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Quality of Service and its Effect on Patient Value, Patient Satisfaction, and Revisit Intention: Investigation of the Public Health Center in Jambi Province

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Abstract

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BACKGROUND: Improving quality of service at the public health center (PHC) is very important to increase patient value, patient satisfaction, and ultimately encourage for behavior intention.

AIM: This study aims to analyze the service quality model and its effect on patient value, patient satisfaction, and revisit interest to PHC in Jambi Province.

METHODS: A cross-sectional research design was conducted through a survey of 12 PHC in Jambi Province which were selected by multistage random sampling. The research sample was outpatients who were selected using convenience sampling technique. A total of 600 questionnaires were distributed and returned completely. A 4-point Likert scale was used to measure the four variable constructs, namely, service quality, patient value, patient satisfaction, and revisit intention. Data analysis was carried out using partial least squares structural equation model.

RESULTS: The study results obtained a construct of variables with valid and reliable indicators, and found five significant influence frameworks, namely, service quality to patient value (β = 0.203), service quality to patient satisfaction (β = 0.429), service quality to revisit intention (β = 0.254), patient value to patient satisfaction (β = 0.156), and patient satisfaction to revisit intention (β = 0.539), while patient value has no effect on revisit intention (β = 0.057).

CONCLUSION: This research model is feasible to use in assessing service quality performance to assist PHC management practitioners in developing strategies that are able to encourage positive behavioral intentions to revisit to PHC.

Introduction

The public health center (PHC) plays a strategic role in the national health system as the backbone of health services for all citizens, especially since the implementation of the national health insurance (NHI) system that encourages equity and equality for the community to be able to access health services without cost barriers. As the spearhead of primary health care, PHC is required to provide quality services to ensure the effectiveness and continuity of health services. Improving quality of service is very important to attract loyal customers, and failure to understand the importance of quality of service, customer value and satisfaction will have the opportunity to lose customers [1]. Meanwhile, patient satisfaction is recognized as an important component of humanfocused health services [2]. Experience of perceived health service quality will provide patient value which determines the level of patient satisfaction. Patient value is a central concept where a patient chooses a service that is perceived to provide the highest value among different service offerings [3]. Therefore, PHC organizations are required to be able to provide different services that can increase patient value so as to create satisfaction and ultimately have an impact on the desire (intention) to revisit to PHC when needed.

Several previous studies show a relationship service quality, patient value, patient satisfaction, and revisit intention. Quality of service has a significant effect on patient value and satisfaction [4], [5], and on patient intention to revisit health-care facilities [6]. Simultaneously, patient satisfaction becomes a mediator of service quality dimensions that have an impact on revisits [7]. Lee et al. (2010) proved that patient value has a significant effect on patient satisfaction, where the higher the value of patient in receiving services, the higher their satisfaction [8]. The patient value has a significant effect on intention in revisits related to how much the resulting service product can provide value to patients [9]. The quality of health services tends to increase patient satisfaction and build patient revisit intentions [10]. The quality of health services has an effect on patient satisfaction which has a positive and strong effect on the tendency to return and recommend to others [11]. This study aims to analyze the service quality model and its effect on patient value, patient satisfaction, and its impact on patient intention to revisit to PHC in Jambi Province.

Literature Study and Hypothesis Development

Service quality

In general, the quality of health services is perceived as a patient's assessment of the services received at health facilities, based on the relationship between patients and doctors, nurses, and staff [12], [13], or based on dimensions of the quality of the physical environment such as ambient conditions, social factors, and tangibles; interaction quality dimensions such as attitudes and behavior, skills and service processes; and quality of outcomes such as waiting time, patient satisfaction, and loyalty [14]. Parasuraman et al. (1988) have specifically developed the SERVQUAL model in evaluating quality of services including health services based on five quality dimensions, namely: (1) Tangibles, the quality attributes in the form of the embodiment and appearance of physical facilities, equipment, personnel, and complement; (2) Reliability, the ability to provide reliable and consistent services promptly, accurately, and reliably; (3) Responsiveness, the desire and willingness to help and provide services that are responsive to customer needs; (4) Assurance, the attributes provided to customers with the support of knowledge, professionalism, courtesy, and reliability: and (5) Empathy, the ability to approach, ease in establishing relationships, communication, attention, and understanding of individual customer needs [15].

