The Evaluation of Patient Perceived Quality and Impact on Perceived Value, Trust and Satisfaction

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***Abstract**: This study attempts to develop a model of patient satisfaction as an integral part of modern marketing strategy. Using fairness theory as a basic theory, the study investigates the influence of perceived fairness on satisfaction, perceived value and trust. The pilot study was conducted on 46 respondents to validate the questionnaire. To collect data, we used purposive sampling method. This study employed cross sectional survey with paper and pencil test to answer the questions. A total of 600 patients who have been treated in one or more domestic hospitals using Indonesian Health Insurance were recruited as respondents. The response rate was 93.17%. To verify the hypothesis, the study employed multiple regression analysis. Based on research finding, only perceived procedural fairness did not effect on trust*

*   **Keywords:** perceived fairness, satisfaction, perceived value, trust*

1. Introduction

Indonesian healthcare insurance is a new healthcare system that is an Indonesian government's big step to improve public health. However as a new program, the implementation of this program seems have many obstacles, which need to be assessed. This assessment will give important feedback to Indonesian healthcare company how to improve quality of care and satisfy patients.

In service industry, satisfaction between provider and customer is very important to build in order to gain long term relationship. Many factors influence consumer satisfaction, such as service quality, value perception (Lien et al, 2010) and trust (Chang et al., 2013). Based on the fairness theory, this study tried to disclose patient perceived fairness toward health care services under the Indonesian health insurance. The quality of care becomes very important for patient since are unhealthy people need more attention.

The nature of perceived value is very subjective and does not only concern on the issue of cost and benefit, but also on the social and emotional responses (Qin *et al.*, 2014). Another important variable in the health care service is patient trust, because trust will also affect patient satisfaction (Wu et al., 2016). Patient trust is a belief in doctors (physician), that doctors who treat illness will give the best action and provide appropriate medical care.

This study attempts to develop a model of patient satisfaction as an integral part of a modern marketing strategy on the basis of fairness theory with the research setting health care services. Fairness theory used in this study was built through three dimension of fairness, namely distributive fairness, procedural fairness and interactional fairness.

2. Literature Review

Fairness or justice is a major moral virtue (the first virtue) of a social institution, as a truth which is a system of thought. The basic premise that fairness is something essential which is owned by everyone and this

ownership cannot be contested even though for reasons of social welfare (Maryatmo & Retnandari, 2000). For this reason, fairness is considered that the loss of freedom cannot be replaced with the greater virtue (Rawls, 1999). Theory of fairness is built on a three-dimensional conceptual of fairness which includes distributive fairness, procedural fairness and interactional fairness (Blodgett *et al*., 1997; McColl-Kennedy & Sparks, 2003; McCole, 2004). In a previous study, the three dimensions of fairness shown as predictor variables affecting satisfaction (Maxham & Netemeyer, 2002; Smith, Bolton & Wagner, 1999; Ellyawati *et al*., 2012).

In this study to assess perceived fairness of healthcare service, we employ three dimension of fairness from patient's perception. Distributive fairness is measured from number of health care workers, doctors and paramedic services, medications received, the condition of the hospital rooms and other physical conditions, that are perceived by patient. Procedural fairness in this study is a compulsory procedure, which starts from registration to the end of treatment. Interactional fairness measures how empathy and friendly health insurance' staffs and hospital workers in serving the member or patients.

Customer's perceived value is the ratio between customers' perceived benefits (economic, functional, and psychological) and the resources (monetary, time, effort, psychological) used to obtain those benefits (Schiffman & Wisenblit, 2015).

Trust is very important in health care services because this service is high risk and involves human safety issues. Based on literature, trust have two main forms: trust based on affect and trust based on cognitive. Trustee behavior is consistent with the concept of inequity/fairness aversion. A good patient perception to doctors, equipment provided, procedures and so forth will lead to a positive patient satisfaction.

The hypotheses proposed are

H1: Perceived fairness influence positively on patient satisfaction

H2: Perceived fairness influence positively on perceived value

H3: Perceived fairness influence positively on perceived trust

H4: Perceived value influence positively on patient satisfaction

H5: Perceived trust influence positively on patient satisfaction

3. Methodology

The study is designed for employing quantitative method. We collect data using cross sectional survey research design with paper and pencil test. This study used purposive sampling method to select respondents. Sample was patients who are member of Indonesia healthcare insurance. Data were gathered during March to July 2017. A total of 600 patients who have been treated in one or more hospitals in Indonesia using Indonesian healthcare insurance were recruited as respondents. The response rate was 93.17%.

Before the research instruments are used to measure the observed variables, they must be tested for their validity and reliability. The study employed Pearson correlation to validate the research instruments and Cronbach's alpha to test the reliability of observed variables. Based on statistical process, all of the item to total correlations show values greater than 0.700; therefore all item are significant. The reliability test shows Cronbach's alpha values more than 0.600. It means that all observed variables are significant (Hair *et al*., 2006).

4. Result

The regression model was employed to verify the hypothesis. The regression supported H1 (p-value<0.05), H3 (p-value<0.05) and H4 (p-value>0.05). It means that distributive, procedural and interactional fairness influence positively and significantly on satisfaction. It means that all fairness dimensions influence positively and significantly on satisfaction. The influence of perceived fairness on perceived value (H2) is supported (all of p-value<0.05). Therefore all dimensions of perceived fairness influence positively and significantly on perceived value. Meanwhile, perceived distributive fairness and perceived interactional fairness also effect

positively and significantly on trust. Perceived procedural fairness did not affect trust (p-value>0.05). It means that only perceived distributive fairness and perceived interactional fairness that influence trust (H3 partially supported). Regression analysis supports H4. It can be seen from the regression output that perceived value positively and significantly affect satisfaction (p-value<0.05). The influence of trust on satisfaction is also supported (H5). It is indicated by p-value (p-value<0.05).

