EVALUATION OF PATIENT SATISFACTION AND THE SERVICE QUALITY OF THE OUTPATIENT CARE

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Abstract

Background and aims: Healthcare management is under increasing pressure to demonstrate that their services are patient-focused and directed to providing the best possible health care for their patients. Consequently, it has become prudent for hospital management to understand and measure the patient's perspectives so that any perceived gap in the delivery of service is identified and suitably addressed with constrained resources. Therefore, Research on patient satisfaction with outpatient service quality at hospitals has been undertaken in both developed countries and developing countries. However, there remains a paucity of studies evaluating patient satisfaction services. This study aims to assess the levels and determinants of patient satisfaction with outpatient care. **Methods**: A cross-sectional descriptive survey was conducted in the outpatient waiting areas of a hospital in the Eastern Province of KSA from March to June 2022. Patients and relatives were face-to-face interviewed on satisfaction questionnaires. **Results**: The satisfaction of patients and relatives about the quality of outpatient care was high, reaching an average of 87.3 percent of patients' expectations with a minimum of 50 to 100. The booking appointments via phone/online services, long times waiting, and toilet/drinking water facilities are also the lowest level of satisfaction. "The transparency of the information", "the behavior and competence of medical staff and service staff", and "the quality of the medical infrastructure and facilities" are three dimensions that impacted patient satisfaction. **Conclusions**: Overall most of the patients positively evaluated the outpatient services but there are still some aspects of healthcare services that need to improve such as the booking services, the toilet and drinking facilities, the long waiting times, and more transparent information. **Recommendations:** Healthcare managers should improve the technical quality of care to book an appointment, make more investments in the system infrastructure to reduce the waiting times;

Keywords: Patient Satisfaction, Quality of Healthcare, Outpatient Care, Healthcare Services.

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Introduction

The patient has been regarded as a consumer and patient satisfaction is one of the important factors that determine the quality of healthcare facilities [1-3]. Many studies have considered patient satisfaction as a quality measurement tool for healthcare providers [4-6]. Patient satisfaction was measured by measuring many factors, which are usually reported by the patient, and the results would be evaluated by the researchers to implant new programs and policies that hopefully would improve the patients' satisfaction for better outcomes [7-10]. Those factors include all the services that are provided by the employees, nurses, and doctors, also, they reflect the patients' thoughts about the general appearance, cleanliness, quietness, and waiting time [10].

Satisfaction can be measured at a clinic base (outpatient), primary health care (PHC) centers, or even in larger hospitals, all are directed to identify the points of defect in the health care system and thus, aim to improve them [9, 10]. Patient satisfaction is an important factor that should be studied frequently as indicated in a PHC-based study that was carried out in Majmaah, Saudi Arabia. The main findings of the study showed a high level of satisfaction that reached 82% [7]. In PHC centers, the patients were satisfied with the enablement, and the most unsatisfying factor was poor continuity of care by the physician [10].

In Najran, Saudi Arabia, nurses' services and care had the highest score of satisfaction in private tertiary hospitals. In the same study, the general satisfaction was found to be high as well (3.91 out of 5) [11]. Regarding waiting time, in a prospective study in central Saudi Arabia, waiting time was considered the most important factor in the care of patients attending the emergency department [12]. High satisfaction levels continued to be present also in the capital of Saudi Arabia's tertiary centers. The only factors that have made patients unsatisfied were doctors not introducing themselves or explaining the procedures [13]. The same findings were introduced by a study in Riyadh PHC centers, where physicians didn't explain the patients' medical conditions properly [14]. Despite the literature findings of high satisfaction levels in Saudi Arabia. In Taif, it was found to be low [15]. While private hospital attendants had slightly higher levels of satisfaction [16].

The patient satisfaction measurement serves three purposes (Kulkarni, 2018) [17] (a) to reflect the quality of healthcare services from the patient's perspective, (b) to identify problem areas in healthcare organizations and generate ideas for solutions, and (c) to evaluate healthcare. In an extensive electronic search of the literature, we found that tools developed to measure patient satisfaction have generally taken one of two forms: episode-specific or general (Kulkarni, 2018). The Service Quality (SERVQUAL) scale has been widely used to measure the quality of medical services [4, 18].

In Saudi Arabia, many studies have been done to evaluate the general satisfaction of patients, and many of them were done in PHC centers or tertiary centers. Patients' satisfaction is considered an important indicator of how well health services are performing, as it can forecast both compliance and use. As a result, the restructuring of healthcare systems operating globally has focused on strategies for increasing patient satisfaction.

