Scientific Foundation SPIROSKI, Skopje, Republic of Macedonia
Open Access Macedonian Journal of Medical Sciences. 2021 Nov 30; 9(E):1383-1392.
https://doi.org/10.3889/oamjms.2021.7747
eISSN: 1857-9655
Category: *E - Public Health*
Section: *Public Health Education and Training*

The Impact of Medical Therapeutic Communication Effectiveness on the Quality of the Medical Service Process in Hospitals at Medan City, Indonesia

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Edited by: Sasho Stoleski
Citation: Lubis AM, Nasution H, Zulfendri Z, Juanita J. The Impact of Medical Therapeutic Communication Effectiveness on the Quality of the Medical Service Process in Hospitals at Medan City, Indonesia. Open Access Maced J Med Sci. 2021 Nov 30; 9(E):1383-1392. https://doi.org/10.3889/oamjms.2021.7747
Keywords: Medical services; Medical therapeutic communication; Partial least squares structural equation modeling; Hospital; Medan City
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Received: 29-Oct-2021
Revised: 14-Nov-2021
Accepted: 24-Nov-2021

Funding: This research did not receive any financial support
Competing Interests: The authors have declared that no competing interests exist

Abstract

BACKGROUND: Many individuals from Medan City, Indonesia, seek treatment abroad. This is because they are dissatisfied with the medical services provided at hospitals in their city, especially those for internal medicine, heart disease, and obstetrics-gynecology (Ob-Gyn). The attitude to seek treatment outside of the city may be because of ineffective medical therapeutic communication. However, a questionnaire to assess medical therapeutic communication from the patient's perspective is lacking.

AIM: Here, we sought to determine the effectiveness of medical therapeutic communication on the quality of the medical service process in hospitals. We also aimed to obtain statement items that can be used in a questionnaire to assess the effectiveness of medical therapeutic communication in hospitals at Medan City.

METHODS: This cross-sectional quantitative research was conducted in three Medan City hospitals. Accidental sampling was used to select patients. Overall, 121 patients from internal medicine polyclinic, 88 from cardiac polyclinic, and 121 from obstetrician polyclinic were selected. All data were analyzed using partial least squares structural equation modeling (PLS-SEM) with the second-order model two-stage approach.

RESULTS: The outer and inner model tests indicated that 6 statement items from Ob-Gyn specialists could be used as measurements with robustness and accuracy. The hypothesis test also proved that the effectiveness of medical therapeutic communication impacts the quality of the medical service process in Ob-Gyn polyclinics. The PLS-SEM analysis revealed that the effectiveness of medical therapeutic communication affected the quality of the medical service process only in the Ob-Gyn polyclinic.

CONCLUSION: Therefore, medical staff at the Ob-Gyn polyclinics must focus more on listening to patient complaints with empathy and sympathy so that the patients feel better. Medical staff must also be forthright about the patient's condition and explain the disease, examination, and treatment steps in an interesting way and in a soft tone such that patients can re-explain. Hospital management can use these six statement items to assess the medical therapeutic communication effectiveness in Ob-Gyn polyclinics from patients' perspective.

Introduction

Good health care is a human right, and health services are perceived to be of high quality when patients are satisfied with the services [1], [2], [3]. However, many individuals from Medan City, Indonesia, seek treatment abroad. Several studies have revealed that individuals seeking treatments overseas have had unsatisfactory experiences in health services provided by the city's medical staff, especially for internal, cardiac, and obstetrics and gynecology (Ob-Gyn) diseases [4], [5], [6], [7]. This is an indicator of the low quality of health services in Medan City [8], [9], [10], [11], [12], [13].

According to a study by Jannah [14]., The primary factor influencing the quality of service is the health service process itself (critical ratio: 2.417), followed by input elements (resources and facilities; critical ratio: 2.002) and environmental elements (hospital policy; critical ratio: 2.009). Medical services begin by examination (Y) of the patient by the medical staff. Patient examination service comprises the following steps: welcoming (Y1), invitation to talk (Y2), listening (Y3), explaining (Y4), discussing the stages of examination and treatment (Y5), and ending by evaluating the medical service process (Y6) [15], [16], [17], [18], [19].

Effective medical therapeutic communication skills are needed when providing medical services. In medical services, Sari [20] found that medical therapeutic communication affects patient satisfaction by 72.5%. Medical therapeutic communication is said to be effective (X) when it has a direct impact on the patient according to the purpose of communication. The purposes of communication in the medical service are as follows: the patient feels accepted (X1), feels comfortable expressing complaints (X2), feels the complaints are heard (X3), understands the disease, stages of

examination, and treatment (X4), believes the treatment will be successful (X5), and agrees to undergo the treatment (X6) [15], [16], [17], [18], [21], [22].