5. Discussion And Conclusion

The study supported previous study conducted by Ellyawati *et al.* (2012). Past study about service failure in the B2B context has been found that distributive justice, procedural and interactional justice effect on satisfaction. Good perceived compensation, simple procedure and empathy from the store staff and good communication between customer and staff lead to customer satisfaction. In this study doctor's services, procedure, medical service and administration staff service are acceptable to patient.

The study proved that perceived fairness significantly effect on perceived value. Therefore this study support previous study (Wu *et al.,* 2016). Patients perceive that the healthcare service is valuable. Patient also gained benefit from hospital not just the value of money but also reduce risk. Past study stated that high perceived procedural fairness have positive effect on trust (Wu et al., 2016). This study does not support previous study. Perceived procedural fairness did not effect on trust. The study found that perceived value and trust significantly effect on satisfaction. The study is in line with previous study (Wu *et al*., 2016; Chen & Chang, 2012; Lien *et al.,* 2011).

6. References

[1] Blodgett, J.G., Donna J. Hill dan Stephen S.Tax (1997), "The Effects of Distributive, Procedural and Interactional Justice on Postcomplaint Behavior", *Journal of Retailing*, Vol. 73(2): 185–210.

[2] Chen, K.C and Chang C.H. (2012), "Enhance Green Purchase Intentions, the Roles of Green Perceived Value, Green Perceived Risk and Green Trust", *Management Decision,* Vol 50(3), 502-520.

[3] Ellyawati, J., Bernardinus M. Purwanto and Basu Swastha Dharmmesta (2012), "The Effect of Perceived Justice on Consumer Satisfactions in the Service Recovery Context: Testing Mediating Variables", *Journal of Service Science* Vol. 5(2): 87-100.

[4] Ellyawati, J., Bernardinus M. Purwanto, Basu Swastha Dharmmesta and Hester van Herk (2013), "Perceived Justice in Service Recovery: Study of Experimental Design on Indonesian Customers", *International Journal of Business Management Studies,* Vol. 2(2): 511-522.

[5] Ha, Jooyeon and SooCheong (Shawn) Jang (2009), "Perceived Justice in Service Recovery and Behavioral Intentions: The Role of Relationship Quality," *International Journal of Hospitality Management*: 1-9 (www.elsevier.com/locate/ijhosman).

[6] Lien, C.H., Miin Jye Wen and Chung-Cheng Wu (2011), "Investigating the Relationship Among E-Service Quality, Perceived Value, Satisfaction, and Behavioral Intentions in Taiwanese Online Shopping", *Asia Pacific Management Review*,Vol.16(3):211-223

[7] Maryatmo, R. dan Retnandari (2000), *Ekonomi Kesejahteraan*, Yogyakarta: Universitas Atma Jaya Yogyakarta.

[8] Maxham, J.G. and Richard G. Netemeyer (2002), "A Longitudinal Study of Complaining Customers' Evaluations of Multiple Service Failures and Recovery Efforts," *The Journal of Marketing,* Vol 66(4) October: 57-71.

[9] McColl-Kennedy, Janet R. and Beverley A. Sparks (2003), "Application of Fairness Theory to Service Failures and Service Recovery", *Journal of Service Research*, Vol. 5(3) February: 251-266.

[10] McCole, P. (2004). Dealing with Complaints in Services. *International Journal of Contemporary Hospitality Management*, Vol. 16 (6): 345 – 354.

[11] Qin, H., Victor R. Prybutok, Daniel A. Peak, Kwabena G.B. (2014). UCPERF: An Urgent Care Patient Satisfaction Instrument", *The Quality Management Journal*, Vol. 21(3): 11-25.

[12] Ramez, W.S. (2012), "Patient's Perception of Health Care Quality and Patient's Satisfaction and Behavioral Intention: An Empirical Study in Bahrain", *International Journal of Business and Social Science*, Vol. 3(18): 131-141.

[13] Rawls, John. (1999), "*A Theory of Justice, Revised Edition*", Cambridge, Massachusetts: Harvard University Press.

[14] Schiffman, L.G., and Wisenblit, J. L. (2015), *Consumer Behavior*, 11th ed., Edinburgh Gate, Harlow, Essex: Pearson Education Limited.

[15] Smith, A.K., Ruth N. Bolton and Janet W. (1999), "A Model of Customer Satisfaction with Service Encounters Involving Failure and Recovery", *Journal of Marketing Research,* Vol. 36(Aug): 356-372.

[16] Terres, M. de Silva and Cristiane Pizzutti dos Santos (2012), "The Importance of Effect to Build Customer Trust in High-Consequences Exchange", *Journal Belo Horizonte*, Vol. 2(4): 133-147.

[17] Undang-Undang Republik Indonesia Nomor 24 Tahun 2011 Tentang Badan Penyelenggara Jaminan Sosial.

[18] Wu, H.C, Tao Li and Meng-Yu Li (2016), "A Study of Behavioral Intentions, Patients Satisfaction, Perceived Value, Patient Trust and Experential Quality for Medical Tourist", *Journal of Quality Assurance,* Vol. 17(2): 114-150

[19] Yang, Z. and Robin T. Peterson (2004), "Customer Perceived Value, Satisfaction, and Loyalty: The Role of Switching Costs", *Psychology & Marketing*, Vol. 21(10):799–822.

[20] Zabada, Charles (2000), Patient Satisfaction: An Analysis of The Effects of Perceived Waiting-Time on The Evaluation of Outpatient Health Care Services, *dissertation,* www.proquest.com.

(http://www.who.int/universal_health_coverage).