Analysis on Value Perception, Word of Mouth, Price, and Trust towards Patient Loyalty at Proklamasi Hospital, Jakarta

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The decrease upon return visits in hospital becomes an indicator of patient loyalty. Thus, in this study aimed to obtain correlation on value perception, word of mouth, price and trust towards patient loyalty at Proklamasi hospital, Jakarta. The several variables such as value perception, word of mouth, price, trust and loyalty are performed in this study. The population of this study taken from ongoing patients at Proklamasi hospital, Jakarta. In addition, the samples observation of this research are 200 respondents using Hair method. This study also uses a cross-sectional study design to obtain correlation between dependent and independent variables with path analysis test. The results show a determinant value of covariance matrix can be achieved. Around 1208.180 (positive results and greater than 0.000), thus, in this study we find that no multicollinearity while, the measurement model test by using Chi-square method is 0.000 (the value is small so that the simultaneous test is accepted). In addition, if the degree of freedom is 0 it’s indicates that the first hypothesis (H₁) is accepted. Thus, the positive correlation on value perception, word of mouth, and trust towards patient loyalty. On the contrary, price has no effect on patient loyalty. Furthermore, word of mouth has the greatest influential value of all. Value perception, word of mouth, and price can directly increase patient loyalty without being influenced by trust.

Keywords: Value Perception, Word of Mouth, Price, Trust and Patient Loyalty

1. INTRODUCTION

WHO’s data on Health Indonesian Statistics shows the number of patient who visit hospital annually are 34,251,159 person. Here, a hospital as a place of health service, is in charge to provide qualified service which is relevant to service standards. Based on that, hospital needs to improve the service quality, so that patient’s satisfaction and trust can be achieved. In 2008, it was reported that there were 288,000 Indonesian people who visited Malaysia to get medical service while in 2007, there were 266,200 Indonesian people who went to Singapore to get medical service(1). In 2010, 70% Malaysian international patients and 65% Singaporean international patients were Indonesians (Firman and Wang, 2013)(2). This proves that the Indonesian people have indirectly begun to lose trust towards the quality of medical services provided by local hospitals in their country. Loyalty means the consistently regular use of service by patient. Therefore, the caused factors to return visits are factors which can encourage patient loyalty, one of which is the quality of service. To sharpen the phenomenon of relationship experienced by patient, hoping that they will hold recommendation upon friends and family to come to our hospital. So that it can arise patient’s trust and loyalty to our hospital services. Thus, in this study is used pathway analysis to justify the significant pathways of value perception, word of mouth, price and trust towards direct and indirect patient loyalty. Path analysis provides a relative estimation upon power of causal effect and other associations among sets of variables. Therefore, this study aims to find out the relationship of value perception, word of mouth, price and trust towards ongoing patient loyalty in Proklamasi
Hospital. The main hypothesis such as (1) The correlation of value perception, word of mouth, price and trust which cause direct and indirect impacts on patient loyalty; (2) The correlation of value perception which has direct and indirect impacts on patient trust; (3) the correlation of word of mouth which has direct and indirect impacts on patient trust; (4) the correlation of price that has direct and indirect impacts on patient trust; (5) the correlation of trust that has direct and indirect impacts on patient loyalty; (6) The correlation of value perception which has direct and indirect impacts on patient loyalty; (7) The correlation of word of mouth which has direct and indirect impacts on patient loyalty; (8) the correlation of price that has direct and indirect impacts on patient loyalty (see Figure 1).

This study uses cross-sectional study to find out correlation between dependent variables and independent variable. Cross sectional is an epidemiology study which learns prevalence, distribution or correlation of diseases and simultaneously observes status, disease or other outcomes of every individual on population. Moreover, cross sectional does not acknowledge time dimension, so that it has weakness in guarantee the explanation prior to effect or vice versa. However, this study is easily and cheaply conducted and does not need follow up time. Commonly, cross sectional study is used to formulate causal correlation hypothesis which will be tested on analyzed study.

### B. Collecting Data Instrument

Socio-demographic factor: six questions are used to discover information dealing with age, gender, education, job, and terms of payment, and visit frequency.

a) Value Perception: contains the eight questions are given to discover information about emotional, social, quality, and price value.

b) Word of mouth: contains the eight questions are given to discover information about intensity, positive valence, negative valence and content.

c) Price: contains the four questions are used to discover information about affordable price, suitability of price corresponding with product quality, price competitive advantage, the suitability price with benefit.

d) Trust: contains the three questions focus on discovering information about probity, equity, reliability.

e) Questionnaires: contains the questionnaires with four Likert scale elements, namely strongly agree, agree, disagree and absolutely disagree.

### C. Validity and Reliability Test

In this study, validity test is conducted to find out how far a statement on used questionnaire can measure indicator of studied variables. There are 31 statements to be tested. A statement is categorized to be valid or not, depends on r value calculated on table. In this study, reliability test is used to show consistency of statements used on questionnaire or how effective the measurement tool is. The result of reliability test is assumed reliable if Cronbach’s Alpha value is >0.6.

### D. Statistics Analysis

Path analysis is conducted to respond the following objectives: 1) to test predictive correlation path among variables such as value perception, word of mouth, price, trust with patient loyalty, 2) to compare theoretical model variants which is built up by founded causal structure. Path analysis is also recommended by other researchers. 3) to test causal correlation of cognitive model.
E. Suitable Model

AMOS program is applied to estimate path analysis by using maximum possible estimation of every parameter in hypothesis model. Every significant parameter on path analysis is determined by estimation of standard regression (\( \beta \)), adjusted to hypothesis model. Goodness of fit of the pathways test on influential factors which arises desire to practice healthy diet habit and PA (see Table I).