Therefore, this study focuses on providing empirical evidence to assess the levels and determinants of patient satisfaction with outpatient care. In this study, the patient's satisfaction is assessed in terms of two objectives:

1. To assess patient satisfaction regarding the services provided in the outpatient department;
2. To assess patient satisfaction among different socio-demographic characteristics of patients.

Methodology

A cross-sectional descriptive survey was conducted in the outpatient waiting areas of a hospital in the Eastern Province of KSA. Among patients attending the outpatient department (OPD) during the period from March to June 2022. Patients and relatives were face-to-face interviewed on satisfaction questionnaires. The sample comprised 401 new patients of all ages attending the outpatient department. A simple random sampling technique was used to select patients attending different specialty departments.

The respondents were interviewed at the exit point of the outpatient department after obtaining informed consent. Patients not willing to participate and follow-up patients were excluded from the study. The patients and accompanying persons either parents or relatives for pediatric age less than 15 years were interviewed at the exit point of the hospital after taking informed consent. The data were collected based on the Ministry of Health (MOH) questionnaire and without interference from staff.

This study was approved by the University Ethics Review Committee and the hospital administrator. The patients were told that the purpose of the study was to assess patient satisfaction with services provided by the hospital to bring further improvement in services. The patients were also told that the investigator was not part of the treatment team and they were free to give their

responses.

Instruments of collecting data for service quality and patient satisfaction which employed the scales designed by MOH to suit reality to measure the quality of medical examination and treatment services in KSA. The questionnaire used in our study consists of two main parts; the first part is about the personal information of the patient, and the second part includes questions about the patient's evaluation of healthcare service quality, his/her satisfaction with the healthcare services and the intention of coming back to the Institute. or introducing the treatment to others.

The MOH scale is a self-report questionnaire that consists of statements that cover the experiences of patients in the outpatient department in the following five domains: Accessibility to services (5 items), Transparency of information (10 items), Medical infrastructure and facilities (8 items), Competence of medical and non-medical staff (4 items) and Outcome of service delivery (4 items). The validity and reliability of the questionnaires were determined.

Data analysis: The proportion of respondents answering each item was recorded. The total score for each domain and overall scale was obtained by averaging the scores of the constituent items. To test the proposed hypotheses, we ran multiple linear regression analyses using the overall patient satisfaction score and the patient satisfaction for the outcome of service delivery as two dependent variables. The independent variables were the four dimensions of service quality (i.e., accessibility to healthcare services, transparency of information, the competence of healthcare staff, the medical infrastructure and facilities, and the outcome of health service delivery).

Multivariable logistic regression [3] was employed to test the differences in dissatisfaction proportion between each patient's characteristics group. Dissatisfaction in this study was defined as the total score for the overall scale lower than 4. All of our

Patient satisfaction was classified according to the Likert scale, with five levels:
- Level I: Very unhappy, very bad, very disagree.
- Level II: Not satisfied, not good, disagree.
- Level III: Acceptable.
- Level IV: Satisfied, good, agree.
- Level V: Very satisfied, very good, very agree.

There is the question for a patient to rate from 1 to 5 to whether "I would return to the Institute again". The patients choose whether they would like to come back or introduce services to others. In addition, this study employed a one-item scale ranging from 0 to 100 measuring overall patient satisfaction score with the quality of healthcare services. The respondents were asked to indicate their level of agreement with the statement "Overall I am satisfied with the quality of healthcare services in the hospital". Although a multiple-item measure like a 5-point Likert scale would often be desirable, the literature has suggested that employing single-item measures of global satisfaction [19].

hypothesis tests were acceptable at type I error proportion less than 0.05.

Results

Table (1) shows the characteristics of participant patients in for 401 completers. Out of 401 respondents, there were 155 males (38.7 %) and 246 females (61.3%). A majority of patients belonged to the age group 18-59 years with a mean age of 51.85± 22.3. The sample covered a wide range of ages from 15-92 years. 91.8 % of respondents were patients themselves and 8.2% of respondents were accompanying persons either parents or relatives for pediatric age less than 15 years of age. Nearly half of patients held health insurance (45.6%). About more than half of patients (65.6%) live less than 200 km from home to the hospital.

