

The Effect of Quality Care on Patient Loyalty Mediated with Patient Satisfaction and Moderated by Age and Gender (Study in Outpatients at a Private Hospital)

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ABSTRACT

An increasingly competitive business climate and changes in patient behavior, fostering hospital managers to pay more attention in regard to factors that could affect patient loyalty. Quality care is well known as a major contributor to patient loyalty. The purpose of this study is to examine the effect of quality care on patient loyalty with patient satisfaction as the mediating variable, while age and gender as the moderators. This research model was tested empirically in outpatients at a private hospital. The results demonstrate that quality care has a significant positive effect on patient loyalty. Several managerial implications were found for hospital management to increase patient loyalty, especially considering the gender of the patient in providing services.

Keywords: Age, Gender, Marketing Strategy, Patient Satisfaction, Private Hospital

JEL Classification Codes: M10, L80, M30

INTRODUCTION

The economic growth in the emerging countries has prompted an increase in the need for health facilities, especially hospitals. The number of private hospitals in emerging countries increases yearly (Rocha, Santana, & Tello, 2021; WHO, 2018). This creates fierce competition among private hospitals. Understanding the patient perspective and providing what they need will help the hospitals win the business (Hehenkamp & Kaarbøe, 2020; Miao, Zhang, Wu, Zhang, & Jiang, 2019). For the long run, a strategic value approach is necessary to allow the hospitals to provide more effective and efficient services for improved performance (Porter & Lee, 2021; Vogus, Gallan, Rathert, El-Manstrly, & Strong, 2020). The hospital management must ensure that quality services are provided according to government standards and optimally delivered (Chakraborty, Kaynak, & Pagán, 2021; Gao & Wang, 2020). The increasing patient visits will keep them in today's competitive healthcare business (Arici & Gucer, 2018).

Patient satisfaction is an important indicator in assessing their service's accordance with patient expectations (Andaleeb, 2001; Ng & Luk, 2019; Orte et al., 2020). Optimal quality care will lead to patient satisfaction. As set out in the satisfaction and loyalty theory by

Oliver (1999; 2010), satisfaction from a consumer's perspective is of significance. From the marketing perspective, it is mandatory to preserve it to increase patient visits. This allows satisfied patients to recommend to potential customers (Andaleeb, 2001; Asnawi, Awang, Afthanorhan, Mohamad, & Karim, 2019; Ho & Huang 2020; Richter & Muhlestein, 2017). Patients as satisfied consumers will be loyal, revisit, and recommend services. These will increase patient visits (Lee & Kim, 2017; Richter & Muhlestein, 2017). This emphasizes that patient satisfaction should become the number one priority. Mahmud and Wolok (202) suggested that tangibility aspects are of importance to maintain patient satisfaction. Also, a well-maintained customer relationship will improve hospital performance and increase profit (Baashar et al., 2020; Larson, Jaworski, & Larson, 2021).

Outpatient units are an important route for the patient flow to inpatient units. The outpatient services provide the first perception of the overall hospital service (Giovanis, Pierrakos, Rizomyliotis, & Binioris, 2018; Topolyan, Brasington, & Xu, 2019). The hospital management thus needs to develop the outpatient units as a source of income, exceeding inpatient incomes (Zarei, 2015).

Based on demographic and patient satisfaction analysis, the moderating factors are age and gender. Patient satisfaction tends to increase as the respondents get older (Johnson, Russell, & White, 2016). By gender, they have different perceptions in capturing emotional signals when conducting treatment visits at hospitals (Bentum-Micah et al., 2020). Female patients have a lower perception of health than men. Also, they have lower satisfaction with health services than male patients (Guo, Zhou, Xing, & Li, 2020; Okunrintemi et al., 2018). This indicates that demographic factors should not be neglected as age and gender are related to patient conditions and influence their expectations and satisfaction. Therefore, research for patient loyalty should be tested by including these demographic variables.

