FACTORs INFLUENCING CUSTOMER SATISFACTION ON MEDICAL AND HEALTH INSURANCE PRODUCT IN SHAH ALAM

Rohayah Adiman
Aziam Mustafa
Siti Rawaidah Mohd Razikin
Ainiza Silim
Nur Fatihah Hassan
Nadhira Lisna Zuber
Shanthiniswary Gunasegaran

Department of Commerce
Politeknik Sultan Salahuddin Abdul Aziz Shah,
Seksyen U1, 40150 Shah Alam, Selangor, Malaysia
E-mail: rohayaa@psa.edu.my, aziam@psa.edu.my, siti_rawaidah@psa.edu.my, ainiza@psa.edu.my

Abstract

Majority of individuals in Malaysia is aware of the importance of Medical and Health insurance in comparison to the other types of insurance. The rising expenditure on healthcare in Malaysia over the years keeps the people apprehensive and the challenge arises for all parties including the government, insurer’s provider and the clients. High demand of insurance requires the companies to elevate their service quality and accomplish the satisfaction of customers. Several factors influencing customer satisfaction towards Medical and Health Insurance were ascertained; few of them are infrastructure, interaction, administrative and nurses’ care. Henceforth, this study was piloted to determine which of the factors may influence customer satisfaction on Medical and Health Insurance. Inclusive of this research, descriptive statistics were applied with random distribution of 180 questionnaires to respondents from five private hospitals in Shah Alam. The revelation of results showed that administrative is the strongest impact upon customer satisfaction as opposed to other factors. The findings of this research hold important attributes to hospitals, insurance company and customers registering for Medical and Health insurance.

Keywords: Customer satisfaction, Medical & Health Insurance, Infrastructure, Interaction, Administrative and Nurses care

1. INTRODUCTION

Medical and Health insurance products have been accessible in Malaysia since the 1970s. Be that as it may, in those days, the vast majority depended vigorously on government's general clinics, which give social insurance at a significantly less expensive cost. Henceforth, right now numerous nations including Malaysia, has opened the wellbeing administration to the private part. This circumstance happened, because of the ascending of populace and expanding way of life which driven huge development inside the worldwide social insurance benefit division, as purchasers requested better therapeutic care to help their enhancing ways of life (Ehsan Zarei,
In 2016 yearly insurance measurements, Malaysia's aggregate insurance support resources in added up to 5.2 for every penny of the country's monetary framework. The insurance part contributed around 20.9 for each penny to Malaysia's aggregate gross national pay (GNI) in 2016. The higher request of insurances item implies all insurance agency required to build their administration quality and satisfied the consumer satisfaction including Medical and Health insurance.

Consumer satisfaction is a man's sentiment joy or frustration coming about because of looking at an item or administration's apparent execution or result in interaction to her or his desires (Nair, 2004). In a whole, fulfillment is an element of saw execution and desires. Regardless of whether the purchaser is fulfilled after buy relies upon the item's execution in infrastructure to the purchaser's desire. If the execution misses the mark concerning desires, the client is disappointed but if the execution coordinates the desires, the client is fulfilled. On the off chance that the execution surpasses desires, the client is exceedingly fulfilled or pleased. This is in conjunction with Kano Model (1984) which a hypothesis of item advancement in business that assemble their procedures around consumer satisfaction. Ehsan (2014), expressed that there were eight measurement of consumer satisfaction which was infrastructure, personnel quality, procedure of clinical care, administrative methods, safety indicators, hospital image, social responsibilities and trustworthiness. In this manner, the estimations of administrations quality and assessed its fulfillme

