

Factors Related to the Satisfaction of Using Online Reservations for Orthopedic General Polyclinic Patients of Fatmawati Hospital in 2024

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Abstract

The advancement of health services through digital technology has significantly improved accessibility and efficiency in patient care. Fatmawati Hospital's Orthopedic General Polyclinic implemented an online reservation system in October 2023 to streamline patient flow and reduce waiting times. This study aims to identify the factors influencing patient satisfaction with online reservations in 2024 using a quantitative, cross-sectional method. Data were collected through structured interviews using a questionnaire based on the SERVQUAL model, covering five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. The findings revealed that the majority of users were elderly (50.5%), female (59.5%), with low educational attainment (61.5%), and mostly unemployed (63%). Nearly all (98.5%) used non-cash payment methods, and over half (58.5%) had used online reservations more than three times. Overall satisfaction reached 90.5%, with empathy scoring highest among SERVQUAL dimensions. Statistical analysis showed significant relationships between user characteristics (age, gender, education, frequency of use) and satisfaction across various service dimensions. The empathy dimension ($\beta = 0.251$) was identified as the most influential factor. These results suggest that patient-centered approaches, especially those fostering empathetic communication, are critical to enhancing satisfaction with online health service platforms. The findings offer valuable insights for healthcare administrators to improve digital services, reduce congestion, and increase patient trust and satisfaction.

Keywords: Online reservation, patient satisfaction, health services, orthopedic clinic, service quality.

INTRODUCTION

Innovations in improving health services through technology are increasingly being developed. Currently, health services are increasingly switching to online platforms to increase accessibility and efficiency (Sari, 2023). The orthopedic polyclinic of Fatmawati Hospital, which serves patients with muscle and bone problems, also uses innovation as part of this system. The innovation adopted is an

online reservation to facilitate patients who want to receive treatment at the orthopedic general polyclinic of Fatmawati Hospital.

The existence of online reservations at the orthopedic general polyclinic of Fatmawati Hospital is in line with the Vision and Mission of Fatmawati Hospital. The vision of Fatmawati Hospital is to create a healthy, productive, independent and just society. Meanwhile, the first mission of Fatmawati Hospital is to become a superior hospital in the field of orthopedic services in the Southeast Asian region. Patients now expect not only easy access, but also a satisfying experience. Patient satisfaction is an important indicator to assess the quality of service which is closely related to the context of online reservations. The high competition between healthcare services means that the Fatmawati Hospital orthopaedic general polyclinic must ensure that online reservations meet patient expectations to retain and attract more patients.

In the orthopedic general polyclinic there are eight sub-specialists, namely spine, thighs and waist, legs, spine, children, tumors, upper arms and forearms. From each of these sub-specialists, the average number of patients treated per day is 25 patients. This certainly requires effective measures to regulate the patient registration system so that there is no accumulation at the same time. The steps that have been taken at this time are online reservations that divide the patient's arrival time and the patient's estimate to be called to the doctor. This is done with the hope that

It can reduce patient buildup upon enrollment and speed up patient wait times. So that there is a sense of certainty for patients when receiving treatment that they can come according to the time that has been determined when making online reservations.

The online reservation facility at Fatmawati Hospital will be launched in October 2023. This facility can be used by new patients and existing patients by downloading the MYRSF application on the playstore for android users and for iphone users can be done directly on www.rsupfatmawati.id website. The flow provided is also quite easy as one user can make reservations for 25 patients at once. The first thing to do after downloading the application is to create an account using a phone number. After that, an OTP code will be sent such as verification to be able to enter the application. Then users are required to create a password consisting of numbers, uppercase and lowercase letters, and symbols. After entering the main menu, users can select the rebooking menu, then click on the destination poly, then enter personal data, doctor's choice, payment method, and date of treatment plan. Then click the submit button to save the data that has been entered. The application will provide a barcode that must be scanned first on the APM machine. Patients arrive according to the predetermined reservation date and time. Then after scanning the barcode, the patient gets a small receipt to be given to the registration officer at the polyclinic. Then the patient just waited for his name to be called to check with the doctor (Susanto W., 2019).