Our research was carried out on outpatients in a private hospital focusing on health care service delivery with three contributions. First, the independent variable is quality care instead of service quality because the context of quality care is more suitable and applicable in health services. Quality care indicators are adopted from Donabedian (1988) and Andaleeb (2001) stating that quality consists of technical quality (clinical) and functional quality (non-clinical) (Abbasi-Moghaddam, Zarei, Bagherzadeh, Dargahi, & Farrokhi 2019; Camilleri & O'Calaghan, 1998; Johnson et al., 2016; Prakash & Srivastava, 2019). Secondly, age and gender as the moderating variable were tested on the path toward patient loyalty (Bener & Ghuloum, 2013; Guo et al., 2020; Okunrintemi et al., 2018; Walsh, Evanschitzky, & Wunderlich, 2008; Wang, Chen, Burström, & Burström, 2019). Thirdly, this paper employed the PLS predict calculation, the advanced method of PLS-SEM to assess the prediction power of the model. This is beneficial to evaluate the out-of-sample predictive capabilities of PLS path models (Shmueli et al., 2019). In addition to the model, age and gender serve as the moderating variable. The research model will be empirically tested on outpatients in a private hospital setting.

To date, patients put forward more demand with higher standard expectations of private health services. They will look for better options if their expectations are not satisfied (Andaleeb, 2001). When the expectations are met, they believe that quality care has been optimally given, increasing their satisfaction (Johnson et al., 2016; Kim et al., 2017; Zarei, 2015).

Patient's expectations depend on the health services they need. However, the satisfaction degree can be influenced by their age and gender. These factors need to be a concern in increasing patient satisfaction (Guo et al., 2020; Okunrintemi et al., 2018). High patient satisfaction increases revisits and will patient loyalty. Revisit will increase the number of patients so that hospital profits increase (Luna et al, 2015; Richter & Muhlestein, 2017).

Loyalty is described as behavioral intention. There are four stages of customer loyalty: cognitive, affective, conative, and action. Consumers can be "loyal" at any of those stages due to their various attitudes (Oliver, 1999). In the context of hospital health services, loyalty has the same benefits like customer loyalty of other services such as banks or retails. Loyalty in the medical field is assessed based on patient willingness to recognize the service as the first choice, revisit the hospital, and/or recommend the hospital facility to others. (Guo et al., 2020; Kim et al., 2017; Zhou, Wan, Liu, Feng, & Shang, 2017). In the world of business and marketing, loyalty gives great benefits. Customer loyalty provides a beneficial strategy for most companies. Loyalty also serves as a health market measurement. Therefore, patient loyalty is a competitive asset for hospitals (Richter & Muhlestein, 2017).

In service companies, service quality is described as a scale of reliability and validity assisting service providers to better understand service customer expectations and perceptions. The results of this mutual understanding could improve service quality. Service quality has five dimensions: tangibles, reliability, responsiveness, assurance, and empathy (Parasuraman, Zeithaml, & Berry, 1988). According to Donabedian (1988), quality care can be assessed by structures, processes, and outcomes. It is the extent to which health services meet the specific patient needs and determine the care physically, emotionally, and psychologically (Prakash & Srivastava, 2019). The professional knowledge provided through health services provides the patients with expected health outcomes (Ampaw, Chai, Liang, Tsai, & Frempong, 2020)

According to Oliver (2010), satisfaction is the response of consumers whose needs are met. Satisfaction is the assessment evidence that a product/service is provided at a pleasurable rate. In health care, patient satisfaction is what patients receive when the need for changes in their health is met (Donabedian, 1988; Wagner & Bear, 2009). In profit healthcare providers, patient satisfaction is a significant measuring variable. It affects return visits and referrals to others. Patient complaints provide opportunities for improvement (Carlucci, Renna, & Schiumma, 2012; Johnson et al., 2016). In the outpatient context, an important component of increasing patient satisfaction is professionalism and staff availability to be more involved in medical care. Patient dissatisfaction of outpatient settings is largely due to the health care providers not

spending enough time with them and not properly explaining health information (Asnawi et al., 2019; Ekaterina, 2017; Kaya, Maimaiti, & Gorkemli, 2017).