Several studies point out that the communication by medical staff in Medan City was off-target. Unfriendly, rude, and favoritism behaviors cause patients to feel less welcome. Medical staff that is frivolous and lacks attention and time can make patients uncomfortable in expressing complaints and feel as being overlooked. Medical staff that does not explain the condition and treatment procedures in detail results in patients having limited knowledge of the disease, stages of examination, and treatment. Thus, patients will be less confident about the suggested treatment and may choose to decline [4], [5], [6].

Based on the abovementioned aspects, we predicted that ineffective medical therapeutic communication lowers the quality of medical services in Medan City. Until this research was conducted, there was no questionnaire to assess medical therapeutic communication based on the patient's perspective, especially regarding the medical staff that works in Medan City hospitals. In this study, we sought to determine the effectiveness of medical therapeutic communication on the quality of the medical service process in Medan City and obtain statement items that can be used as a questionnaire to assess the same.

Methods

Study design

This study received ethical clearance from the Ethics Committee of the Universitas Sumatera Utara (Indonesia) Number 43/KEP/USU/2021. A cross-sectional quantitative study was conducted for 4 months (February 01, 2021–May 29, 2021) in three B-class hospitals (Dr. Pirngadi Regional General Hospital, Murni Teguh Memorial Hospital, and Royal Prima Hospital) that have medical services for internal medicine, heart disease, and Ob-Gyn in Medan City.

Respondents

The study population comprised outpatients visiting the internal medicine, cardiac, and Ob-Gyn polyclinics. In total, 11 internal medicine staff, 8 cardiac staff, and 11 Ob-Gyn staff consented to participate in this study. According to Overeem *et al*. [23], a minimum of 11 patients are required to assess a medical staff. In this study, accidental sampling was used to select 121 patients from the internal medicine polyclinic, 88 patients from the cardiac polyclinic, and 121 patients from the Ob-Gyn polyclinic. These patients happened to be receiving treatment at the study site at the time of sampling, obtained permission from the responsible medical staff to participate in the study and were willing to follow the course of the study.

Research procedure

The questionnaire (Table 1), tested for validity and reliability (Table 2), was distributed to patients over 2.5 months. Questionnaires were distributed by direct interviews with patients after their meeting with the medical staff. Each statement in the quality of the medical service process column (Y) was measured using the Guttman scale. For the expectation column, a score of 1 indicated "no expectation" and a score of 0 indicated "expected services." Next, for the reality column, a score of 1 indicated poor treatment experience and 0 indicated good treatment experience.

Data analysis

Based on the two columns, there were four comparisons between reality and patient expectations: patients do not expect but get good treatment (score 0), patients expect and get good treatment (score 1), patients do not expect and get poor treatment (score 2), and patients expect but received poor treatment (score 3). Each statement in the medical therapeutic communication effectiveness column (X) was measured using the Guttman scale. The statement gets a score of 1 if the patient feels a bad impact and a score of 0 if the patient feels a good impact. All data were in ordinal.

Data were analyzed using partial least squares structural equation modeling (PLS-SEM) with the second-order model two-stage approach (Figure 1) to predict the influence between the constructs and samples. The first test was from the latent construct of the dimension to the indicator. The second was from the latent construct to its dimension construct. The indicator of the latent construct is the dimension construct itself, not the indicator of the dimension construct (not a repeated indicator) [24], [25], [26].

The relationship model between the latent dimension construct in the dependent variable and its indicators were called the outer model for unobserved endogenous variables 1. This relationship model used a reflective relationship. In Figure 1, it is shown by the arrow from the latent dimensional construct toward the indicators. This happens because each indicator was considered a reflection, embodiment, or impact of the latent construct of its dimensions.

The relationship model between latent variables and latent construct of dimensions in the dependent variable was called the outer model for unobserved endogenous variables 2. This relationship model uses formative relationships. In Figure 1, it is indicated by the arrow from the latent construct of the dimension to the latent variable. This happens because