Patient value

Patient value is understood to be a key mechanism in overcoming the challenges of health care, especially to build a patient-focused service system. Customer value is a central concept in marketing because customers will choose the product that provides the highest value among different offerings [16]. The basic idea of marketing is to understand the various needs of customers and develop a proposition to offer superior values and differentiation advantage in a sustainable manner. Sweeney and Soutar developed a measurement of customer value consisting of four dimensions, namely: (1) Emotional value, namely, utility derived from positive feelings or affective/emotions arising from consuming the product; (2) Social value, namely, utility obtained from the product's ability to improve the consumer's self-concept; (3) Performance value, namely, utility obtained from the perception of the quality and expected performance of the product; and (4) Price/value for money, namely, utility obtained from the product due to the reduction of shortterm costs and long-term costs [17].

Patient satisfaction

Satisfaction is the emotional reaction to the quality of service perceived, namely, the level of feeling

that someone declare the results of a comparison of the performance of the products/services received as expected, if the performance matches or exceeds the expectations will be satisfied, and vice versa if it is below the expectations will not be satisfied [18]. The definition of customer satisfaction varies in different ways. Owusu-Frimpong et al. (2010) described customer satisfaction as a way of maintaining and fulfilling customer preferences and expectations to increase the value that customers feel. According to Zineldine (2006) and Elleuch (2008), in health care, patient satisfaction is a multidimensional concept that is adapted to the characteristics of service providers including technical, functional, infrastructure, interaction, and service processes [11].

Patient satisfaction is generally based on the theory: (1) The expectancy disconfirmation models, namely, the satisfaction or dissatisfaction of patients is result of a comparison between the expectations of decision-making (pre-purchase expectation); (2) Equity theory, where satisfaction depends on whether the sense of justice (equity) or not on a situation [16]. However, the disconfirmation model is considered to determine customer satisfaction which reflects the extent to which customers believe that service provides positive feeling for customer [15]. Some previous studies using a construct of a multi-item measure to assess patient satisfaction with health services, for example, by measuring how satisfied patients with the services of doctors, nurses, and spaces reserved [19], [20], while studies Hemadeh et al. on primary health care in Lebanon to develop instruments general practice assessment questionnaire (GPAQ) to assess patient satisfaction consists of five dimensions consist of communication officers, the competence of the officers. health education quality, waiting time, and service knowledge [21]. This study uses four dimensions as patient satisfaction construct, consist of communication, competence, health education, and infrastructure.

Revisit intention

Intention is a person's tendency to behave that is directed to attention to certain objects or activities, driven by feelings of pleasure because they are considered to have benefits. In the health-care sector, this is in line with the willingness of patients to revisit to health-care facilities after receiving services. Therefore, it is important to manage patients' intention in making revisits when they need health services. Kotler and Keller developed the dimensions that characterize customer loyalty, as follows: (1) Affective loyalty, the willingness and readiness to use the same product or service continuously for a long time; (2) Conative loyalty, making a commitment to reuse when needed; (3) Action loyalty, using the same service repeatedly; and (4) Advocator loyalty, recommend products or services received to friends, relatives, and other community groups voluntarily and exclusively [16]. Kim et al. measured the interest in repeat visits with two indicators, namely, (1) the desire or intention to continue using health services and (2) recommend services to others [22].