Research in Taiwan shows that 59.7% of hospitals have implemented an online reservation system (Yang, 2019). Similar research was also conducted and it is known that the existence of this system increased the total number of patient visits from 34.9% to 89.13% (Xie, 2019). This also goes hand in hand with an increase in patient satisfaction rate to 71.7% in Cao's (2021) research. Several hospitals in Indonesia have also started implementing online reservations to facilitate patients to receive treatment in hospitals. Research by Nurus (2017) in Ardiansyah (2021)

reveals that there is a 92% level of trust in using this system, then 96% convenience, and 90% intention to use.

Although online reservations are increasingly being used in healthcare, research focusing on the factors that affect the satisfaction of using online reservations in orthopedic polyclinics is still limited. Therefore, this research aims to fill this knowledge gap. Understanding this background, research on the factors that affect the satisfaction of using online reservations in patients of the orthopedic general polyclinic of Fatmawati Hospital in 2024 is important to provide deeper insights into how to improve the quality of services and meet patient expectations. The study aims to find out the factors related to the satisfaction of using online reservations for orthopedic general polyclinic patients at Fatmawati Hospital in 2024.

RESEARCH METHODS

This study employed a quantitative research design with a cross-sectional approach to explore the relationship between service quality dimensions and patient satisfaction regarding the use of online reservation systems at the Orthopedic General Polyclinic of Fatmawati Hospital in 2024. Data were collected through direct interviews using structured questionnaires targeting both independent variables (dimensions of service quality) and the dependent variable (patient satisfaction). The research took place at Fatmawati Hospital, specifically in the orthopedic general polyclinic, during May 2024, with data analysis scheduled for June 2024.

The population in this study included all orthopedic outpatients at Fatmawati Hospital who utilized online reservations. The sample was composed of patients or accompanying family members who had used the online reservation system at least twice and were classified as returning patients. Respondents were required to be willing to participate in interviews and have no communication difficulties. Individuals unable to be interviewed were excluded. A simple random sampling technique was used, ensuring that each eligible individual had an equal opportunity to be selected. Based on inclusion and exclusion criteria applied to the orthopedic patient visit records from the previous month, 198 patients were determined to meet the sample criteria.

Primary data were obtained directly from interviews, while secondary data included hospital records on orthopedic patient visits. The instrument used was a questionnaire, designed to assess patient satisfaction with online reservations across five SERVQUAL dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Data analysis was carried out in three stages. Univariate analysis described the distribution of each variable. Bivariate analysis, using Chi-square and t-tests at a 0.05 significance level, examined the relationships between patient characteristics and service quality dimensions with satisfaction. Finally, multivariate analysis was conducted using multiple linear regression to identify the most influential factors affecting satisfaction. The T-test (Independent Sample) model was applied to evaluate the strength and significance of each factor in the model.

RESULTS AND DISCUSSION

The research on factors related to the satisfaction of using online reservations in orthopedic general polyclinic patients of Fatmawati Hospital in 2024 is a study

using a cross-sectional study and analyzed quantitatively. Quantitative data is obtained from primary data. Primary data in the form of a patient satisfaction questionnaire using the SERVQUAL theory Parasuraman, et al. (1985) in Rahmawati (2023) which was distributed to 200 respondents in May 2024. The results of the questionnaire test were tested for validity and realism. A question with a calculated value of r greater than the value of r of the table is said to be valid while the value of r alpha greater than the value of r calculated is said to be reliable.

The results of the study are presented based on an overview of the data and analysis of the research variables. The analysis was carried out in three stages, namely univariate, bivariate, and multivariate analysis. Univariate analysis to describe the frequency distribution of each research variable, bivariate analysis to see the relationship between independent and dependent variables. The need for multivariate analysis to find out the factors of the most dominant independent variables affect the dependent variables. The collected data was then processed and analyzed using the IBM SPSS Statistics Program version 25.0.

Based on table 1, it is known that from the analysis of respondent satisfaction data, the number of respondents who expressed satisfaction was 90.5% and 9.5% expressed dissatisfaction.