The concept of quality care revolves around the efforts to meet patient needs. The relationship between quality care and patient satisfaction affects one another as quality care increases patient satisfaction. However, other variables can strengthen or weaken the effect of quality care on patient satisfaction; age and gender. The younger the patient group, the higher the satisfaction. Therefore, young patients are not easily satisfied with particular services. Older patients are more involved in the interaction with doctors, yet are rarely involved in the decision-making process during health care (Peck, 2011; Wang et al., 2019).

Care quality has positive direct effects on patient satisfaction (Asnawi et al., 2019; Ampaw et al., 2020; Sharma, 2017; Zhou et al., 2017). Several research contended that there is a direct effect of quality care on patient satisfaction. Service quality has a significant positive effect on patient satisfaction (Kim et al., 2017). The formulated hypothesis is as followed:

H1: Quality care has positive effects on patient satisfaction.

Quality care has positive direct effects on patient loyalty which is explained by revisit intention (Lai et al., 2020). Patient loyalty can be increased indirectly by service quality if mediated by patient satisfaction (Asnawi et al., 2019; Kim et al., 2017; Vimla & Taneja, 2020). The formulated hypothesis is as followed:

H2: Quality care has positive effects on patient loyalty.

Patient satisfaction has positive direct effects on patient loyalty which is described as revisit intention (Asnawi et al., 2019; Guo et al., 2020; Zhou et al., 2017). The formulated hypothesis is:

H3: There is a positive effect of patient satisfaction on patient loyalty.

Patient age affects the doctor-patient relationship. It can be a moderator and have a positive effect on satisfaction and loyalty. There is a stronger correlation with older consumers than younger consumers on increased satisfaction and loyalty (Walsh et al., 2008). Patient satisfaction significantly increases within older patients (Wang et al., 2019). The formulated hypotheses are:

H4: Age as a moderator has effects between patient satisfaction and patient loyalty.

H5: Age as a moderator has effects between quality care and patient loyalty.

Gender influences patient's satisfaction level towards health services (Bener & Ghuloum, 2013). Female patients have lower satisfaction than male patients (Okunrintemi et al., 2018). The formulated hypotheses are:

H6: Gender as a moderator has effects between patient satisfaction and patient loyalty.

H7: Gender as a moderator has effects between quality care and patient loyalty.

RESEARCH METHOD

The research model was tested empirically on the outpatients of Husada Hospital. This hospital is a leading private hospital accredited with sufficient daily outpatients. Quality care is measured by a scale developed from Prakash and Srivastava (2019). The patient satisfaction scale is developed from Asnawi et al. (2019) and the patient loyalty scale is developed from Guo et al. (2020). The age and gender scale was adopted from the research of Walsh et al. (2008), Bener & Ghuloum (2013), and Okunrintemi et al. (2020). Our sample was purposively selected by a questionnaire instrument with a five-point Likert scale. Those who were able to answer the questions were selected as the respondents. The questionnaires were directly distributed to the patients from October to November 2020 adhering to the hospital health protocol of the COVID-19 pandemic. Hypothesis and correlational analysis were conducted by the Partial Least Square - Structural Equation Model (PLS-SEM) multivariate approach (Hair, Howard, & Nitzl, 2020; Hair, Risher, Sarstedt, & Ringle, 2019; Kock & Hadaya, 2016). PLS-SEM provides more than a predictive relevance test to assess the research model quality (Hair et al., 2019; Shmueli et al., 2019).

RESULTS AND DISCUSSION

Out of 278 questionnaires distributed offline, we obtained 96 male respondents and 182 female respondents.