Model development

The previous studies have provided an overview of the relationship between service quality, patient value, patient satisfaction, and revisit intention that build the conceptual model of this study. Service quality acts as a predictor which has a positive effect on the patient's perceived value [5], [8], [23]. Quality of service is also understood as antecedents of patient satisfaction, patient satisfaction becomes a component in which an important indicator for the quality of service [24], [25], [26], [27]. Furthermore, in various contexts, service quality becomes an antecedent of patient intention to revisit [28], [29], and simultaneously, quality services that build good relationships with patients will provide values that are always remembered by patients, create high satisfaction, and encourage positive behavior such as intention to revisits [30], [31]. Quality of service also indirect effect on patient satisfaction through customer value [8], [26], and to revisit intention is mediated by patient satisfaction [32], [33].

Perceived value is a positive predictor of satisfaction, where patients who feel that there is more value than a service will have a high level of satisfaction. This shows that patient satisfaction is an indicator of the patient's value for the health services received [34]. Furthermore, patient values significantly influence patient revisit intention whereas higher perceived value will be even greater patient loyalty to avail the services back [5], [9]. Studies Moliner concluded that satisfaction is able to mediate the perception of the value of the patient to revisits as well as other behavior as a form of loyalty [35]. Other studies have also proven that patient value influences revisit intention through patient satisfaction either directly or indirectly [36], [37], [38], [39]. Furthermore, satisfaction is the basis for forming loyalty and a key predictor of revisit behavior. Patient satisfaction has a strong positive relationship with interest in revisits [22]. Based on the literature study above, the research hypotheses can be formulated, namely:

- H1: Service quality has an effect on patient value
- H2: Service quality has an effect on patient satisfaction
- H3: The quality of service affects the revisit intention
- H4: Patient value has an effect on patient satisfaction
- H5: The value of the patient has an effect on the revisit intention
- H6: Patient satisfaction is significantly related to the revisit intention.

Methods

Research design and sampling

The design of this study is a cross-sectional study conducted on 12 PHCs in Jambi Province which were selected in a multistage with geographical criteria consisting of six urban PHCs and six rural PHCs. The sample unit was outpatients at PHC who met the inclusion criteria include aged 15 years, communicated well, and willing to be a respondent after informed consent was given. The sample size is determined by the rule of thumb, namely, 10 respondents per indicator for confirmatory factor analysis (CFA) using partial least square [40]. A total of 600 questionnaires were distributed to about 50 respondents from each PHC who were selected by convenience sampling and all returned completely (response rate: 100%). Data collection was carried out from June 2021 to September 2021 after obtaining permission from local government authorities through interviews by surveyors who had received training. Before interview, respondents were first given an explanation about the purpose and benefits of the included studies formulir informed consent.

Data management and analysis

The study was conducted to measure four constructs of latent variables, namely, service quality, patient value, patient satisfaction, and revisit intention using a questionnaire with answers using a 4-point Liker scale. Quality of service was adapted from the Servoual concept developed by Parasuraman et al. including the dimension tangibles, reliability, responsiveness, assurance, and empathy consists of 28 indicators [41], the patient value was adapted from Perval concept by Sweeney and Soutar including performance, emotional, social, and price with 13 indicators [17], patient satisfaction was adapted from the GPAQ instrument with 11 indicators (Hemadeh et al., 2018) [21] and revisit intention with three indicators (Kotler and Keller, 2012) [16]. Data analysis was performed using CFA and structural equation model analysis using the partial least squares structural equation model method using the SmartPLS 3.0 program application.

Results

Characteristics of respondents

Description of respondent characteristics is presented in Table 1. This study obtained that the age of respondents ranged from 17 to 85 years with an average about 40.28 years (SD = 13.441). The majority of respondents were between 21 and

Table 1: Characteristics of respondents (n = 600)