Table (1): The socio-demographic characteristics of patients (N= 401)

Socio-demographic variable	Frequency	%
Response types:		
Patients	365	91.8
Relatives	36	8.2
Gender:		
Male	155	38.7
Female	246	61.3
Age range (years)	Mean (SD): 51.85± 14.9	Range: 15-92
<18	8	2.0
18-59	214	53.4
≥60	179	44.6
Insurance:		
Yes	183	45.6

Socio-demographic variable	Frequency	%
No	218	54.4
Distance from home to the Institute:		
<200	263	65.6
≥ 200	138	34.1

Patients' satisfaction with service quality

Satisfaction was adequate for all the domains of healthcare services relating to the accessibility of healthcare services, transparency of information, the quality of facilities, the competence of medical staff, and the outcome of service delivery. The distribution of patient respondents was similar across five domains. More than half of the patient's responses were attributable to a score of 4 or 5 indicating that the patient was satisfied or extremely satisfied with the services. Table (2) shows the distribution of responses from the respondents according to the accessibility of healthcare services, indicating that the respondents were satisfied with the clear diagrams, signs showing directions to the departments and rooms in the hospital, clear blocks and stairs to find, and the flat pathways to move around. The patients were well-informed about the time to visit. However, about 30% of respondents were not satisfied with booking services via phone, and website as the CMI has not presently implemented the booking via online services.

Table (2): Distribution of responses from the respondents according to the accessibility of healthcare services

Items of care	Frequency (%)					Mean ± SD
	1	2	3	4	5	
1. Diagrams, signs showing directions to the departments and rooms in the hospital are clear and easy to understand, and easy to find	0.3	2.0	8.7	57.1	31.9	4.18 ± 0.69
2. Time to visit patients is clearly informed	0.3	1.0	10.7	55.3	32.7	4.19 ± 0.68
3. Blocks, stairs, and rooms are clearly numbered and easy to find	0.3	1.2	13.4	52.4	32.7	4.16 ± 0.71
4. The pathways in the hospital are flat and easy to move around	0.3	0.7	13.9	52.4	32.7	4.16 ± 0.70
5. Customers can find out information and register for examination by phone, the website of the hospital conveniently	0.3	1.7	25.7	51.1	21.2	3.91 ± 0.74
Accessibility of healthcare services (Average)						**4.12 ± 0.58**

Note: 5=Strongly Agree, 4=Agree, 3=Neither Agree nor Disagree, 2=Disagree, 1=Strongly Disagree

Table (3): The distribution of responses from the respondents according to the transparency of information and procedures for medical examination and treatment shows that most of the respondents were satisfied with the well-informed processing of consultation, the clear quoted price of consultation, and the welcomed spirit of the staff. However, concerning the waiting times, about 35% of patients were not happy with the waiting time for registration, seeing the doctors, getting the investigation check from OPD, and the time taken to get the results from investigations. One explanation for the long waiting times was the lack of doctors who specialized in heart problems against the number of patients visiting the Institute.

Table (3): Distribution of responses from the respondents according to the transparency of information and procedures for medical examination and treatment

Items of care	Frequency (%)					Mean ± SD
	1	2	3	4	5	
6. The medical examination process is clearly and publicly available and easy to understand	0.5	1.0	8.5	49.9	40.1	4.28 ± 0.70
7. The procedures and procedures for the medical examination have been reformed to be simple and conveniently	0.5	1.0	15.9	48.9	34.7	4.15 ± 0.75

Items of care	Frequency (%)					Mean ± SD
	1	2	3	4	5	
8. Prices of medical services are clearly and publicly listed	0.3	0.3	10.2	51.8	37.4	4.26 ± 0.67
9. Medical staffs welcome and guide patients to make affable procedures	0.5	0.7	13.0	56.4	29.4	4.13 ± 0.69
10. Assess the lining up in the order first after the procedures for registration, payment, examination, testing, screening	0.5	1.2	17.0	52.6	28.7	4.08 ± 0.74
11. Assess the waiting time for registration procedures	0.5	5.0	29.7	41.9	22.9	3.82 ± 0.86
12. Assess the waiting time for the doctor's turn to see	0.5	5.3	28.9	46.1	19.2	3.78 ± 0.83
13. Assess the time to be examined and advised by a doctor	0.3	2.0	26.4	49.6	21.7	3.91 ± 0.76
14. Assess waiting time for testing and screening	1.0	8.0	29.9	42.9	18.2	3.69 ± 0.89
15. Assessing the waiting time for receiving results of tests and screenings	0.7	6.2	25.5	48.9	18.7	3.79 ± 0.84
B. Transparency of information and procedures for medical examination and treatment (Average)						**3.99 ± 0.59**

Note: 5=Strongly Agree, 4=Agree, 3=Neither Agree nor Disagree, 2=Disagree, 1=Strongly Disagree

Table (4) Distribution of responses from the respondents according to the quality of the medical infrastructure and facilities shows that most of the respondents were satisfied with the conditions of the waiting room, the patient's privacy was kept confidential when the investigation was taken, the CMI ensures the security to prevent theft, and creates the green campus surrounding the Institute. However, 54.1 % of patients were not happy with the toilet and drinking water facilities in OPD.