In the light of Bank Negara Malaysia's (BNM) 2016 yearly insurance insights, Malaysia's aggregating insurance support resources in 2016, added up to 5.2 for each penny of the country's money related framework. The insurance area contributed around 20.9 for each penny to Malaysia's aggregate gross national salary (GNI) in 2016. The higher request of insurances item implies all insurance agency required to expand their administration quality and satisfied the consumer satisfaction including Medical and Health insurance. This is suggested by Cha Chong Heng (2011), where he expressed that the desire to all administrations quality components gave by private healing facility were higher. Padma (2010), expressed that there were eight measurement of consumer satisfaction which was infrastructure, personnel quality, process of clinical care, administrative procedures, safety indicators, hospital image, social responsibility and trustworthiness. Henceforth, this study, intend to determine whether infrastructure, interaction, administrative and nurse care impact consumer satisfaction on Medical and Health insurance products and examine the most importance factor that impact consumer satisfaction to Medical and Health product.

2. LITERATURE REVIEW

2.1 Customer Satisfaction

Consumer satisfaction was considered as an essential result in showcasing movement. As said by (Haslina Che Ngah, 2016), consumer satisfaction was essential in created business possibilities, gave better mileage to winning a high piece of the overall industry and will in the end leaded to an organization's profitability. The result determined on consumer satisfaction was for the most part can be assessed in the light of the compelling reaction to the acquired and in addition having a positive experienced on the great and administrations that had been devourd. Most insurance agencies today are centered on really fulfilling their customers, and the reason being that simply
fulfilled customers are inclined to switch when they discover better alternatives (Kotler P., 2000a). However, the main way a Medical and Health insurance agency can better adjust to the regularly requesting clients and hold them is to surpass client's desires by always estimating their desires and recognitions. There are various factors that impact the consumer satisfaction picture, social obligation and reliability. Hence, it was vital to gauge the administrations quality and assessed its fulfillment level keeping in mind the end goal to fight comprehend client needs and enhanced the administration quality.

2.2 Infrastructure

The medicinal services benefit depends on physical proof to enhance client encounter. Medical and Health services were high in assurance characteristics thusly physical proof, which gave a prompt to patients' administration quality discernments (Ramsaran Fowdar, 2008). For the most part, in clinic, infrastructure, for example, physical offices, gear, work force and composed materials must be seemed great to make positive impressions and to impact ideal patient observations (Andaleeb et al., 2007). Studies demonstrated that the interactive amongst factors (infrastructure and perceived service quality) and revealed that perceived service quality (PSQ) is critical and positive (Dagger et al., 2007; Chahal and Kumari, 2010).

2.3 Interaction

The interactions that occur amongst clients and administration work force amid benefit conveyance frequently influence benefit quality (Brady and Cronin, 2001). Medical and health services and Health administrations were immaterial and frequently required patient interaction in the treatment procedure. All the while, patients likewise require data about their health status and results in the grounds that missing data may influence the recuperating procedure. This circumstance adds to suggested collaborations amongst patient and medical staff. Along these lines, Medical and Health administrations underscored the collaborations amongst patients and care suppliers (Hausman, 2004; Zineldin, 2006). Scientist proposed correspondence, regard for tolerant issues, intrigued by taking care of patient issues, polished skill and understanding patient issues were the principle things in building up this.

2.4 Administrative

The administrative (ADM) helps centre administrations and at the same time includes an incentive for a client (Baalbaki et al., 2008). In doctor's facility, ADM incorporates confirmation, stayed and released forms, clinical arrangements and sitting tight time for discussion. The ADM procedure was critical for guaranteed good discernments (Atinga et al., 2011). Productive ADM makes patients acknowledged healing centre administrations. Thus, appropriately sorted out ADM was required to influence the patients to feel safe and have a lovely involvement in clinic. Numerous investigations demonstrate that the infrastructure amongst ADM and PSQ was huge and positive (Duggirala et al., 2008; Dagger et al., 2007).