Variable	Category	Frequency (%)
Age (years)	17–20	42 (7.0)
	21–30	187 (31.2)
	31–40	127 (21.2)
	41–50	100 (16.7)
	51–60	85 (14.2)
	61–85	59 (9.8)
Gender	Man	251 (41.8)
	Woman	349 (58.2)
Education	No school	24 (4.0)
	Basic school	95 (15.8)
	Junior high school	99 (16.5)
	High school	266 (44.3)
	University	116 (19.3)
Work	Does not work	80 (13.3)
	Housewife	191 (31.8)
	Civil servant	67 (11.2)
	Trader	6 (1.0)
	Private employees	97 (16.2)
	Farmer	102 (17.0)
	Entrepreneur	28 (4.7)
	Laborer	29 (4.8)
Household monthly expenditure (Rp)	600 thousand-1 million	86 (14.3)
	>1 million-2.5 million	399 (66.5)
	>2.5 million-5 million	114 (19.0)
	>5 million	1 (0.2)
Patient status	General	353 (58.8)
	BPJS (JKN)	240 (40.0)
	Private insurance	7 (1.2)

30 years old (31.2%), female (58.2%), high school education (44.3%), and housewives (31.8%). More than half of the monthly household expenditures were between >1 million and 2.5 million rupiah (66.5%), and the majority of respondents register as general patients (58.8%).

Construct validity and reliability

CFA analysis was carried out to determine the validity and reliability of the measurement model. Test convergent validity by looking at the loading factor value which represents how much the indicator is able to explain latent variable construct with standard loading factor (SLF) >0.7, and average variance extracted (AVE) >0.5. The reliability test to assess the reliability of indicators and variables latent by calculating the coefficient of Cronbach's alpha and composite reliability [42]. The final analysis of the CFA model produces a path diagram, as shown in Figure 1. The convergent validity test requires us to discard several observation indicators because they have SLF ≤0.70, consist of the "wide vehicle parking space" indicator on the service quality variable and "uncomfortable PHC environment" on patient value variable. Finally, all indicators display SLF values >0.7 and AVE >0.5 which are concluded to have satisfactory convergent validity. The reliability test results showed all indicators and variables have satisfactory reliability with coefficient value of Cronbach's alpha and composite reliability >0.70. The results of the construct validity and reliability test are shown in Table 2 and Figure 2.

Discriminant validity also meets statistical standards calculated from latent variables. We found a positive correlation between all latent variables indicating that the model construct had met the requirements (Table 3).

Table 2: Validity and reliability of questionnaire construct and items

Construct (dimension) question item	SFL	AVE	CR	CA
Quality of service (SQ)	0.020		0.976	
Tangible Registration area roomy and tidy	0.929	0.718	0.947	0.935
Waiting room is clean and comfortable	0.830			
Comfortable examination/service room	0.861			
Directions/service information board available	0.874			
Examination room is closed and kept private	0.816			
Modern medical equipment	0.868 0.859			
Doctor/staff always look neat Reliability		0.693	0 919	0.889
Uncomplicated administrative services	0.816	0.000	0.010	0.000
Doctor/staff services on time	0.813			
Service by competent personnel	0.849			
Service is carried out carefully	0.845			
Services according to patient's problems	0.838	0.700	0.000	0.004
Responsiveness Wait time for service is not long	0.935	0.702	0.922	0.894
Provide services to patients quickly	0.859			
The doctor/staff explains before service	0.821			
Doctors/staff show genuine interest in providing services	0.838			
Doctors/staff always help when needed	0.852			
Assurance		0.717	0.927	0.901
Instilling trust in serving patients	0.838			
Patients feel safe when served	0.871			
Staff always friendly and polite Does not discriminate against patients	0.803 0.885			
Answer patient questions satisfactorily	0.835			
Empathy		0.771	0.944	0.925
Staff always greet the patients	0.888			
Provide service sincerely and attentively	0.896			
Give the patient opportunities to ask questions or	0.866			
complaints	0.000			
Understanding the patient's needs Provide explanations to patients without being asked	0.903 0.835			
PV	0.633	0 592	0.941	0 930
Performance	0.917	0.671		
PHC staff is reliable	0.812			
Service procedures are standardized	0.854			
Complete infrastructure	0.798			
Clear service information	0.813	0.700	0.070	0.700
Emotion Good service impression	0.893	0.709	0.679	0.792
The service process is easy and relaxed	0.857			
Makes me feel better	0.771			
Social	0.866	0.805	0.892	0.758
Respect every patient	0.895			
Take action with the patient's consent	0.900	0.040	0.040	0.040
Price (Mon) Affordable cost (cheap)	0.867	0.840	0.913	0.810
Fees according to the service received	0.906			
PS	0.020	0.707	0.964	0.958
Communication	0.941	0.808		
Describe patient health condition and treatment	0.930			
Friendly and polite attitude	0.872			
Involve patients in decision-making	0.895	0.007	0.007	0.004
Competency		0.887	0.927	0.881
Ability to understand patient health problems and needs Service results that meet your expectations	0.943 0.941			
Health education		0.877	0.934	0.860
Patients understand health problems	0.945			
Patients understand how to deal with health problems	0.928			
Infrastructure		0.828	0.906	0.793
Cleanliness and tidiness of the PHC building/room	0.912			
Completeness of equipment and service support facilities	0.909	0.000	0.005	0.000
Waiting time	0.880	0.933	U.905	0.928
Waiting time for registration Waiting time for service/action	0.968			
RI	0.000	0.732	0.891	0.818
I'll come back to this PHC when I need it	0.868			
This PHC is my first choice	0.843			
I'll recommend PHC to family/friends/neighbors	0.856			