Table 1. Demographic Analysis (N=278)

Characteristic	Description	Total	Presentage
Gender	Man	96	34.6 %
	Woman	182	65.4 %
Total		287	100 %
Age (years old)	17 – 25	21	7.5 %
	26 – 35	38	13.7 %
	36 – 45	60	21.6 %
	46 – 55	86	30.9 %
	55 – 65	47	16.9 %
	> 65	26	9.4 %
Total		287	100 %
Occupation	General employees	122	43.9 %
	Professionals	17	6.1 %
	Housewives	42	15.1 %
	Others	27	9.7 %
	Entrepreneurs	53	19.1 %
	Civil servants	9	3.2 %
	College students	8	2.9 %
Total		278	100 %
Last education	Bachelor/Graduate	66	23.7 %

	Postgraduate	2	0.7 %
	Diploma	7	2.5 %
	High School	140	50.4%
	Elementary School	43	15.5%
	Primary School	20	7.2 %
Total		278	100%
Payment Method	The Healthcare and Social Security Agency (BPJS)	50	17.9%
	Personal Charges	197	70.9%
	Private Insurance	20	7.2%
	Company Reimbursement	10	3.6%
	Others	1	0.4%
Total		278	100%
Reason for Treatment	Location	116	41.7%
	Doctor's Expertise	79	28.4%
	Facility	40	14.4%
	Hospital Rates	4	1.4%
	Others	39	14.1%
Total		278	100 %

Table 1 concludes that women occupy the majority of outpatients than men. By age, the majority of respondents are 46 - 55 years old (86 respondents) followed by the 36 - 45-year-old group (60 respondents). A total of 132 respondents live in Central Jakarta, the same location as where the Husada Hospital is located. By education, most respondents are senior high school graduates (140 respondents). A total of 112 respondents were hospitalized in the Internist Polyclinic. Most of the respondents (70.9%) take personal charge for the hospital treatment at the Specialist Doctor Polyclinic, followed by 17.9% using the BPJS insurance. The majority of the respondents (41.7%) chose the health service at Husada Hospital for its location and 28.4% for its doctor's expertise.

Outer Model

Data analysis in the outer model employed the Partial Least Square - Structural Equation Model (PLS-SEM) approach with SmartPLS3.3. In this inferential statistical analysis, the outer model results are to test the reliability and validity of the research model. The inner model results are to describe the explanatory and predictive abilities of the research model independent variables. The outer model or the measurement model is tested by the PLS Algorithm menu. In this research, the outer reflective model tests used are the indicator of reliability (outer loading), construct reliability (Cronbach's alpha and composite reliability), construct validity (Average Variance Extracted-AVE), and discriminant validity (Heterotrait-Monotrait Ratio). In the outer model output tests, 10 indicators met the requirements of outer loading. Of the 12 reflective indicators in the research survey, two indicators, DQC4 and DQC5 were excluded from the quality care variable. DQC4 describes how to follow up with patients regularly and DQC5 describes the availability of medical records. The results of the outer model test suggest all reliable indicators in the research model are in accordance with the required outer loading value.



Table 2. Indicator Reliability

Variable	Indicator	Definition	Outer Loading
Quality Care (DQC)	DQC1	The hospital has specialist doctors with competent and professional treatment.	0.836
	DQC2	The medical specialists provide communicative services.	0.889
	DQC3	The nurses serve well.	0.872
Patient Satisfaction (PSA)	PSA1	The hospital services are in accordance with patient expectations.	0.933
	PSA2	Overall satisfaction with the polyclinic services	0.938
Patient Loyalty (PLA)	PLA1	The desire to continue to get health services at Husada Hospital.	0.914
	PLA2	Husada Hospital as the first choice when seeking treatment and health services.	0.929
	PLA3	Polyclinic services at Husada Hospital are recommended to others.	0.897

In the outer model analysis, the relationship between the variables and the indicators is analyzed more specifically. In addition to the reliability indicator test (outer loading), the subsequent tests were construct reliability (Cronbach's alpha and composite reliability), construct validity (Average Variance Extracted-AVE), and discriminant validity (Heterotrait-Monotrait Ratio) (Hair et al., 2019). The results are presented in Table 3.