2.5 Nurses Care

Nurses care were the larger part representatives in social insurance, the essential specialist organization and invest more energy with patients contrasted with other staff (Tafreshi et al., 2007). Subsequently, nurses care (NC) was experienced and estimated by patients (Wagner and Bear, 2009). Tafreshi et al. (2007, p. 320) characterized the NC as "conveyance of security mind
in light of nursing norms, which eventuates in tolerant fulfillment". Specialists affirmed that NC was emphatically and altogether identified with PSQ (Dagger et al., 2007). NC was viewed as the most imperative factor in persistent observations. If the medical caretaker was not able satisfy this part, then social insurance benefit quality will not be accomplished. Patients are happy with NC created positive responses to nurses and other staff.

2.6  Research Framework

![Diagram of Research Framework]

Figure 1: Theoretical framework on The Relationship between Customer Satisfaction (CS) and Infrastructure (INF), Interaction (INT), Administrative (ADM) and Nurses Care (NC).

This theoretical framework and conceptual provided to showed the relationship between customer satisfaction (CS) and infrastructure (INF), interaction (INT), administrative (ADM) and nurses care (NC).

3.  RESEARCH METHODOLOGY

In this study, questionnaire used as the tool to collect data to provides reliable information for the research. The questionnaires were randomly distributed to 220 targeted respondents from five hospitals excluded 30 questionnaire for pilot test. The population of the study focused on the patients of KPI Shah Alam, Salam Medical Centre, Columbia Asia, Umra Hospital and Darul Ehsan Medical Centre Hospital (DEMC Hospital). A convenience sampling method was adopted so that all samples of the same size have an equal chance of being selected from the entire population. For this small scale study a total of 220-sample sizes found to be valid and eventually distributed among the potential respondents for this study, of which 200 questionnaires were received. Each of the response received systematically screened for errors, incomplete and
missing responses. However, those responses that still contained questions in the survey questionnaire that had been remained unanswered or left incorrectly answered finally discarded from data analysis in order to establish a rationality of analysis through proper representation. After having the screening process completed, 180 responses found valid for data analysis. This represents a rate of 90.0%, which is considered extremely well in view of time, cost, certainty and geographical constraints (Sandelowski, 1995). The instrument of this research was questionnaire. The structured questionnaire was adapted from Hasin Muhammad (2010 in his study on Statistical measures of customer satisfaction for health care quality assurance: a case study. The questionnaire consists of 3 sections which contains about 4 to 10 questions. The questionnaires were divided into general questions, level of satisfaction of respondents on Medical and Health insurance: infrastructure, interaction, administrative and nurses care and demographic. The questionnaire is designed to gather factors that influencing customer satisfaction on medical and health insurance. The questionnaire was tailored to the overall objectives to avoid deviation of the data.

4. FINDINGS AND DISCUSSION

4.1 General Questions

Table 1 indicates five diverse sort of insurance agencies that respondents are utilizing as of now. As indicated by the outcome acquired, lion's share of respondent utilizes medical card from Takaful. There are 27.8 percent of the respondents that utilized Takaful Medical Card as their present medical card, which is 50 out of the 180 frequencies. The second insurance agency that utilized by most of the respondents is Prudential which has 45 frequencies that stand 25 percent of the aggregate react. Next, third most noteworthy insurance agency that utilized by the vast majority of the respondent is AIA with 43 frequencies that stand 23.9 percent. Taken after by Allianz that increase 16.7 percent, and 30 frequencies. For respondents who addressed other than the brand gave, is sorted under "Others". There are 12 frequencies under the ‘Others’ classifications which have 6.7 percent to the aggregate reacts.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prudential</td>
<td>45</td>
<td>25.0</td>
</tr>
<tr>
<td>Allianz</td>
<td>30</td>
<td>16.7</td>
</tr>
<tr>
<td>Takaful</td>
<td>50</td>
<td>27.8</td>
</tr>
<tr>
<td>AIA</td>
<td>43</td>
<td>23.9</td>
</tr>
<tr>
<td>others</td>
<td>12</td>
<td>6.7</td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100.0</td>
</tr>
</tbody>
</table>