Satisfies CR >0.7, AVE >0.5, CA >0.7. SQ: Service quality, SFL: Standard factor loading, CR: Construct reliability, AVE: Average variance extracted, CA: Cronbach's alpha, RI: Revisit intention, PHC: Public health center, PV: Patient value, PS: Patient satisfaction.

Structural model

The final evaluation of the structural model analysis to assess the hypotheses is presented as

Table 3: Correlation between latent variables

Construct	SQ	PV	PS	RI
SQ	0.779			
PV	0.403	0.769		
PS	0.573	0.529	0.841	
RI	0.492	0.598	0.616	0.856
SQ: Service quality,	PV: Patient value, PS: F	atient satisfaction, RI: F	Revisit intention.	· ·

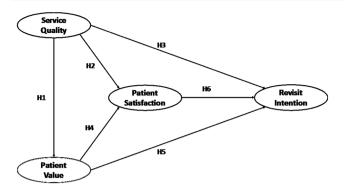


Figure 1: Conceptual framework

the standardized path coefficient and significance levels (Table 4). The results of the analysis show that the factors significantly affect the endogenous factors include service quality to patient value ($\beta=0.203$), service quality to patient satisfaction ($\beta=0.429$), service quality to revisit intention ($\beta=0.254$), patient value to patient satisfaction ($\beta=0.156$), and patient satisfaction to revisit intention ($\beta=0.539$). Meanwhile, the patient value factor had no effect on revisit intention ($\beta=0.057$). The patient satisfaction factor had the greatest statistical effect on patient intention to revisit to PHC in Jambi province.

Table 4: Path coefficient results

Path	Path coefficient	t
H1: SQ → PV	0.203*	7.330
H2: SQ → PS	0.429**	9.285
H3: SQ → RI	0.254*	8.757
H4: PV → PS	0.156*	4.668
H5: PV → RI	0.057	1.477
H6: PS → RI	0.539**	13.541

*p < 0.05, **p < 0.001. SQ: Service quality, PV: Patient value, PS: Patient satisfaction, RI: Revisit intention.

The results of final analysis of structural model testing are shown in the path diagram in Figure 3.

Mediation effect analysis

This study also assesses the indirect effect on the construct model analyzed, namely, the effect of service quality on patient satisfaction mediated by patient value, the effect of service quality on revisit intention mediated by patient value and patient satisfaction, and the effect of patient value on revisit intention mediated by patient satisfaction (Table 5).

Table 5: Path coefficient directly and indirectly

Path	Path coefficient		
	Direct effect	Indirect effect	Total effect
SQ → PV	0.203*	=	0.203
SQ → PS	0.429**	0.143*	0.572
SQ → RI	0.254*	0.638*	0.892
PV → PS	0.156*	-	0.156
PV → RI	0.057	0.145*	0.202
PS → RI	0.539**	-	0.539

*p < 0.05, **p < 0.001. SQ: Service quality, PV: Patient value, PS: Patient satisfaction, RI: Revisit intention.