Table 1: Questionnaire guidelines for patients

Statement	Do you have any expectation?		How do you feel in reality?	
	Yes	No	Good	Bad
1. The doctor is aware of your presence [(i)]				
2. The doctor stopped their other work [(i)]				
3. The doctor looks friendly [(i),(c)]				
4. The doctor gives greetings (according to the time and your culture or religion) [(i),(c),(o)]				
5. The doctor introduces themself [(i),(c),(o)]				
6. The doctor make eye-contact [(o)]				
7. The doctor asks how you are [(i),(c),(o)]				
8. The doctor uses understandable words [(o)]				
9. The doctor does not seem to be patronizing				
10. The doctor welcomes you and your family well [(o)]				
11. The doctor treat you as equal to other patients [(o)]				
12. The doctor asks about your identity [(i),(c),(o)]				
13. The doctor asks about your complaints in detail [(i),(o)]				
14. The doctor asks again about the unclear statement [(i),(o)]				
15. The doctor can make conversation outside the medical problems [(i),(c),(o)]				
16. The doctor can make conversation about private matters [(i),(c),(o)]				
17. You feel comfortable expressing your problems [(i),(o)]				
18. The doctor seems to know what you want [(c),(o)]				
19. The doctor immediately performs the necessary examination and treatment [(o)]				
20. The doctor gives you the opportunity to say what's on your mind for 1–2 min [(i)]				
21. The doctor does not interrupt [(o)]				
22. The doctor understand the concerns that you do not want to be expressed [(c),(o)]				
23. The doctor understands your feelings [(c),(o)]				
24. The doctor does not judge you [(o)]				
25. The doctor does not embarrass you [(o)]				
26. The doctor understands the pain you feel [(i),(c),(o)]				
27. You feel much better after talking to the doctor [(o)]				
28. The doctor describes your disease, the stages of examination, and treatment in a soft tone [(c),(o)]				
29. The doctor describes your disease, the stages of examination, and treatment in an interesting way [(i),(o)]				
30. The doctor describes your disease, the stages of examination, and treatment assertively [(c),(o)]				
31. The doctor describes your disease, the stages of examination, and treatment clearly [(o)]				
32. The doctor seems to have mastered your disease, the stages of examination, and treatment [(o)]				
33. The doctor describes your disease, the stages of examination, and treatment systematically [(o)]				
34. The doctor describes your disease, the stages of examination, and treatment openly [(o)]				
35. You can explain again about the disease, the stages of examination, and treatment required [(o)]				
36. The doctor said they would really do their best in examining and treating [(i),(c),(o)]				
37. The doctor seems to really do their best in examining and treating [(i),(o)]				
38. The doctor said that they really mastered the stages of examination and treatment required [(i),(c),(o)]				
39. The doctor seems to know what to do about your problem [(o)]				
40. The doctor says that they will help you until you recover [(i),(c),(o)]				
41. The doctor eliminates your worries about your disease [(i),(o)]				
42. The doctor believes that the examination and treatment that you will undergo can successfully treat your disease [(o)]				
43. The doctor tries to convince you that the examination and treatment that will be carried out can successfully treat your disease [(o)]				
44. The doctor says that you still have to pray, because only with the blessing of God, the doctor can cure your disease [(i),(o)]				
45. You believe that with God's blessing, the treatment given by the doctor can cure your disease [(i),(o)]				
46. The doctor asks for your response regarding the way the doctor communicates with the patient [(i),(c),(o)]				
47. The doctor asks about your expectation in the examination and treatment as recommended [(i),(c),(o)]				
48. You intend to carry out the examination and treatment as recommended by the doctor [(o)]				
49. The doctor asks about the reasons for your expectation to carry out examination and treatment [(i),(c),(o)]				
50. The doctor apologizes if there is something that is not pleasing to your heart [(i),(o)]				
51. The doctor recommends the appropriate doctor if it turns out that they cannot help you to recover [(o)]				
52. The doctor can control their emotions when they receive complaints from you [(o)]				
53. The doctor promises they will communicate better [(i),(c),(o)]				

Information: [(i)]: Internist, [(c)]: Cardiologist, [(o)]: Obstetrician.

each latent construct of the dimension was considered a partial cause of the latent variable.

The relationship model between the indicators in the independent variable and the latent dimension construct was called the outer model for unobserved exogenous variables 1. This relationship model used a reflective relationship. In Figure 1, it is shown by the arrow from the latent dimensional construct toward the indicators. This happens because each indicator was considered a reflection, embodiment, or impact of the latent construct of its dimensions.

Table 2: Questionnaire validity and reliability test

Validity and reliability	Internist	Cardiologist	Obstetrician
Sample for validity and reliability test	50	52	43
Standard for corrected item-total correlation	0.279	0.2738	0.301
Number of valid and reliable items	27	20	48
Cronbach's alpha X	0.896	0.910	0.956
Cronbach's alpha Y	0.923	0.873	0.961

The model of the relationship between latent variables and the dimension latent construct in the independent variable was called the outer model for unobserved exogenous variables 2. This relationship model used a reflective relationship. In Figure 1, it is shown by the arrow from the latent variable to the latent dimension construct. This happens because each dimensional latent construct was considered a reflection, embodiment, or impact of the latent variable. The hypothesis of this research was as follows: "There is an impact of medical therapeutic communication effectiveness on the quality of the medical service process in each medical service."