Table (4): Distribution of responses from the respondents according to the quality of the medical infrastructure and facilities

Items of care	Frequency (%)					Mean ± SD
	1	2	3	4	5	
16. Having a clean, cool lounge/lounge in the summer; Airtight and warm in winter	0.7	1.3	20.5	46.4	31.2	4.06 ± 0.79
17. The waiting room has enough seats for the patients and relatives and is in good use	0.0	4.5	22.2	44.4	28.9	3.98 ± 0.83
18. The waiting room has a full fan (air conditioner) in regular operation	0.0	1.2	25.2	44.4	29.2	4.01 ± 0.77
19. The waiting room has facilities to help patients feel comfortable such as television, pictures, leaflets, drinking water ...	0.0	2.0	23.7	50.9	23.4	3.96 ± 0.74
20. The CMI guarantees privacy for the patient's medical examination, screening, procedures	0.0	1.7	18.5	53.4	26.4	4.04 ± 0.72
21. The toilets are convenient, in good use, and clean	10.0	13.7	30.4	28.4	17.5	3.30 ± 1.19
22. The environment campus surrounding the CMI is green, clean, and beautiful	0.3	1.7	11.0	51.1	35.9	4.21 ± 0.72
23. Medical examination and treatment areas ensure security, and order and prevent theft from people	0.3	2.5	16.2	55.6	26.4	4.05 ± 0.73
C. The quality of the medical infrastructure and facilities (Average)						**3.95 ± 0.65**

Note: 5=Strongly Agree, 4=Agree, 3=Neither Agree nor Disagree, 2=Disagree, 1=Strongly Disagree

Table (5): Distribution of responses from the respondents according to the behavior, and professional competence of medical and service staff shows that most of the respondents were satisfied with the doctor and nurse attitude and communications with an average score of 4.20 ±

0.60 (out of 5). The patients felt satisfied with the doctor's explanation and the doctor's professional

care. The patients were respected by the doctors, nurses, and service staff.

Table (5): Distribution of responses from the respondents according to the behavior, and professional competence of medical and service staff

Items of care	Frequency (%)					Mean ± SD
	1	2	3	4	5	
24. Doctors and nurses have the polite words, attitudes and communication	0.3	0.3	13.0	52.8	33.6	4.19 ± 0.68
25. Service staff (nurse, guard, accountant ...) have the right words, attitudes and communication	0.0	1.5	14.2	54.1	30.2	4.13 ± 0.70
26. Be respected by medical staff, treat them fairly, care and help	0.0	0.5	12.2	54.1	33.2	4.20 ± 0.66
27. Professional qualifications of doctors and nurses meet expectations	0.0	0.3	9.5	51.6	38.6	4.29 ± 0.64
D. Behavior, professional competence of medical and service staff						**4.20 ± 0.60**

Note: 5=Strongly Agree, 4=Agree, 3=Neither Agree nor Disagree, 2=Disagree, 1=Strongly Disagree

Table (6) the distribution of responses from the respondents according to the outcome of service delivery shows that the respondents expressed high satisfaction with the outcomes of consultations, examinations, and medication. The invoices and the outcomes were delivered in full and clear in detail. The respondents expressed trust in the quality of healthcare and satisfaction with the price of healthcare.

Regarding the one-item scale of overall patient satisfaction (Table 6), the average score of overall patient satisfaction level was 87.3 with a minimum of 50 to 100. The distribution of overall satisfaction level was divided as follows: 73% of respondents selected between 70 points to 100 points (good to excellent), 22% selected between 50 points to 70 points (average), and 5% chose less than 50 points (poor service). In this study, 94% of respondents answered "yes" to the question: "Would you recommend this hospital to friends and family?"