Bivariate Analysis of Respondent Characteristics with Patient Satisfaction

Bivariate analysis was conducted to determine the relationship between respondent characteristics (variables of age, gender, education, occupation, payment methods, and frequency of use of online reservations) and patient satisfaction and to answer the research question whether these characteristics are a confounding factor or not of satisfaction with using online reservations, using the analysis of the Compare Mean Independent-Sample T test. From the data analysis, the following results were obtained:

Bivariate Quality of Service Analysis (SERVQUAL) with Online Reservation Usage Satisfaction

The following bivariate analysis was carried out to determine the relationship between the dimension of service quality and patient satisfaction and to prove the research hypothesis that there is no relationship between patient perception of service quality and patient satisfaction, using the Compare Mean Independent-Sample T test analysis. And from the data analysis, the following results were obtained:

Table 1. The Relationship between Service Quality (SERVQUAL) and Satisfaction with Online Reservation Use at Orthopedic General Polyclinic of Fatmawati Hospital in 2024

Age		N	Mean	Std. Deviation	P-Value
Tangible	Satisfied	181	1,436	0,497	0,001
	Dissatisfied	19	2,000	0,000	
Reliability	Satisfied	181	1,425	0,495	0,001
	Dissatisfied	19	2,000	0,000	
Responsiveness	Satisfied	181	1,381	0,487	0,001
	Dissatisfied	19	2,000	0,000	
	Satisfied	181	1,337	0,474	

Age		N	Mean	Std. Deviation	P-Value
Assurance	Dissatisfied	19	1,947	0,229	0,001
	Satisfied	181	1,337	0,474	
Empathy	Dissatisfied	19	2,000	0,000	0,001

Based on table 1, it is known that all dimensions of service quality (SERVQUAL) have a p value of 0.05. Thus, the research hypothesis is rejected so that it can be concluded that there is a meaningful relationship between the dimension of service quality and satisfaction with the use of online reservations at the Orthopedic General Polyclinic of Fatmawati Hospital in 2024.

Multivariate Analysis

Bivariate analysis is an analysis of the relationship between several independent variables and dependent variables to find out the factors that are closely related or the most dominant in relation to the dependent variable, then the following results are obtained:

Table 2. Multivariate Analysis

Variable	Coefficient B	Beta	p-value Coefficient	R Square	p-value Anova
Tangibles	0.038	0.065	0.503	0.161	0.000
Reliability	-0.055	-0.094	0.455		
Responsiveness	0.091	0.155	0.169		
Assurance	0.059	0.099	0.370		
Empathy	0.150	0.251	0.035		

Based on table 2, an R Square value of 0.161 was obtained, meaning that the five dimensions of service quality simultaneously varied patient satisfaction by 16%. From the results of the statistical test (Anova's p value), a p value of 0.000 was obtained which showed a significant value and it was seen that the empathy dimension had the largest Beta value of 0.251 so that it can be concluded that the empathy dimension is the most dominant independent variable or has the greatest influence on the dependent variable in this study, namely patient satisfaction.

The limitations of research are the first to be discussed in this chapter. Then it was followed by a discussion about the description of the characteristics of the respondents including age, gender, education, occupation, payment methods, and frequency of use of online reservations. Then an overview of the satisfaction of using online reservations for service quality (SERVQUAL) is seen from the dimensions of tangible, reliability, responsiveness, assurance, and empathy.

Overview of the Characteristics of Online Reservation Respondents at the Orthopedic General Polyclinic of Fatmawati Hospital in 2024

Respondents in this study are patients or families who accompany patients who use online reservations at least twice to request orthopedic general polyclinic services. The characteristics to be studied include age, gender, education, occupation, payment methods, frequency of using online reservations, and the choice of subspecialists at the orthopedic general outpatient polyclinic of Fatmawati Hospital in 2024.

1) Age

The results showed that 50.5% of the respondents were over the age of 50.5 from 35 years old or included in the old age group where this number is slightly more than the younger age group. This shows that respondents who use online reservations at the orthopedic general polyclinic of Fatmawati Hospital are an elderly population. This is not much different from the picture of the population of orthopedic patients who use online reservations in the same period, namely in May 2024 as many as 51.7%, which explains that the sample measured can already represent the affordable population of this study.

2) Gender

The results of this study show that the most respondents are female, which is 59.5%. This is because most of the respondents who filled out the questionnaire were mothers of children, patients, and wives of patients who were treated at orthopedic general polyclinics.