Results

PLS-SEM analysis

The PLS-SEM analysis consisted of three steps: Outer model test, inner model test, and hypothesis testing. The outer model test was performed for reflective indicators and formative indicators. The reflective indicators (outer model for unobserved exogenous variables 1 and 2, also unobserved endogenous variables 1) were tested using convergent validity, discriminant validity, and internal consistency reliability.

The loading factor of the PLS algorithm (Table 3) found two statement items and one latent construct of the impact of medical therapeutic communication in internal medicine polyclinic; three statement items and one latent construct dimension of the impact in cardiology polyclinic; and six statement items and two latent construct dimensions in Ob-Gyn polyclinic (Figure 2a) were >0.7. The average variance extracted values also exceeded 0.49. These results indicate the diversity of indicators possessed by the latent construct

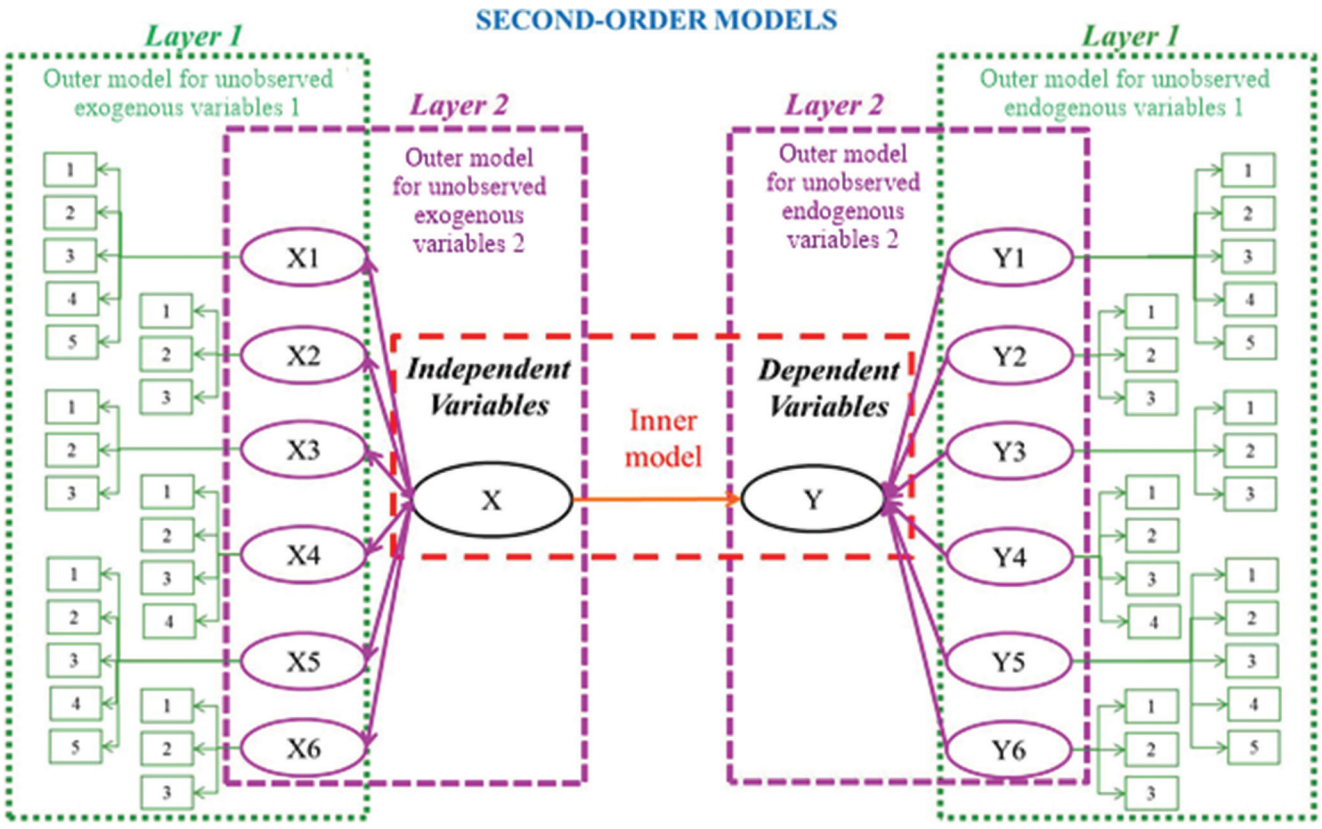

Figure 1: Conceptual framework

Table 3: Outer model for reflective indicator

Outer model for reflective indicator	LF			AVE			CL			CR		
	Inter nist	Cardio logist	Obstetrician	Internist	Cardio logist	Obstetri cian	Internist	Cardio logist	Obstetrician	Internist	Cardio logist	Obstetri cian
X												
X3			0.895			0.775			0.895			0.874
X3.2.2			0.914			0.754			0.914			0.902
X3.3.1			0.817			0.754			0.817			0.902
X3.3.2			0.871			0.754			0.871			0.902
X4			0.866			0.775			0.866			0.874
X4.1.1			0.878			0.674			0.878			0.861
X4.1.2			0.731			0.674			0.731			0.861
X4.4.2			0.847			0.674			0.847			0.861
X5	1.000	1.000		1.000	1.000		1.000	1.000		1.000	1.000	
X5.1.1	0.538	0.958		0.900	0.929		0.538	0.958		0.947	0.975	
X5.2.1	0.516	0.975		0.900	0.929		0.516	0.975		0.947	0.975	
X5.3.1		0.958			0.929			0.958			0.975	
Y												
Y3.2.2			0.932			0.795			0.932			0.921
Y3.3.1			0.870			0.795			0.870			0.921
Y3.3.2			0.871			0.795			0.871			0.921
Y4.1.1			0.879			0.684			0.879			0.866
Y4.1.2			0.785			0.684			0.785			0.866
Y4.4.2			0.815			0.684			0.815			0.866
Y5.1.1	0.534	0.884		0.876	0.831		0.534	0.884		0.934	0.936	
Y5.2.1	0.534	0.937		0.876	0.831		0.534	0.937		0.934	0.936	
Y5.3.1		0.913			0.831			0.913			0.936	

AVE: Average variance extracted, CR: Composite reliability, CL: Customer loyalty.

of the impact of medical therapeutic communication, latent construct of the patient satisfaction dimension, and latent variable of the medical therapeutic communication effectiveness (convergent validity).

The cross loading values that were >0.7 indicate that the reflective indicator has a strong relationship with the latent construct of its dimension compared with other indicators (discriminant validity). The composite reliability also >0.7 demonstrate the high internal consistency of the measurement used. The outer model test for formative indicators (unobserved endogenous variables 2) was analyzed using significance of weights and multicollinearity. The significance value of outer weight for medical staff in internal medicine and cardiology was <1.96 (Table 4), and the results of Bootstrapping p value is not shown. These results indicate that the value of the formative indicator weight with the construct was not significant. Therefore, the measurement was not feasible (invalid and reliable), and it cannot be continued to the inner model analysis.