Table (6): Distribution of responses from the respondents according to the outcome of service delivery, and the one-item scale of patient satisfaction level

Items of care	Frequency (%)					Mean ± SD
	1	2	3	4	5	
28. The results of the examination met the expectations of patients	0.3	0.3	8.7	48.8	41.9	4.32 ± 0.66
29. Invoices, receipts, prescriptions and medical examination results are provided and explained in full, clear, transparent	0.3	0.7	10.0	46.1	42.9	4.31 ± 0.70
30. Assess the level of trust in the quality of health services	0.3	0.3	8.0	50.3	41.1	4.32 ± 0.65
31. Assess the level of satisfaction with the price of medical services	0.0	0.0	10.0	49.4	40.6	4.31 ± 0.64
E. The outcome of service delivery						**4.31 ± 0.61**
F. One-item scale of overall satisfaction level (0 -100)						**87.3 ± 11.72 Range: 50 - 100**

Note: 5=Strongly Agree, 4=Agree, 3=Neither Agree nor Disagree, 2=Disagree, 1=Strongly Disagree

The association of service quality and patient satisfaction

Table (7) presents the results of multiple regression analysis with overall patient satisfaction as a dependent variable. These results showed that patients' satisfaction with outpatient services was explained significantly by three components of

healthcare services. The regression results confirmed the positive impact of "the transparency of information", "the competence of medical staff", and "the outcome of service delivery" on patient satisfaction: β= 3.10 (p <0.05); β = 2.79 (p < 0.05) and β = 6.05 (p < 0.001) respectively.

The regression model was found to be significant

($F = 40.22$, $p < 0.001$), accounting for 33% of the variance in the data. In the table above, the variable "the outcome of service delivery" had the strongest relationship with the dependent variable, since its standardized beta is the highest (0.312) followed by the "transparency of the information". All of the variables have the variance inflation factor (VIF) lower than 4 indicating that there are no collinearity issues. The general rule of thumb is that VIF exceeding 4 warrants further investigation [20].

Table (7): The association of Service Quality and Patient Satisfaction

Service quality dimensions	Unstandardized beta (B) beta (SE B)	Standardized beta (β)	P-values	VIF
Constant	32.6095 (4.1284)		<0.0001***	
A: Accessibility of healthcare service	0.5329 (1.2110)	0.026	0.6601	2.14
B: Transparency of information	3.1057 (1.2757)	0.158	0.0154*	2.50
C: The quality of the medical infrastructure and facilities	0.5883 (1.1617)	0.032	0.6128	2.45
D: Competence of medical and service staff	2.7861 (1.3569)	0.142	0.0407*	2.86
E: Service delivery outcome	6.0516 (1.2483)	0.312	<0.0001 ***	2.48

Adjusted $R^2 = 0.33$; F (5, 395) = 40.22; p<0.001   SE: Standard errors are reported in parentheses.
*, **, *** indicate significance at the 90%, 95%, and 99% levels, respectively VIF: Variance inflation factor

Table (8) presents the second regression analysis with the outcome of service delivery as a dependent variable. These results confirmed the positive impact of "transparency of information" ($\beta = 0.12$, $p < 0.05$), and "the competence of medical and service staff" ($\beta = 0.61$, $p<0.05$). In addition, the study found a significant impact on the quality of the medical infrastructure and facilities for the "outcome of service delivery" ($\beta = 0.17$, $p < 0.05$).

Table (8): The association of Service Quality and the outcome of service delivery

Service quality dimensions	Unstandardized beta (B) beta (SE B)	Standardized beta (β)	P-values	VIF
Constant	0.94061 (0.15933)		<0.0001	
A: Accessibility of healthcare service	-0.08653 (0.04856)	-0.083	0.07	2.12
B: Transparency of information	0.12010 (0.05100)	0.12	0.02*	2.47
C: The quality of the medical infrastructure and facilities	0.16883 (0.04599)	0.18	0.000275***	2.36
D: Competence of medical and service staff	0.61458 (0.04505)	0.60	<0.0001***	1.95

Adjusted $R^2 = 0.593$; F (4, 396) = 146.7; p<0.001
Sig.: Significance test of Multivariable Linear regression Standard errors are reported in parentheses
*, **, *** indicates significance at the 90%, 95%, and 99% level, respectively

Differences in patient satisfaction according to the socio-demographic characteristics of patients

The multivariable logistic regression was applied to examine the patient satisfaction according to different socio-demographic characteristics of patients. The "outcomes of service delivery" were categorized as "dissatisfaction" for the responses that were rated (1, 2, 3) according to the Likert scale and for 4 and 5 for the "satisfaction". **Table (9)** showed that there were no significant differences in patient satisfaction between gender, age groups, having insurance or not, or the distance from home to the hospital.