The analysis results show that indirectly service quality has a significant effect on patient satisfaction mediated by patient value and on revisit intention mediated by patient value and patient satisfaction with each total path coefficient is $\beta=0.143$ and $\beta=0.638$.

Meanwhile, although patient value has no direct effect on revisit intention, it has a significant indirect effect through mediation by patient satisfaction (β = 0.145). This study shows that service quality factor has the largest total indirect effect on revisit intention statistically (β = 0.638).

Discussion

This study aims to analyze the validity and reliability of the measurement model of each construct of latent variables, namely, service quality, patient value, patient satisfaction, and outpatients revisit intention at PHC, as well as assessing the effect between these variables. On the measurement model analysis, we found valid and reliable indicators in constructing latent variable and confirmed that each dimension of the latent variable is a different construct and has a significant relationship in constructing each latent variable. These findings conclude that the resulting measurement model is feasible and appropriate to be used in assessing service quality performance at PHC. The structural model analysis show that service quality has a significant effect on patient value, patient satisfaction, and revisit intention, either directly or indirectly, while patient value has a significant direct effect on patient satisfaction and indirectly on revisit intention through patient satisfaction. Furthermore, patient satisfaction has a direct significant effect on patient intention to visit PHC in Jambi province.

Perception of service quality is an assessment of whether the services provided to patients are appropriate and provide the best results according to patient expectations [43]. Our study proves that service quality has a direct significant effect on patient value, which implies that the better the quality of PHC services, the more positive value added for patients. This result is consistent with the previous studies that prove the concept of service quality as an antecedent or predictor that has a positive effect on patient scores [5], [8], [23]. PHC needs to improve the quality of services continuously in terms of physical appearance, reliability in providing services, being sensitive and responsive to patient needs and complaints, ensuring service quality to gain patient trust, and being empathetic which has an impact on increasing the value felt by patients. Service quality is useful as an input to marketing strategies for PHC to create and strengthen value for patients [30].

This study proves that PHC service quality has a significant effect on outpatient satisfaction either directly or indirectly mediated by patient value, which implies that good service quality has a tendency to build patient satisfaction. This finding is consistent with the previous studies which concluded that patient satisfaction is an important indicator component of

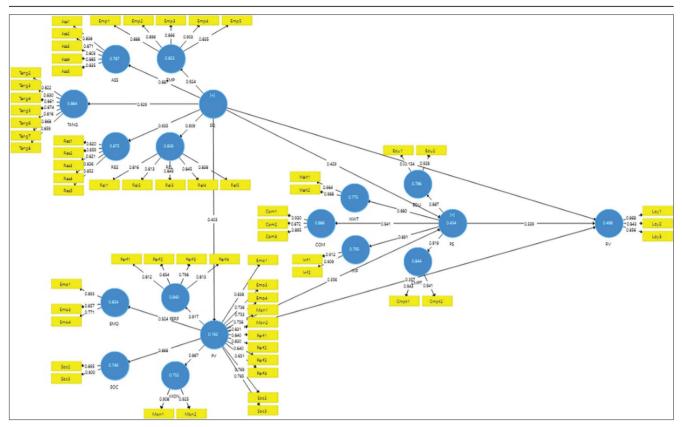


Figure 2: Final model CFA path diagram

service quality where service quality is an antecedent of patient satisfaction [10], [22], [23], [44], [45]. In the current era of NHI, PHC must consider efforts to improve service quality because patients have more choices to choose the desired health facility, and of course, the significant ones are able to provide satisfaction for patients. This study also found that service quality affects patient satisfaction indirectly through patient value. This finding shows that patient satisfaction is closely related to patient value and is a measure of how well patient value has been delivered based on the quality of services provided. Service quality will establish a good relationship with the patient who provides value always keep in mind and create high satisfaction [3], [30]. Satisfaction not only reflects on past experience but also demonstrates the value that patients feel [46].