The Ob-Gyn staff has an outer weight of >1.96, a $p < 0.05$, and the VIF values of >5, indicating a significant construct and absence of multicollinearity between indicators. Therefore, the measurement used was feasible, and it can be used to analyze the inner model. The inner model analysis comprised determination of reflective and formative indicators. The reflective indicators were tested using the coefficient of determination (R^2), predictive relevance (Q^2), and goodness of fit (GoF) values from the latent construct dimension of the medical therapeutic communication impact.

The Bootstrapping using 200 samples (Figure 2b) resulted in an R^2 of >0.75 (Table 5). This value indicates a strong relationship between patients' feeling that their complaints are heard (X3) and that they understand the stages of examination and treatment (X4) with the medical therapeutic communication effectiveness (X) in the Ob-Gyn polyclinic.

Based on the construct cross-validated redundancy from blindfolding results (Figure 2c), the value of Q^2 (Table 5) was >0. This shows that the values observed in the two latent construct dimensions of the medical therapeutic communication impact have been well reconstructed. Therefore, it can be concluded that the inner model for reflective indicators has predictive relevance for the relative influence of the structural model on the measurement of observation for latent variables of the medical therapeutic communication effectiveness in the Ob-Gyn polyclinic. The GoF value of >0.36 shows that the observation data strongly support the PLS-SEM model.

The inner model analysis for formative indicators was only based on the R^2 and Q^2. The latent variable of the quality of medical service process (Y) demonstrated an R^2 value of >0.75 (Table 5), which indicates a strong relationship between the medical therapeutic communication effectiveness (X) and the quality of medical service process (Y). It also indicates that the two latent construct dimensions of patient satisfaction (Y3 and Y4) have a strong relationship with the quality of medical service process (Y) in the Ob-Gyn polyclinic.

Based on the construct cross-validated redundancy from blindfolding results (Figure 2c), the quality of medical service process (Y) in the Ob-Gyn polyclinic had a Q^2 value of >0, which indicates that the observed values in this variable have been reconstructed properly. Therefore, the inner model for formative indicators has predictive relevance for the relative influence of the structural model on the measurement of observations.