3) Education

The results showed that 61.5% of respondents were poorly educated, which was less or the same as having graduated from high school, which was the education of the most respondents who used online reservations at the orthopedic general polyclinic of Fatmawati Hospital.

4) Work

The results showed that 63% of respondents were not working. This is not much different from the picture of the respondents' educational population. The most respondents consisted of housewives, students, and retirees. Unemployed patients tend to spend more time visiting hospitals for medical reasons and accompanying patients and their family members for treatment (Araujo, 2022).

5) How to Pay

Almost all respondents who used online reservations at the orthopedic general polyclinic of Fatmawati Hospital used non-cash or insurance payment methods. This is shown by a result of 98.5%.

6) Frequency of Use of Online Reservations

The results showed that 58.5% of respondents used online reservations more than 3 times. This is not much different from the picture of the population based on gender.

Overview of the Dimension of Service Quality (SERVQUAL) Online Reservations at the Orthopedic General Polyclinic of Fatmawati Hospital in 2024

From this study, it is hoped to obtain an overview of respondents' perception of satisfaction with the use of Online Reservations at the Orthopedic General Polyclinic of Fatmawati Hospital in (2024). This is seen from the five dimensions of SERVQUAL, namely tangible, reliability, responsiveness, assurance, and empathy. The assessment of service quality is measured by giving a score of 1 to 10 to statements describing patient satisfaction. The smaller the score given by the respondent, the more the respondents disagree with the statement provided on the questionnaire. Meanwhile, the greater the score (closer to or equal to 10) the more respondents strongly agree with the statements provided on the questionnaire. This also shows that respondents are satisfied with the online reservation service at the orthopedic general polyclinic of Fatmawati Hospital.

Tangible Service Quality Dimensions

From the results of this study, it is known that the tangible dimension has a total mean value of 8.5. This figure shows that respondents give a fairly satisfied assessment of the online reservation service at the orthopedic general polyclinic from a tangible dimension. The assessment given in this dimension includes facilities, physical appearance of doctors and staff, waiting rooms, administrative services that give a professional impression of services at the orthopedic polyclinic of Fatmawati Hospital (Walean, 2022). In general, respondents felt dissatisfied with the polyclinic waiting room. This is shown based on the lowest assessment given in statement number 3, namely 'this polyclinic waiting room feels comfortable and pleasant' of 7.88. The patients who gave suggestions for hospitals to provide air conditioning facilities and the waiting room area was expanded.

A comfortable polyclinic waiting room will have a positive impression on patient satisfaction. Complete facilities such as air conditioning, bright, clean and neat lights will increase the patient's assessment of patient satisfaction. This is evidenced by Zainafree's research in Suprpto (2023) which states that a good physical appearance towards a health service enjoyed by patients or visitors is directly proportional to the high level of satisfaction felt by patients.

Dimensions of Service Quality Reliability

The results of this study obtained a mean value of the total reliability dimension of 8.76. The reliability dimension assessment gets a higher score than the tangible dimension. The assessment of the reliability dimension includes an assessment of the quality of online reservation services, doctor appointments, and reliable services (Agustiansyah, 2021). This is aimed at an excellent assessment of statement number 8, which is 8.95. Respondents are very satisfied with the reliable online reservation service to obtain treatment at orthopedic general polyclinics. The choice of a doctor who is always appropriate, precise, accurate, and consistent with patient complaints increases satisfaction with online reservation services, especially at the orthopedic polyclinic of Fatmawati Hospital (Kusumawati, 2023). However, on the other hand, for the assessment of doctor's appointments, the lowest score was 8.86. This is due to the lack of notification services or notifications for patients who have successfully made online reservations. This is related to the condition when the doctor takes a sudden leave or comes not according to the schedule stated earlier.

Online reservation services are a form of using technology that is expected to increase efficiency in connecting and communicating with patients. There are many ways that an online reservation application can provide to contact patients regarding the latest information about services at the destination polyclinic. These services include using smartphone applications downloaded through the application store, through the hospital's official website, whatsapp and SMS applications (Ardiansyah, 2021). Through online reservations, the most appropriate choice for orthopedic polyclinic services at Fatmawati Hospital informs patients through WhatsApp numbers if there is a change in the doctor's schedule (Pradiatinintyas, 2019).