Construct Reliability, Construct Validity, and Discriminant Validity

Table 3. Construct Reliability, AVE, and HTMT

Variable	Cronbach's Alpha	Composite Reliability	AVE	Patient Loyalty	Patient Satisfaction	Quality Care
Patient Loyalty	0,901	0,900	0,834			
Patient Satisfaction	0,857	0,933	0,875	0,766		
Quality Care	0,833	0,938	0,750	0,594	0,506	
Age	1,000	1,000	1,000	0,023	0,094	0,111

Table 3 shows the result of construct reliability. All variable values are above 0.7. The results of composite reliability, all variable values are between 0.7 to 0.95. Based on the table, it can be concluded that all indicators are declared reliable to measure the construct. The Average Variance Extracted (AVE) values of all variables are higher than 0,50. This concludes that the indicators in the model are valid to collectively measure their respective constructs.

The discriminant validity test was conducted to determine the discriminant validity value. This value is used to assess whether a construct has indicators properly discriminated



against to measure each construct specifically. The value used in the discriminant validity test is the Heterotrait-Monotrait Ratio (HTMT). It is more precise than the Fornell Larcker value (Hair et al., 2019). If the HTMT ratio is less than 0.9, a construct has a valid discriminant value. Valid means that the indicators of one variable are the most precise and specific to measure the construct. Table 3 shows the results of the discriminant validity test and the Heterotrait-Monotrait Ratio (HTMT) value of each indicator is below 0.9. This leads to a conclusion that all indicators in the research model have been well discriminated against so that they can measure their respective constructs and each indicator can accurately or specifically measure the respective constructs. The four parameters of the reliability and validity results of the outer model conclude that all indicators are reliable and valid to measure their respective constructs. Thus, it is feasible to continue in the next stage, the inner model test (structural model test).

R-squared, Q-squared, and Q-squared Predict.

Table 4 shows the results of the R-squared test. This test indicates that patient loyalty as (dependent variable) can be explained by 54% by its independent variables, and the remaining 46% is explained by other variables outside this research model. From the predictive accuracy aspect, according to Hair et al., (2019), the R-squared value is 0.540 including moderate predictive accuracy.

Table 4. R-squared, Q-squared, and Q-squared Predict

Variable	R-Squared	Q-squared	Q-squared Predict
Patient Loyalty	0.540	0.438	0.232
Patient Satisfaction	0.184	0.155	0.172

Based on the Q-squared value in Table 4, patient satisfaction has a Q-squared value of 0.155. This is categorized as small predictive relevance. The patient loyalty variable has a Q-squared value of 0.438, which is categorized as medium to large predictive relevance. Table 4 also indicates patient satisfaction variable has a Q-squared predict value of 0.172, and the patient loyalty variable Q-squared predict value of 0.230. Thus, these two variables have small predictive relevance.

Another assessment used in this research is the Root Mean Squared Error (RMSE) test, which can be defined as the square root of the average square difference between predictions and actual observations. In the RMSE test it is necessary to compare the RMSE value with the linear regression model (LM). to generate predictions for the manifest variable or indicator. Below is a table showing the RSME test.



PLS and LM Q-Square (Q^2) Predict

Table 5. PLS and LM Q-Squared Predict

Indicators	RMSE-PLS	RMSE-LM
PLA1	0,795	0,803
PLA2	0,780	0,789
PLA3	0,770	0,772

Note. PLA = Patient Loyalty

Based on Table 5, the target construct is the patient loyalty (PLA) variable with three indicators, namely PLA1, PLA2, and PLA3. Table 5 implies that all indicators of patient loyalty in the PLS-SEM analysis have a lower RMSE value compared to the LM benchmark (Shmueli et al., 2019). This concludes that the research model has high predictive power. This means that if this research model is replicated in subsequent studies, the value will remain the same.