The statistical analysis proved that the structural model built in this study was robust and accurate. Thus, it can be used for testing the hypothesis. The hypothesis was tested using the probability values of the medical therapeutic communication effectiveness (X) with the quality of medical service process (Y) variables. Based on the path coefficients (Figure 2b),

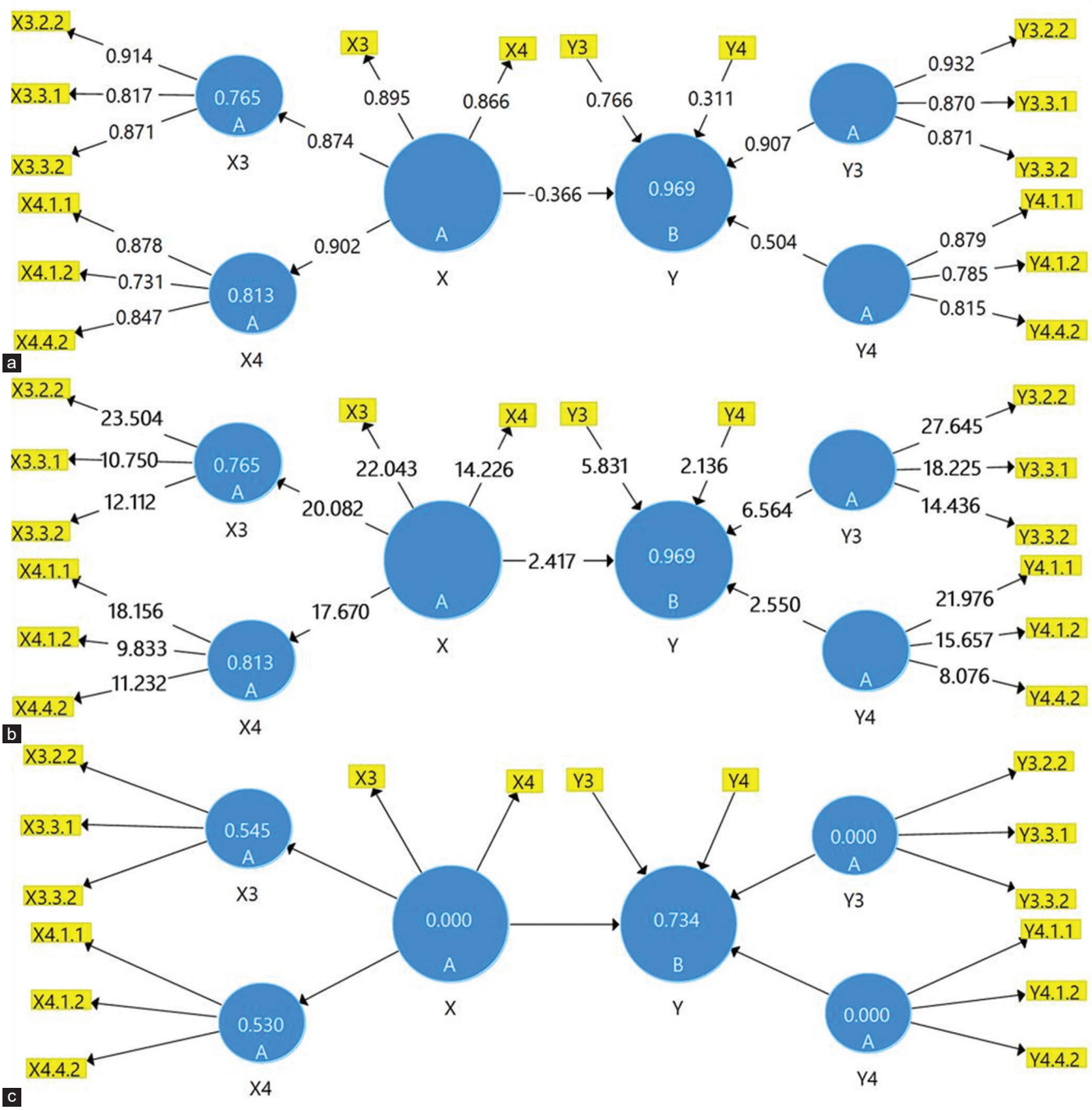

Figure 2: (a-c) Partial least squares structural equation modeling Analysis of obstetrics-gynecology Medical staff

the probability were 2.417 and p values were 0.017. Thus, H0 was rejected, and Ha was accepted. Therefore, it can be concluded that there is an impact of medical therapeutic communication effectiveness on the quality of the medical service process in the Ob-Gyn polyclinic.