Dimensions of Service Quality Responsiveness

Based on the results of the study, it is known that the total mean of the responsiveness dimension is 8.67 which means 'Agree' to the statement provided. Statements describing patient satisfaction from the responsiveness dimension include

prompt and appropriate responses, assistance, and information provided to respondents, as well as short service lead times. This is shown by the highest assessment in statement number 13, which is 8.86 that the needs of respondents are responded to quickly at orthopedic general polyclinics.

Meanwhile, the lowest assessment was obtained from statement number 16 of 7.82 regarding the waiting time to get services was very short. The proof of the online reservation service has stated what time the patient is asked to check in and the estimate is called by the doctor. However, often patients come not in accordance with the instructions stated on the proof of service. For example, patients come too early and this causes patients to feel that the time to arrive at the hospital until they are called by the doctor to get services feels too long. Online reservations are a medium that is expected to be able to reduce the length of waiting time for patients to get services at the hospital. Based on existing research, the use of online reservations has a significant effect on the timeliness of services at polyclinics with a percentage of 57% (Sodik, 2023).

Dimension of Quality of Service Assurance

The assessment of the results of the study on the assurance dimension shows that the respondents 'Strongly Agree' with the existing statements. The assessment is shown through an average score of 8.9. Respondents were very satisfied with the service that online reservations provided a feeling of safety and comfort. The feeling of being safe and comfortable when entering personal identity data into the online reservation application makes patients feel confident and encourages patients to use this facility again for their next visit (Sari, 2023).

Dimension of Empathy Service Quality

The empathy dimension has the highest rating compared to other dimensions with a mean value of 9. This shows that respondents are very satisfied with the online reservation service at the orthopedic general polyclinic. The highest score of 9.16 was obtained on the statement that respondents were confident that the doctors in the orthopedic polyclinic had adequate qualifications. The lowest score was 8.79 regarding the statement that the patient felt heard and understood by the parties involved in the orthopedic polyclinic.

Patients who use online reservations are satisfied with the doctor chosen to treat their disease complaints. Patients also feel heard, understood, and remembered about the complaints they need. The services provided not only include complaints of diseases related to the field of orthopedics, but also related to the administration and flow of patient services. Clear statements and information through online reservations also motivate patients to regularly seek treatment and reduce anxiety about the treatment process that patients undergo at the orthopedic polyclinic of Fatmawati Hospital (Alamsyah, 2019).

Patient Satisfaction Overview

The patient satisfaction analysis was carried out to determine the general level of satisfaction of respondents with the quality of service at the Orthopedic General Polyclinic of Fatmawati Hospital in 2024. Data were obtained from respondents' answers to question IV.1 of the questionnaire. In the questionnaire there are 10 answer options about the level of patient satisfaction. Then the answer was divided

into 2 groups, namely satisfied and dissatisfied. The results of the analysis of respondent satisfaction data showed that 90.5% of respondents stated that they were satisfied with the quality of services provided at the Orthopedic General Polyclinic of Fatmawati Hospital, and 9.5% stated that they were not satisfied. Efforts to improve online reservation services at the Orthopedic General Polyclinic of Fatmawati Hospital, analysis of patient satisfaction levels by using

Bivariate and multivariate analysis methods are very necessary

Patient satisfaction generally means an impression that can be poured into the form of an assessment of the events experienced by a person. In this study, satisfaction was focused on patient assessment when using online reservation services at the orthopedic polyclinic of Fatmawati Hospital in 2024. Satisfaction can also be measured through the difference between expectations and reality felt by a person. However, the one used in this study is in line with Sari's (2023) research, which is to use a scoring scale or assessment and state directly on the closed choice of 'Satisfied' or 'Dissatisfied'. Patient satisfaction is essential in improving hospital performance and achievement. The advantages obtained from the high assessment of satisfaction with the use of online reviews include hospitals being able to compete in developing innovations between hospitals, obtaining as many consumers as possible, increasing hospital revenue, improving employee welfare, and customers becoming happy, trusting, confident and loyal to visit again (Sodik, 2023). Yang's (2019) research also showed that the number of hospital visits has increased by 59.7% since the implementation of the use of online reservations. A similar study was also conducted by Kucok (2021) which stated that there has been a lot of increase in patient satisfaction since the online reservation system has increased from 49% in the manual reservation system to 71.7% in the online reservation.