Hypothesis Test Result

Table 6. Hypothesis Test Result

Hypothesis	Path	Standardized Coefficient	T-Statistics	P-value	Explanation
H1	Quality care -> patient satisfaction	0.429	6.688	0.000	Hypotesis Supported
H2	Quality care -> patient loyalty	0.278	4.064	0.000	Hypotesis Supported
H3	Patient satisfaction -> patient loyalty	0.581	9.247	0.000	Hypotesis Supported
H4	Age to patient satisfaction -> patient loyalty	-0.005	0.077	0.469	Hypotesis Not Supported
H5	Age to quality care -> patient loyalty	0.010	0.171	0.432	Hypotesis Not Supported
H6	Gender to patient satisfaction -> patient loyalty	-0.106	1.556	0.060	Hypotesis Not Supported
H7	Gender to quality care -> patient loyalty	0.111	1.849	0.032	Hypotesis Supported

From seven hypotheses tested in the research model, we found four significant hypotheses. The patient satisfaction variable has the largest standard coefficient value

of 0.581, underlining the greatest influence on patient loyalty. The quality care variable has a standard coefficient value with an influence value of 0.278 on patient loyalty.

As for the fourth hypothesis (H4), its T-statistics value is 0.077. Its standardized coefficient value is -0.005, highlighting a negative direction. This implies that it can weaken the effect of patient satisfaction on patient loyalty suggesting the hypothesis is not supported. This contradicts by Walsh et al. (2008) contending that age affects consumer perceptions in evaluating services on customer satisfaction. However, it is in line with Johnson et al. (2016) finding that age does not have a significant effect on overall patient satisfaction. A research on outpatients in a public hospital in China by Wang et al. (2019) contended that general patient satisfaction increases significantly with older patients.

The fifth hypothesis (H5), suggesting that age as a moderator has an influence on the relationship between quality care and patient loyalty, has a T-statistical value of 0.171. The standardized coefficient value is 0.010 implying a positive direction. This means that it can strengthen the effect of patient satisfaction on patient loyalty. As the T-statistical value is lower than the T-table value and the effect is not significant, the hypothesis is not supported. This is in line with Walsh et al. (2008), finding that age affects consumer perceptions in evaluating quality care services.

The sixth hypothesis (H6) suggests that gender as a moderator has an influence on the relationship between patient satisfaction to patient loyalty. It has a T-statistical value of 1,556. The standardized coefficient value in this hypothesis is -0,106 underlining a negative direction. This implies that it can weaken the effect of patient satisfaction on patient loyalty. Since the T-statistical value is lower than the T-table value and the effect is not significant, the hypothesis is not supported. This finding is in line with Johnson et al. (2016), contending that gender does not have a significant effect on overall patient satisfaction. Nevertheless, Okunrintemi et al. (2018) concluded that female patients have lower satisfaction with health services than male patients.

Gender Sub-Group Analysis Test Results

This paper used the gender variable as a moderator on the effect of quality care on patient satisfaction and patient loyalty. The results of the significance test affirm that there is a significant positive effect of patient gender as a moderator on the effect of quality care on patient loyalty. This indicates that gender can strengthen the influence of patient perception on loyalty. The finding is followed up by conducting a subgroup analysis of each gender, specifically to investigate the effect of gender on quality care.

Out of the total sample, 96 male respondents and 182 female respondents fulfilled the requirements to be tested by PLS-SEM separately. Table 7 presents the results of the outer model for gender subgroups.



Table 7. Gender Sub-Group Analysis Test Results

Woman		Path	Man	
T Statistics	Standardized Coefficient		Standardized Coefficient	T Statistics
9,876	0,671	Patient Satisfaction -> Patient Loyalty	0,311	2,382
2,028	0,152	Quality Care -> Patient Loyalty	0,517	4,902
6,275	0,495	Quality Care -> Patient Satisfaction	0,291	2,786
2,315	0,110	Age -> Patient Loyalty	0,066	0,734

Table 7 illustrates that both subgroups have effects on patient satisfaction with patient loyalty, quality care on patient satisfaction, and quality care on patient loyalty. This confirms the results of the total respondents. Quality care is proven to have a significant positive effect on patient loyalty in both subgroups. The female group has a positive effect of 0,152, while the male group has a positive effect of 0,517. It suggests that the effect of quality care is stronger in the male subgroup. This concludes that males (gender), as a moderator, can strengthen the influence between quality care and patient loyalty.