4.2 Factors that influence Customer’s Satisfaction on MHI

Table 2 indicates score mean for every independent factors of Customer Satisfaction are infrastructure, interaction, administrative and nurses care. From the outcome above, administrative has the most noteworthy mean among the other variable with 3.5267. Taken after by infrastructure, interaction and nurses care which are 3.4667, 3.4589 and 3.3622 separately.
This demonstrated most respondents concurred that managerial assume a noteworthy part in influencing their fulfillment towards Medical and Health Insurance. The standard deviation for medical nurses care was the most elevated among alternate elements, which is 0.37746. Followed by, the standard deviation for infrastructure, authoritative and communication are 0.36860, 0.36366 and 0.34068 separately.

Table 2: Mean analysis customer’s satisfaction on MHI

<table>
<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Std Deviation</th>
<th>Mean</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Infrastructure</td>
<td>.36860</td>
<td>3.4667</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Interaction</td>
<td>.34068</td>
<td>3.4589</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Administrative</td>
<td>.37746</td>
<td>3.5267</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Nurses Care</td>
<td>.29599</td>
<td>3.3622</td>
<td>4</td>
</tr>
</tbody>
</table>

4.2 Pearson Correlation Analysis

Based on Table 3, the correlation of each independent variable (infrastructure, interaction, administrative, and nurses’ care) is significant at 0.01 and 0.05 levels, two-tailed toward customer satisfaction.

Table 3: Pearson Correlation Analysis
In addition, the result also shows that there are the positive relationship between all independent variables and customer satisfaction except nurses care which shows negative relationship. The value between infrastructure and customer satisfaction is 0.185 or 18.5%. The value between interaction and customer satisfaction is 0.036 or 3.6%. The value between administrative and customer satisfaction is 0.245 or 24.5%. The value between nurses care and customer satisfaction is -0.021 or –2.1%. As a result, administrative shown a strongest positive relationship with customer satisfaction (r= 0.245), followed by infrastructure (r= 0.185) and interaction (r= 0.036). However, nurses care shown negative relationship with customer satisfaction (r= - 0.021).

### 4.4 Multiple Regressions

Table 5 displays, the R value = 0.265, R Square = 0.070 and Adjusted R Square = 0.049. R Square shows that 7 percent of the customers’ satisfaction can be explained by infrastructure, interaction, administrative and nurses’ care. This also indicates that the relationship between the dependent variable and independent variables are weak.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.265a</td>
<td>.070</td>
<td>.049</td>
<td>.28867</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Nurses care, Administrative, Interaction, Infrastructure  
b. Dependent variables : Customer satisfaction
As shown in the ANOVA, Table 6, $F = 3.300; p = 0.012 <0.001$, thus, fitness for the model is confirmed. Four independent variables which is infrastructure, interaction, administrative and nurses care are significantly contribute to customer satisfaction on Medical and Health insurance.

Table 6: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.100</td>
<td>4</td>
<td>.275</td>
<td>3.300</td>
<td>.012</td>
</tr>
<tr>
<td>Residual</td>
<td>14.582</td>
<td>175</td>
<td>.083</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>15.682</td>
<td>179</td>
<td></td>
<td>3.300</td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Nurses care, Administrative, Interaction, Infrastructure
b. Dependent variable: Customer satisfaction

Based on the Table 7, the following linear equation is formed:

**Customer Satisfaction** = $1.834 + 0.084$ (Infrastructure) + $0.006$ (Interaction) + $0.167$ (Administrative) – $0.014$ (Nurses care).

There is a significant relationship between infrastructure, interaction, administration, nurses’ care and customer satisfaction. Based on the equation formed, regression coefficient of infrastructure is 0.084. It means the level of customer satisfaction will increase 0.084 units when infrastructure increased one unit while others remain. Moreover, the regression coefficient of interaction is 0.006 which means the level of customer satisfaction will increase 0.006 units when interaction increased one unit while others remain. Besides, the regression coefficient of administrative is 0.167 and this means the level of customer satisfaction will increase 0.167 units when administrative increased one unit while other remains. Lastly, the regression coefficient of nurses care is - 0.014 which means the level of customer satisfaction will increase - 0.014 units when nurses care increased one unit while others remain.