Frequency distribution after PLS-SEM analysis

The communication by the medical staff in the Ob-Gyn polyclinic was found to be effective and had an impact on the quality of the medical service process (Table 6). This effectiveness was indicated by

Table 4: Outer model for formative indicators

Outer model for formative indicators	Statistical weight						Multicollinearity		
	Significance of outer weights			p-values			VIF		
	Internist	Cardiologist	Obstetrician	Internist	Cardiologist	Obstetrician	Internist	Cardiologist	Obstetrician
Y3			5.831			0.000			1.789
Y4			2.136			0.034			1.789
Y5	0.0001	0.0001					1.000	1.000	

VIF: Variance inflation factor.

Table 5: Inner model for reflective and formative indicators

Inner model	R^2	Q^2	AVE	√AVE	Average R^2	GoF
Reflective indicator						
X3	0.765	0.545	0.754	0.87	0.79	0.685
X4	0.813	0.530	0.674	0.82		0.648
Formative Indicator						
Y	0.969	0.734				

AVE: Average variance extracted, GoF: Goodness of fit.

patients who felt their complaints were heard and they well understood the disease, stages of examination, and treatment. The quality of the medical service process was visible from patient satisfaction when the medical staff listened to patients and explained them the disease, stages of examination, and treatment in detail.

The items that patients expected from the medical staff are listed in Table 6. The items included the following: medical staff must have empathy for patients, understand their suffering (sympathy), make them feel relieved, and describe the disease, stages of examination, and treatment in a soft tone, interesting manner until they understand.

Table 6: Frequency distribution after PLS-SEM analysis

Frequency distribution	n	%
Latent variable Y		
Quality service	115	95.0
Poor service	6	5.0
Latent variable X		
Effective communication	115	95.0
Ineffective communication	6	5.0
Latent construct of patient satisfaction dimension Y3		
Satisfied	110	90.9
Not satisfied	6	5.0
Very dissatisfied	5	4.1
Latent construct of patient satisfaction dimension Y4		
Very satisfied	2	1.7
Satisfied	98	81.0
Not satisfied	17	14.0
Very dissatisfied	4	3.3
Latent construct of medical therapeutic communication impact dimension X3		
Suitable for communication purposes	115	95.0
Not suitable for communication purposes	6	5.0
Latent construct of medical therapeutic communication impact dimension X4		
Suitable for communication purposes	113	93.4
Not suitable for communication purposes	8	6.6
Statement item		
The doctor understands your feelings		
The patient expected and gets good treatment	114	94.2
The patient did not expect and gets bad treatment	1	0.8
The patient expected but gets bad treatment	6	5.0
The doctors understand your suffering		
The patient did not expect but gets good treatment	1	0.8
The patient expected and gets good treatment	109	90.1
The patient did not expect and gets bad treatment	2	1.7
The patient expected but gets bad treatment	9	7.4
You feel much better after talking to the doctor		
The patient expected and gets good treatment	114	94.2
The patient expected but gets bad treatment	7	5.8
The doctor describes your disease, the stages of examination, and treatment in a soft tone		
The patient did not expect but gets good treatment	2	1.7
The patient expected and gets good treatment	113	93.4
The patient expected but gets bad treatment	6	5.0
The doctor describes your disease, the stages of examination, and treatment openly		
The patient did not expect but gets good treatment	4	3.3
The patient expected and gets good treatment	96	79.3
The patient did not expect and gets bad treatment	2	1.7
The patient expected but gets bad treatment	19	15.7
You can re-explain the disease, the stages of examination, and treatment required		
The patient expected and gets good treatment	114	94.2
The patient did not expect and gets bad treatment	1	0.8
The patient expected but gets bad treatment	6	5.0

PLS-SEM: Partial least squares structural equation modeling.

Discussion

In this study, we observed that the medical staff at the Ob-Gyn polyclinic properly listened and explained the treatment course to their patients. This observation is in line with the study by Rahmania and Saragih [27], who found that therapeutic communication techniques applied by Ob-Gyn physicians involved showing acceptance, listening, clarifying, focusing, conveying observations, silence, summarizing, giving gifts, allowing clients to start a conversation, suggesting to continue the conversation, and encouraging clients to describe their perceptions. However, their research was a qualitative study, in contrast to our research, which was quantitative.