Table I. Goodness of fit statistical test between empirical data and hypothetical models

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Explanation</th>
<th>Interpretation</th>
<th>Fit model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of parameters (NPAR)</td>
<td>Total number of estimated parameter from empirical data</td>
<td>Less than a hypothetical model (Full model)</td>
<td></td>
</tr>
<tr>
<td>Chi-square (CMIN(\chi^2))</td>
<td>To test absolute empirical data according to the hypothetical model or not</td>
<td>CMIN p-value (&gt; 0.05)</td>
<td></td>
</tr>
<tr>
<td>Relative Chi-square (CMIN(\chi^2) / df)</td>
<td>Comparative fit index (CFI)</td>
<td>( \geq 0.9 ) indicates model fit</td>
<td></td>
</tr>
<tr>
<td>Normal fit index (NFI)</td>
<td>The comparative suitability index of the constructed and hypothetical models</td>
<td>( \geq 0.9 ) indicates model fit</td>
<td></td>
</tr>
<tr>
<td>Root mean square error of approximation (RMSEA)</td>
<td>The degree of variance to estimate the parameters in the model</td>
<td>(&lt; 0.05 ) indicates model suitability</td>
<td></td>
</tr>
</tbody>
</table>

F. Ethical considerations

Esa Unggul University Research Ethics Commission has approved this study prior to collecting data. Informed approval is obtained from every willing participant in this study. Here, demographic data in this hospital Among the 200 control groups, 78% are women whose ages are 36-45 years old. Related to education, 89% are graduates or higher level. 45% are entrepreneurs or self-employed. The one time visit frequency is (67%), and terms of personal payment is (66.5%). By using several testing models, we defined into five section as follows:

a) Normality test: Detecting multivariate normality can be seen from cr value of kurtosis in the last row be more than ±2.58.

b) Multicollinearity Test: This test is done by looking at the determinant of the covariance matrix. If the value is very small, it indicates multicollinearity. In this study, the determinant value of the covariance matrix is 1208.180 (positive results and more than 0.000). It means that there is no multicollinearity.

c) Simultaneous Test: In the measurement model test, the Chi-square result is 0.000 (the value is small so that the simultaneous test is accepted). Then, the degree of freedom of 0 indicates that the first hypothesis (H_1) is accepted.

d) Determinant Coefficient (R^2) Test: Analysis of determination effect in the AMOS-path analysis is used to determine the contribution of exogenous variables to endogenous variables. The coefficient of determination can be seen in the Squared Multiple Correlations table. From the results of the determination analysis, it is concluded that the influence of value perception, word of mouth, price and trust on loyalty is 32.2%, while the remaining 67.8% is influenced by other factors which are not involved in this study such as patient satisfaction and service quality.

e) Intervening Test: The intervening test is carried out to comparing the direct effect and indirect effect of independent variables, namely value perception, word of mouth, and price towards dependent variable, that is patient loyalty (see Figure 2).

![Figure 2. Intervening Test](image)

The direct correlation given by value perception variable to loyalty is 0.143, while the indirect correlation between value perception through trust to loyalty is 0.062, PTL < PL (0.062 <0.143). It means there is no intervening, where trust does not lead to value perception on loyalty. Loyalty can be directly related to value perception. The direct correlation produced by word-of-mouth variable to loyalty is 0.512, while indirect correlation of word of mouth through trust to loyalty is 0.090, PTL < PL (0.090 <0.512). This means that loyalty can directly be related by word of mouth. If the patient’s word of mouth is higher towards the hospital, the loyalty of the patient will be higher as well.
The direct correlation given by price variable to loyalty is 0.221, while indirect effect of price through trust on loyalty is 0.020, PTL < PL (0.020 < 0.221). This means that loyalty can directly be related to price.

3. RESULT AND DISCUSSION

Word of mouth, price and value perception can directly increase patient loyalty without having to be influenced by trust. Another finding is that word of mouth has the greatest effect on increasing trust compared to value perception. The result of the interview shows that there are some patients who complain about the convenience of Proklamasi hospital especially on cleanliness, limited parking lot, and less attractive building. They believe through the quality of experienced and professional medical and non-medical personnel’s, they get medical treatment from generation to generation and recommendations of others, some will visit again because they live near the hospital.

This is the first research conducted using theory to encourage to examine the correlation among value perception, word of mouth, price, and trust in patient loyalty upon ongoing patient services at Proklamasi hospital. This study also applies path analysis with data obtained from a cross-sectional survey to test the significance of the pathway to explain correlation of value perception, word of mouth, price, and trust by direct and indirect effects of patient loyalty in ongoing patient at Hospital proclamation. In strengthening customer retention that is by establishing high switching barriers and providing high customer satisfaction, thus making competitors more difficult to break down switching barriers only by offering a lower price or other incentive. Evaluation and improvement towards promotion system either electronic or mass media are needed in order to promote hospital more widely, so that the hospital is better known. Facilities need to be improved so that patients feel more comfortable. Another point is to manage influencer or reader who can post promotion in blogs. Last but not least, the management needs to give rewards or any promoted products in certain moments such as on patient’s birthday or the hospital anniversary.

4. CONCLUSION

Value perception and word of mouth have a positive and significant correlation to trust and loyalty. Price is not positively related to trust but positively related to loyalty. This means that value perception, word of mouth can increase patient loyalty to the hospital. The high price does not guarantee that patients have more trust in the quality of the hospital.

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References