Table 7: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.834</td>
<td>.349</td>
<td></td>
<td>5.261</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>.084</td>
<td>.064</td>
<td>.104</td>
<td>1.311</td>
</tr>
<tr>
<td>Interaction</td>
<td>.006</td>
<td>.066</td>
<td>.006</td>
<td>.083</td>
</tr>
<tr>
<td>Administrative</td>
<td>.167</td>
<td>.065</td>
<td>.205</td>
<td>2.583</td>
</tr>
<tr>
<td>Nurses care</td>
<td>-.014</td>
<td>.060</td>
<td>-.017</td>
<td>-.230</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Customer satisfaction

Besides, among all the three independent variables, administrative is the strongest influence on customer satisfaction where standardized beta is equal to 0.205. Thus, administrative is an
important predictor of customer satisfaction and followed by infrastructure (0.104), interaction (0.006) and nurses care (- 0.017).

This study examined the interactions between the key elements infrastructure, interaction, administration, nurses’ care and its impact on customer satisfaction. The statistical results confirms the existence of a very strong relationship between infrastructure, interaction, administration and customer satisfaction, implying that excellent positive outcome can only be achieved through the rigorous implementation of various support procedures as well as increasing the facilities related to improve customer’s satisfaction. The finding of this study is also consistent with Ehsan (2014) where improvement of quality to attract more customers for the private hospitals was found to be directly related to strategic planning. Interestingly, nurses’ care has a relatively weak direct effect on customer satisfaction. This is in line with the study conducted by Haq & et. Al.,(2012) To be competitive in an ever-increasing private healthcare industry, Malaysian private hospital staffs need to emphasis on the customer attention procedures and institute genuine customer support when dealing with customers. It can be concluded that customers are the key for the success of the private hospitals. Therefore, it can be suggested that, an effective marketing policy will influence the future customers that, in turn, will enhance the revenue of the hospitals.

5. CONCLUSIONS AND RECOMMENDATION

Based on the research, it has been discovered that infrastructure, interaction, administration, nurses’ care on Medical and Health insurance products. In subsequence to testing the Descriptive Analysis, Pearson Correlation analysis and regression analysis, it is demonstrated that the greater part of the four autonomous factors infrastructure, interaction, administration have positive noteworthy association with the consumer satisfaction aside from nurses care which have negative critical relationship with the consumer satisfaction. Due to this circumstance, healing facility ought to enhance the administration of medical caretakers keeping in mind the end goal to fulfilled clients. Thus, keeping in mind the end goal to guarantee clients’ satisfaction with the medical attendants, doctor's facilities can speculate the medical caretakers’ obligations by giving poll to clients regarding their obligations to ponder the level of fulfillment on medical caretakers’ obligations and duties. The findings demonstrates that administrative is the most critical factor affecting consumer loyalty and the slightest vital factor is nurse’s care.

Additionally, customer satisfaction should reflect the need of healthcare quality requested by the customers, as direct and indirect relationships exist between nurses’ care and customer satisfaction and attention to customers and hospital facilities and between hospital facilities and customer satisfaction. There is urgent need for quality healthcare for any citizens of the society. Therefore, understanding this need of customers is crucial for the staffs working in the hospitals. Failing to meet or exceed customers’ quality needs is not an option for any health service providers. Therefore, developing a measure that systematically weighs health service quality could significantly contribute towards service improvement. In the academic era, no study is perfect. This study is not beyond those limitations. This study has been validated by collecting data from only five private hospitals due to shortage of time. Due to this small sample size and the convenient method of data collection, there is a possibility of bias playing a role in the outcome of the study. Future study need to be conducted with a bigger sample size to obtain better results. Nevertheless, this study offers support for the proposed conceptual model and an empirical basis for comparison in future research.
References