The coefficient data underline that the women subgroup has a lower effect on the quality care. This is in line with Okunrintemi et al. (2019) contending that the female gender expresses lower responses on health services, their quality of life, and their perceptions of their health status.

Importance-Performance Map Analysis (IPMA)

Importance Performance Map Analysis (IPMA) is a method to obtain significant variables and indicators providing input to managers to prioritize their activities. The variables and indicators need to be maintained and improved.



Figure 1. IPMA Test Results with the Construct Target of Patient Loyalty (Indicators)

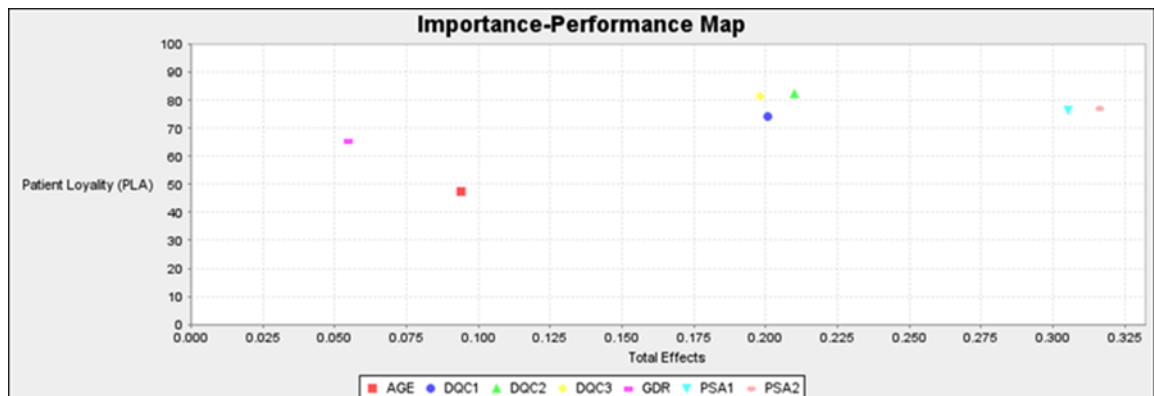


Figure 1 illustrates the three strongest indicators: PSA2 (0.316), PSA1 (0.305), and DQC2 (0.210). The indicators of patient satisfaction (PSA1 & PSA2) show good performance indicating that the relationship between the patients and the hospital must be properly maintained. Husada Hospital is able to provide health services for patients, and the health market. In addition, the hospital can facilitate the complex service needs of the outpatient unit according to the degree of patient satisfaction.

Based on the analysis test on the empirical research conducted, we suggest a research result model as in Figure 2.