Bivariate Analysis of Respondent Characteristics with Patient Satisfaction

Determination of patient satisfaction levels through bivariate analysis was used to identify the relationship between respondent characteristics consisting of variables of age, gender, education, occupation, payment methods, and frequency of use of online reservations with patient satisfaction. This study aims to determine whether these characteristics are a disruptive factor or not in determining patient satisfaction. The results of the bivariate analysis showed that only the age variable had a correlation that was significant with patient satisfaction. Thus, the age variable is considered a confounding factor or interfering with patient satisfaction. Thus, to find out how satisfied patients are with the online reservation service at the orthopedic polyclinic of Fatmawati Hospital, the age factor must be considered.

Patient satisfaction is the customer or patient feels that the health services and facilities provided by the hospital are in accordance with the level of expectations and needs they want. This is also a benchmark for a health service to be declared successful or not in providing customer needs. A high level of patient satisfaction can also increase the number of visits as well as hospital revenue. Hospitals will also get a good image in the community (Sari, 2023). The age of the respondents affected patient satisfaction with the online reservation service at the orthopedic polyclinic of Fatmawati Hospital 2024. As the body grows older, the functions of organs and structures are also deteriorating. Therefore, the number of hospital visitors in old age is more than young. A person with old age is more likely to accept circumstances

than at a young age. They also have more open minds and feelings as well as lower demands and expectations from a young age. So it can be concluded that elderly patients or visitors feel satisfied more quickly (Arifin, 2019).

Bivariate Analysis of Respondent Characteristics with Service Quality Dimension

This bivariate analysis was conducted to determine the relationship between respondent characteristics (age, gender, education, occupation, payment methods, and frequency of use of online reservations) and the dimension of service quality. The analysis was carried out to answer the research question whether the characteristics of the respondents were a confounding factor or not from the dimension of service quality. From the results of this study, several conclusions were obtained as follows:

- 1) There is a meaningful relationship between the respondent's age variable and the tangible service quality dimension so that the age variable is a confounding factor of the tangible dimension. This shows that for the tangible dimension in the online reservation service at the orthopedic polyclinic of Fatmawati Hospital, the age of the respondent must be considered.
- 2) There is a meaningful relationship between the respondent's gender variable and the dimension of service quality reliability so that the gender variable is a confounding factor in the reliability dimension. This shows that for the reliability dimension in the online reservation service at the orthopedic polyclinic of Fatmawati Hospital, the gender of the respondent must be considered.
- 3) There is a meaningful relationship between the education variable and all dimensions of service quality so that the education variable is a confounding factor in all dimensions of service quality. This shows that the results of this study support the theory that service quality is a predictor of patient satisfaction by considering the respondents' education.
- 4) There is a meaningful relationship between the variable frequency of online reservation use and all dimensions of service quality except for the tangibles and responsiveness dimensions. So that the variable frequency of online reservation use is a confounding factor for all dimensions of service quality except for tangibles and responsiveness dimensions. This shows that for the dimensions of service quality, reliability, assurance, and empathy in online reservation services at the orthopedic polyclinic of Fatmawati Hospital, it is necessary to consider the frequency of online reservation use.

Tangibles is a dimension of service quality theory that refers to the examination of physical facilities (Rahmawati, 2023). Patient satisfaction is related to the quality of service and focuses on the facilities available in health care facilities. By knowing the level of patient satisfaction, management of health care providers can improve the quality of service. From the above theory, we can conclude that the better the facility, the greater the impact on patient satisfaction. Satisfied patients will also recommend the health services they get to others and their families. It can also encourage the development of medical facilities. Respondents with old age are satisfied more quickly, therefore in the next study they can consider age characteristics (Arifin, 2019).

Reliability is a dimension that focuses on assessing promising services. The meaning of promising service is service that is reliable, accurate, and consistent. In this study, the female gender population is more than men. So that these variables

can affect the assessment of satisfaction and service quality of the reliability dimension. Satisfaction is literally an emotional state or a person's feelings towards service so that women look more gentle, anxious, loving, sensitive, sentimental. Meanwhile, men's emotions are more ignorant, rude and unemotional (Araujo, 2022).