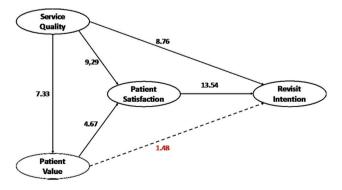


Figure 3: Final model structural path diagram (t-value)

Our study found that service quality had a significant direct effect on revisit intention and indirectly mediated by value and patient satisfaction. This finding further confirms that high service quality will increase the patient's intention to return to PHC. These results are consistent with the previous studies which explain that efforts to improve aspects of service quality will increase the patient's desire to visit again [43]. Service quality is related to the patient's intention to revisits which can predict variations in subsequent behavioral intentions. Service quality is one of the determining factors in increasing intention to revisit [30], so PHC managers must focus on service quality attributes to find and retain patients. Furthermore, service quality also has significant effect on revisit intentions through patient value and satisfaction, this shows that good service quality will provide positive added value perceptions for patients and create patient satisfaction which ultimately forms patient intention to revisits. This is consistent with the results of the previous studies that quality of service affects the value and satisfaction of patients who encourage positive behavior such as revisit intention [10], [11], [24]. Value and patient satisfaction mediate the relationship between service quality and revisit intention, explaining that patients who get value and are satisfied with the quality of PHC services tend to have the intention to reuse services in the future [22], [29]. PHC will be able to increase patient visits if the quality of service really provides impressive value and can exceed patient expectations.

Our study proves that the patient's perceived value has a significant effect on patient satisfaction. This finding is in line with the previous studies which proved that patient score is a positive predictor of patient satisfaction [5], [8], [25]. Patients who feel more value from PHC services tend to have a high level of satisfaction, this shows that patient satisfaction is an indicator of the patient's perceived value for the services they receive. On the other hand, our study found that patient scores did not have a direct significant effect on revisit intention, but could increase patient intention to revisiting indirectly after being mediated by patient satisfaction. This is an interesting finding from our study because it is not in line with many previous studies. This finding explains that the patient's perceived value for the services provided by PHC only has an impact on the patient's desire to reuse the service if patient satisfaction is met. This result is in line with the previous studies which proved that the better the patient's perceived value, the higher the patient's satisfaction and ultimately increased the patient's intention to revisit [30], [37] [43], [45]. PHC management must take appropriate initiatives to strengthen the value that is able to create satisfaction and increase revisit intention in the long term.

Furthermore, this study proves that patient satisfaction has a direct and significant effect on patient intention to revisiting PHC. These results imply that patients will tend to come back if the service they receive meets or exceeds their expectations and desires. In this study, revisit intention was defined as the patient's willingness to consider returning to the same PHC and as their first choice of health care in the future, and recommending the PHC to others. Therefore, PHC management must be able to ensure that patients have received maximum satisfaction with the services they receive, so that it has an impact on their desire to revisit to PHC in the future. This finding is consistent with the results of the previous studies which prove that patient satisfaction plays an important role in shaping patient loyalty [22], [23], [29].

Conclusion

This study can guide researchers to better understand how the interaction between service quality, patient value, patient satisfaction, and patient revisit intentions in primary health services at PHC. This study obtained a variable construct model with valid and reliable indicators, and from six hypothetical frameworks found five significant and one no significant relationship. This study shows that this research model is feasible to assess the performance of PHC service quality and provides empirical evidence that can help PHC management practitioners to focus on developing

strategies that encourage positive behavioral intentions to revisit

Research limitations

Our study has limitations that it only focuses on outpatient services at PHC, while other services such as inpatient and emergency services may have different dimensions and indicators. This study uses patient perception as an indicator of a measure that tends to be subjective so it requires further research that investigates it from the provider's side. In addition, longitudinal studies are also needed to get a more significant effect between variables.

Ethics Approval

This study has received ethical approval from the health research ethics commission of the Health Polytechnic of the Jambi Ministry of Health Number: LB.02.06/2/049/2021.

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