulate patient loyalty directly and also improve patient satisfaction through improving service quality. Thus, in a competitive hospital environment, the focus of their marketing efforts must be on effective and strategic brand management. A brand can be defined as a patient's perception of a product, service, experience or organization. A brand seen from the aspects of marketing or consumer perspective is a promise of the experience existence from the staff perspective as a culture and mission from the business perspective is the future profit security [16].

Brand loyalty obtained a p-value of 0.005 < (α =0.05), which means there is a significant correlation between brand image and patient loyalty at MCH polyclinic on the trustworthy level of 95%. Value (Exp. (B)) brand loyalty of 4.612 indicates that a person who has good brand loyalty will be 4.612 times more loyal than someone with a bad brand loyalty. In line with research that states brand loyalty is one of the two major components that contribute to the development of service brand equity in the healthcare sector. The research also states that brand loyalty is linked with indicators associated with attitudinal loyalty and behavioral loyalty (i.e. consequences of consumer satisfaction) [7].

On the brand awareness variable, it was obtained a p-value of 0.398 > (α =0.05), which indicates that there is no significant correlation between brand awareness and patient loyalty at MCH polyclinic at the level of trustworthy of 95%. This may be due to the lack of effective dissemination of information and promotions carried out by the hospital management, so that information is not evenly distributed to all people. A brand has the potential to gain competitive advantage if it can understand its target audience and meet its needs properly. This need also includes emotional needs so that a brand that is designed to serve this target audience must be able to cause consumer interest in it. Through the understanding of a certain market segment well, the information such as data on the lifestyle can increase the effectiveness of advertisement and promotion [18].

The perception of quality obtained a p-value 0.209 > (α =0.05), which means that there is no significant correlation between perception of quality and the patient loyalty at MCH polyclinic on the trustworthy level of 95%. Supported by research which states that perception of quality has no contribution to patient loyalty [30]. In line with the other's research which proved that perception of quality does not affect loyalty [31]. However, there is also another study which stated that perception of quality is one of the major components that contributes to the development of service brand equity in the healthcare sector [7]. This can be caused by the previous dimensions have a cognitive or attitudinal character, whereas loyalty also involves the individual’s commitment to purchase the brand, and thus it is closer to the concept of brand equity [31]. Besides that, the condition of respondents' identities in this study that differed between age, education, occupation, and place of residence can be further analyzed. Similar to the research by Gil et al. Besides, it would be important to analyze the differences between the effects of the family on young adult consumers and the effects on young workers, and also the differences between young adult consumers with different degrees of family cohesion [31].

The determination coefficient (R2) reached 0.232 or as much as 23.2%. This means that the independent variables of brand awareness and brand image affect the loyalty of patients of the MCH polyclinic in RSIA Muhammadiyah Kota Malang in general by 32.8% and the rest (100% - 32.8% = 67.2%) are influenced by other factors. In accordance with the opinion of other’s study which states that there are factors that influence loyalty, among others perceived product superiority, personal fortitude, bonding with product or company, satisfaction perceived by the consumers [32].

4. CONCLUSION

This research focused on four aspects of brand equity. Therefore, it can be concluded that brand equity variable which has a significant correlation with patient loyalty at MCH polyclinic with a p-value of 0.024 and the brand loyalty with a p-value of 0.05 on the trustworthy level of 95%. Meanwhile, the brand awareness has a p-value of 0.398 and the perception of quality has a p-value of 0.209, which indicates that there is no significant correlation with patient loyalty at MCH polyclinic on the trustworthy level of 95%.

REFERENCES