Hayuningsih's research (2018) states that education level has a significant relationship with service quality and patient satisfaction. According to Jacobalis in Hayuningsih (2018), the level of education can affect a person's rational and irrational thinking patterns when making decisions and seeking medical services. People with lower levels of education are more likely to feel contradictions (not holding positions) and are more susceptible to contradictions than people with higher levels of education.

The use of online reservations, which is increasingly stated to be able to affect patient satisfaction. This is because the use of online reservations can improve the efficiency of relationships and communication between health care providers and patients (Nasution, 2020). Online reservations are also able to simplify and speed up transaction activities at the orthopedic polyclinic of Fatmawati Hospital. So that patients who receive treatment tend to use online reservations on their next visit.

The Relationship between the Dimension of Service Quality and Patient Satisfaction

From the results of the analysis, it can be concluded that there is a meaningful relationship between the dimension of service quality and satisfaction. According to Prayoga (2021), service quality is when the services provided by health service providers to patients have met expectations even more than perfect. The characteristics of products and services that are totality can affect high patient satisfaction. The higher the assessment of patient satisfaction, the higher the quality of service received, and vice versa. Putri's research (2022) also stated the same statement that service quality affects customer satisfaction and loyalty to get the same service back.

Multivariate Analysis

Multivariate analysis is an analysis to look at the relationship between several independent variables and dependent variables to find out the factors that are closely related or the most dominant in relation to the dependent variable. Based on the results of the Multiple Linear Regression Test, it was concluded that the empathy dimension is the most dominant independent variable related to the dependent variable in this study, namely patient satisfaction. This can be seen from the results of this study where the respondents are confident with the doctor chosen when making an online reservation that the doctor has adequate qualifications.

Empathy is a form of care provided by health care facilities to patients. This is also assessed from the extent to which hospitals are able to establish good communication with patients so that they feel that their needs are met (Rahmawati, 2023). They think that the services of doctors and medical personnel can relieve patients' anxiety, successfully handle patient complaints, and provide advice and enthusiasm for patients, as well as taking the time to give personal advice about their illness. Empathy is related to patient satisfaction and quality of service. Patient complaints that are handled appropriately by medical personnel should involve an honest attitude. Caring personally or individually for the patient and communicating

both with the patient and the patient's family makes the patient feel cared for. The effectiveness of good communication between doctors and patients has an impact on health, well-being, increased patient satisfaction, reduced risk of medical errors, and conflicts and controversies between doctors and patients (Walean, 2022).

Research by Kusumawati (2023) revealed that the dimension of empathy is significantly related to patient satisfaction. Empathy is providing sensitive and individualized services according to the patient's needs and expectations. The empathy and compassion of healthcare workers affect the patient's emotions and of course affect their level of adherence to the treatment plan. This level of adherence ensures that the treatment plan is successful, the patient's expectations are met, and the patient is satisfied with the care they receive. Empathy is recognition of the patient, based on politeness and friendliness in providing sensitive and individualized service, responding to the patient's needs, and helping the patient even when he or she does not ask for it. Most patients consider the staff at the orthopedic polyclinic of Fatmawati Hospital to be friendly, polite, polite, and always responsive to the needs of patients when providing services.

CONCLUSION

This research concludes that patient satisfaction with the use of online reservations in the orthopedic general polyclinic at Fatmawati Hospital in 2024 is significantly influenced by specific demographic characteristics and service quality dimensions. Most users of the online reservation system are older adults, predominantly female, with low education levels and non-working status. The majority of respondents used non-cash payment methods and had previously used online reservations more than three times. Overall, satisfaction with the service was high, with 90.5% of respondents expressing general satisfaction. Among the service quality dimensions measured using the SERVQUAL model, empathy had the strongest influence on patient satisfaction, with a Beta value of 0.251 and a significant p-value of 0.035, while the overall model explained 16% of the variation in satisfaction. Age, gender, education, and frequency of system usage were also found to be significantly associated with various dimensions of service quality. These findings highlight the importance of enhancing empathetic service delivery and understanding user demographics to improve patient experiences with digital healthcare services. For future research, it is recommended to explore qualitative insights into patient perceptions and barriers to technology use, as well as to evaluate the long-term impact of online reservation systems on clinical efficiency and health outcomes.

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