Figure 2. Research Result Model

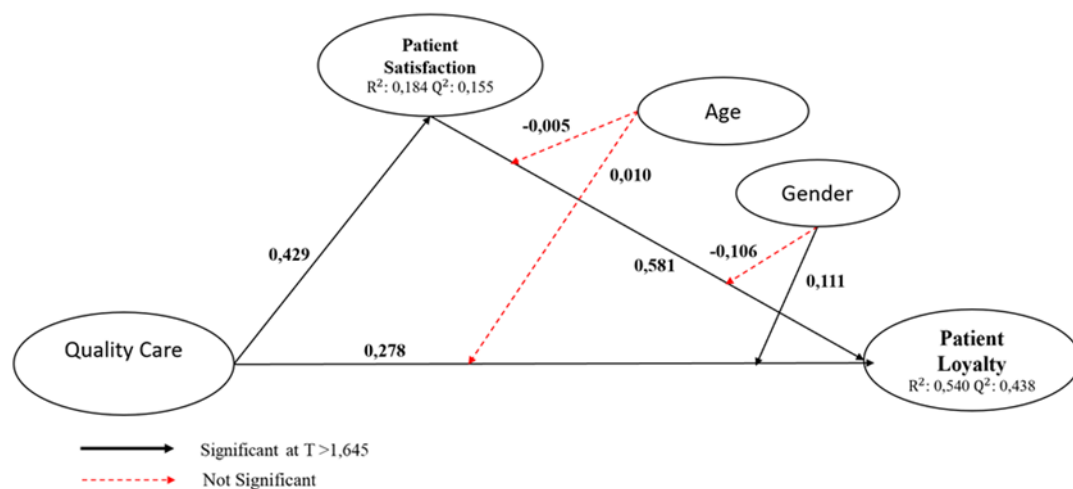


Figure 2 illustrates the seven hypothesized pathways with four significant and supported pathways. There are three insignificant hypotheses, namely the effect of age as a moderator between quality care on patient loyalty, and the effect of age as a moderator between patient satisfaction on patient loyalty, and the influence of gender as a

moderator between patient satisfaction on patient loyalty. Quality care provides a significant direct positive effect on patient loyalty. It was found that the gender as a moderator that can strengthen the influence between quality care and patient loyalty is the male gender.

The analysis test results highlight moderate predictive accuracy and medium to large predictive relevance to patient loyalty. Based on the RSME Q-Square Predict value, it can be concluded that this research model has high predictive power. This means that if this research model is replicated in subsequent studies, the value will remain the same. This finding is in contradiction with Wang et al. (2019) stating that general patient satisfaction of older patients is increased significantly. It also disproves the research model where age weakens the effect of patient satisfaction on patient loyalty at the sample level. This is possible due to different respondent profiles (younger respondents with acute illness) from that of previous studies (older respondents with chronic disease)

CONCLUSIONS

This paper aims to analyze the effect of quality care and patient satisfaction on patient loyalty, and the influence of age and gender on patient loyalty. The research model was tested empirically on outpatients at the Husada Hospital. Quality care provides a significant direct positive effect on patient loyalty. Also, the male gender was proven to strengthen the influence between quality care and patient loyalty. Our analysis results found moderate predictive accuracy and medium to large predictive relevance to patient loyalty. The RSME Q-Square Predict value emphasized that the research model has high predictive power.

As women occupied our majority of respondents, the hospital management shall enhance its promotion strategies to target female patients, such as Mother's Day, and Breast Cancer Day, in addition to paying more attention to female patients to increase patient satisfaction by maintaining toilet cleanliness and waiting room comfortability. Also, it is necessary to specifically provide additional facilities, such as parking areas, breastfeeding corners, prayer rooms, and an examination room for women. Communicative and informative medical specialists and nurses are also needed.

We also recorded that most of our respondents were aged over 45 years. This needs to be a special concern for the management to improve its communication methods. From the IPMA Analysis, patient satisfaction has given good performance and must be maintained. This implies the value of hospital management's undivided attention to the relationship between patients and the hospital. Hospitals may facilitate complex service needs, from the patient's according to the degree of their satisfaction.

Quality care must be improved since it has a direct and significant effect on patient loyalty, by ensuring that the doctors and nurses are competent, professional, communicative, and empathic. In addition, with the findings on gender moderating variables, it is necessary to provide additional attention and time for female patients. Also, patient privacy should be improved during the visit during the registration,

consultation, and drug administration. Age and gender can be used as references in market research to determine marketing and promotion strategies of outpatient services.

There are several limitations to this study. First, the sampling was carried out on respondents directly met in the waiting room of outpatient services. And the respondents were met while waiting to see the doctors. This may be significant effects as the respondents have not received the doctor consultation and examination and have not had a comprehensive visit experience. Future research should invite respondents after having the doctor examination or after payment at the cashier (exit interview).

Addedly, the sample is relatively small, since not all potential respondents were willing to take the time to fill out the questionnaire. This suggests future research increase the number of samples with a longer sampling period from various polyclinics to ensure representative populations.

Finally, the respondents are not grouped to the same number of age and gender. This can provide a more comprehensive comparison of the influence analysis on moderating factors. The existence of different expectations and perceptions of the quality of health for men and women also needs to be considered. Future research on outpatients is necessary to look for the same diagnosis respondent and the same number of respondents of male and female gender subgroups.

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