The outer model for reflective and formative indicators in the Ob-Gyn polyclinic was feasible because it had large convergent validity, strong discriminant validity, and high internal consistency. The two latent constructs of patient satisfaction dimensions were also significantly related to the variable of the quality of medical service, and each latent construct did not have multicollinearity between one another. The results of this study are similar to those in The Generic Short Patient Experiences Questionnaire (GS-PEQ) from Sjetne *et al*. [28]. They mentioned five items related to medical staff that have been tested for validity and reliability and are used as the core of the GS-PEQ in Norway. One of them is that the medical staff explains in a manner that is easily understood by patients. However, the statement item in this study was more detailed about the method used by the medical staff. It stated that the medical staff must explain in a soft tone and interesting manner such that patients can re-state the details of their disease, examination, and treatment.

This study also supports the Multisource Feedback from Overeem *et al*. [23]. This study revealed 17 items that had been tested and were used to assess the professional performance of medical staff in the Netherlands. The items related to medical staff were explaining the disease, treatment options and plans, physical examinations, and other things that may occur at unexpected times. Moreover, Pompili *et al*. [29] described 11 items that had been tested and were used to assess patients' self-confidence in choosing treatment for early-stage lung cancer in the United Kingdom, including patients' understanding of the disease, treatment options, and the benefits and risks of each treatment option. However, both researches have no statement items regarding medical staff listening to patients or patients feeling their complaints were heard by the medical staff.

This study found that patients' perception of being heard and understanding the explanation provided by the medical staff strongly correlated with the medical therapeutic communication effectiveness. This observation is in line with the opinions of

experts [19], [17] dan and the results of several previous studies [30], [31], [32], [33], [34]. Medical staff that shows empathy and sympathy when actively listening to patient complaints can increase patient satisfaction, and thus, the overall quality of medical services. The opinion of Herqutanto [35] and research by Langewitz *et al*. [36] also support this aspect. They state that medical staff must actively listen to patient complaints without interrupting until they finish in about 1–2 min. After listening to the patient's explanation, the medical staff performs a physical examination (weight and blood pressure), ultrasonography, and other necessary investigations before making a diagnosis. The medical staff then explains the results to patients until they understand the diagnosis made.

Based on the opinions ofexperts [15], [16], [17], [18], [19] and the results of previous studies [34], [37], medical staff must explain gently (tenderness), be assertive, authoritative, open about their condition, stages of examination, and treatment (forthright). This explanation needs to be adjusted to the culture, knowledge, and education of the patient. The medical staff indulgently explains to the patient until the patient fully understands the diagnosis. Bendapudi [30], Herqutanto [35], and others [33], [38], [39] also state that frank and complete explanation of the diagnosis by the medical staff is an ideal behavior. Medical staff that ensures all patient questions are answered increases patient satisfaction and avoids medical lawsuits. Wirakesuma *et al*. [40] stated that one of the factors that may lead to medical lawsuits is unclear communication by medical staff.

Conclusions

Based on the PLS-SEM analysis of each medical service, we found that the medical therapeutic communication effectiveness affected the quality of the medical service process only in the Ob-Gyn polyclinic. This effectiveness was experienced by patients who felt their complaints were heard and they understood the disease, stages of examination, and treatments properly. The quality of the medical service process was observed from patient satisfaction when the medical staff actively listened to their complaints and explained to them the disease, stages of examination, and treatments properly. These results indicate that the medical staff in Ob-Gyn polyclinics should focus more on listening to the patient's complaints with a sense of empathy and sympathy, so that they feel relieved. The medical staff must also be forthright about the patient's condition and explain it in an interesting way and a soft tone such that the patient can re-iterate.

Authors' Contribution

AML- Contributed to the concept and design of the study, statistical analyses, interpretation of the data, drafting of the manuscript, and gave final approval for submission of the manuscript. HN- Contributed to statistical analyses, interpretation of the data, drafting of the manuscript, and gave final approval for submission of the manuscript. ZZ- Contributed to statistical analyses, interpretation of the data, drafting of the manuscript, and gave final approval for submission of the manuscript. JJ- Contributed to statistical analyses, interpretation of the data, drafting of the manuscript, and gave final approval for submission of the manuscript.

Availability of Data and Materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Ethics Approval and Consent to Participate

This research has received ethical clearance from the Ethics Committee of the Universitas Sumatera Utara (Indonesia) Number 43/KEP/USU/2021.

Patient Consent for Publication

In the consent form for the patient's participation in the study, it is written that the patient allows the publication of information from the results of this study anonymously.

Informed Consent

Written informed consent was obtained from a legally authorized representative(s) (the Ethics Committee of the Universitas Sumatera Utara [Indonesia]) for anonymized patient information to be published in this article.

Significance for Public Health

Health services provided by the medical staff are called medical services. Quality medical services can improve the health status of the community. Quality medical services require effective medical therapeutic communication. Medical therapeutic communication is said to be effective when the patient recovers from the disease.

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