Table (9): Comparison of mean satisfaction scores according to the socio-demographic characteristics of patients

Patient's characteristics		Dissatisfaction n (%)	Satisfaction n (%)	OR (95% CIs)	p- value
Response type	Patients	175 (48.9)	183 (51.1)	1	
	Relative	17 (53.1)	15 (46.9)	1.18 (0.57 - 2.44)	0.646
Gender	Male	8 (34.8)	81 (38.9)	1	
	Female	15 (65.2)	123 (61.1)	0.55 (0.15 - 1.76)	0.335
Age groups (years)	<18	0	8 (2.1)	1	
	18-59	14 (60.9)	200 (52.9)	0.91 (0.27 - 2.93)	0.874
	≥60	9 (39.1)	170 (45.0)	1.61 (0.37 - 6.95)	0.522
Insurance	Yes	15 (65.2)	168 (44.4)	1	
	No	8 (34.8)	210 (55.6)	2.53 (0.82 - 8.48)	0.115
Distance from home to hospital	<200	15 (65.2)	248 (65.5)	1	
	≥ 200	8 (34.8)	130 (34.4)	1.02 (0.40 - 2.41)	0.969

Note: 95% CIs: 95% confidence intervals OR: Odds ratios of demographic characteristics of respondents

Discussion

The analysis reveals that patients are satisfied with the outpatient facilities provided at the Hospital. The degree of patient satisfaction with the service quality was at an acceptable level from the accessibility of healthcare services, the transparency of information and procedures for medical examination and treatment, the quality of the medical infrastructure and facilities, the behavior, professional competence of medical and service staffs, the outcome of service delivery.

Most of the patients were not happy with the booking services via phone, website, and online services, the long waiting times to get registered, to see the doctors, to do the investigations and receive the results, and also the condition of the toilet and drinking water facility in OPD. These issues have also been encountered in studies in developing countries [6, 17]. These findings are in line with the study conducted by Nguyen & Mai, (2014) [21] shown that the majority of patients expressed satisfaction with their care, with a few responding negatively to any given items [21]. However, this positive appreciation might have resulted from patients being unwilling to express dissatisfaction for fear of displeasing staff and experiencing even worse service in the future [22].

In addition, this study focused on investigating the relationship between service quality and patient satisfaction. The findings indicated that three service quality dimensions, "the transparency of information", "the competence of medical staff" and "the quality of the medical infrastructure and facilities" significantly determined patient satisfaction and the outcome of service delivery. The results of our research, in line with the findings by Nguyen & Mai, (2014) [21], confirmed the impact of "competence of professional staff" and "facilities and tangibles" on patient satisfaction. The importance of tangible elements such as

booking facilities, electronic medical equipment, and infrastructure influences patient satisfaction. From the same point of view, previous studies [23-25] reported that the highest expectations and perceptions were observed in the tangible dimension, as it is concerned with the physical infrastructure of care at private hospitals in Jordan, Saudi Arabia, Iran, and Malaysia.

Our study also provides empirical evidence for the strong impact of the competence of medical staff and doctors and the transparency of information to improve patient satisfaction. Of the socio-demographic assessed, the results of our study could not demonstrate the noted differences in satisfaction between age groups, gender having insurance or not, and distance from home to hospital.

The findings from this study contribute to a better understanding of the quality of outpatient services provided and their impact on the level of patient satisfaction. Therefore, healthcare managers should pay attention to improving the elements of facilities and services, especially the bed, water drinking, and toilet conditions. The MOH should consider implementing electronic booking to reduce the waiting time for registration and consultation. It is also very important to continue to promote an attitude of medical staff and doctors towards patients, as well as provide training to medical staff and physicians to enhance the speed of the process while still ensuring the quality of communication, skills/specialization, and transparent culture.

Recommendations:

1. Healthcare managers should improve the technical quality of care to book an appointment, make more investments in the system infrastructure to reduce the waiting times;

2. The physical environment should be improved to cleanliness;
3. Healthcare managers should enhance the inter-professional and inter-departmental collaborations.

Conclusion

Overall most of the patients positively evaluated the transparency of information regarding disease conditions and the competence of medical staff but there are still some aspects of healthcare services that need to improve such as the medical infrastructure, and electronic facilities to reduce the waiting times and enhance more transparent information to patients. This study provides empirical evidence to help healthcare managers make policies and develop action plan programs to improve the quality of service for patients.

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