

Evaluating patient satisfaction levels with urgent care provided in primary health care, Al-Ahsa, Saudi Arabia

Jumanah Abdulrahman Alessa ^{1, *}, Saja Khalifah AlSaqr ¹, Hamad Abdulaziz AlSubaie ¹, Abdulrahman Abdullatif Alarfaj ¹, Fatimah Sami Alnaim ², Reem Khalid Alkhateeb ², Anfal Abdulrahman Al Othman ², May Ahmed Bo khuwah ¹, Fai Khalid Alhussain ¹, Razan Mansour Alzahrani ¹ and Lama Abdullatif Aljafari ¹

¹ Department of Family Medicine, King Abdulaziz Hospital for national Guard in AlAhsa, Saudi Arabia.

² Medicine College, King Faisal University, AlAhsa, Saudi Arabia.

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Abstract

Background: Patient satisfaction is a key indicator of healthcare quality and reflects patients' perceptions of the services they receive. In urgent care settings within primary healthcare, satisfaction is influenced by multiple factors, including waiting time, communication, and service organization. Limited evidence exists regarding patient satisfaction with urgent care services in Al-Ahsa, Saudi Arabia.

Objective: To assess patient satisfaction with urgent care services in Primary Healthcare Centers under National Guard Health Affairs in Al-Ahsa, Saudi Arabia.

Methods: A cross-sectional study was conducted over three months at the Primary Health Care Center of King Abdulaziz Hospital, National Guard Health Affairs, Al-Ahsa. A total of 385 adult patients attending urgent care clinics were recruited using convenience sampling. Data were collected using a structured, validated, Arabic-translated questionnaire covering sociodemographic characteristics and satisfaction across multiple service domains, including access, reception, physician care, nursing care, diagnostics, pharmacy services, and facility cleanliness. Satisfaction was measured using a 5-point Likert scale. An overall satisfaction score was computed and categorized into low, moderate, and high satisfaction levels. Data were analyzed using SPSS version 28.0. Descriptive statistics, chi-square tests, Pearson correlation, and binary logistic regression were applied. Statistical significance was set at $p < 0.05$.

Results: A total of 385 participants were included. Most participants (90.4%) reported high satisfaction, while 9.6% reported moderate satisfaction, and none reported low satisfaction. Female participants demonstrated significantly higher satisfaction compared to males ($p = 0.049$). All service components showed significant positive correlations with overall satisfaction ($p < 0.001$), with the strongest associations observed for physician-related factors such as involvement in decision-making ($r = 0.861$). Logistic regression identified physician involvement in decision-making (ORA = 3.12, $p < 0.001$), physician attention (ORA = 2.85, $p < 0.001$), physician explanation (ORA = 2.67, $p < 0.001$), cleanliness (ORA = 2.14, $p < 0.001$), and nursing care (ORA = 1.96, $p < 0.001$) as significant predictors of high satisfaction.

Conclusion: Patient satisfaction with urgent care services in Al-Ahsa is exceptionally high. Physician communication and shared decision-making are the strongest determinants of satisfaction. Improving patient-centered communication and maintaining high standards of cleanliness and nursing care may further enhance patient experience in urgent care settings.

Keywords: Patient satisfaction; Urgent care; Primary healthcare; Saudi Arabia

* Corresponding author: Jumanah Abdulrahman Alessa.

1. Introduction

Patient satisfaction has become one of the most widely used indicators for evaluating healthcare quality and service performance [1]. It reflects patients' perceptions of care received and provides important feedback on the effectiveness, accessibility, and responsiveness of healthcare systems [2]. In modern healthcare models and within primary healthcare (PHC), patient-centered care is considered a core principle, where patient experience is increasingly recognized as essential for improving health outcomes and strengthening healthcare delivery systems [3].

Health Services Research Urgent care services within PHC settings play a critical role in reducing emergency department overcrowding by managing non-life-threatening conditions efficiently [4]. These services are planned to provide timely access to care, improve continuity, and enhance patient satisfaction through rapid assessment and treatment. However, multiple factors such as waiting time, communication with healthcare providers, staff behavior, and facility conditions can significantly influence patients' experiences and overall satisfaction with urgent care services. Primary Health Care [5-7]. Structural and organizational issues such as limited resources, staffing shortages, and long waiting times have been associated with reduced satisfaction levels in other settings [8, 9]. In urgent care settings specifically, recent evidence from Saudi Arabia has shown that although overall satisfaction is generally high, patients frequently express concerns regarding waiting time, parking availability, and involvement in clinical decision-making [10-12]. At the same time, physician interaction and nursing care are often rated positively, indicating variability across different dimensions of service quality [13, 14]. Despite increasing attention to patient experience in PHC systems, there remains limited evidence specifically evaluating patient satisfaction with urgent care services in the eastern region of Saudi Arabia. Given the potential differences in population characteristics, healthcare utilization patterns, and cultural expectations across regions, localized assessment is essential to inform quality improvement strategies. Therefore, this study aims to assess the level of patient satisfaction with urgent care services in primary healthcare centers within National Guard Health Affairs in Al-Ahsa, Saudi Arabia

2. Methods

A cross-sectional quantitative survey was conducted at the Primary Health Care Center of King Abdulaziz Hospital, National Guard Health Affairs, in Al-Ahsa, Saudi Arabia. The study was carried out over a period of three months following ethical approval. The target population included adults attending the urgent care clinics at the study site. Eligible participants were adults aged 18 years and older who visited the urgent care clinic during the study period. Patients younger than 18 years and those who did not complete the questionnaire were excluded from the study.

The required sample size was estimated at approximately 385 participants using the Raosoft sample size calculator, based on a 95% confidence level and a 5% margin of error. A convenience sampling technique was applied, where eligible patients were approached after completing their consultation and invited to participate until the target sample size was achieved. Data were collected using a structured, previously validated questionnaire adapted from a previous similar study. The questionnaire was translated into Arabic and administered through a Google Forms link to ensure accessibility and ease of completion. The tool consisted of sections covering sociodemographic characteristics, healthcare utilization, and satisfaction with different aspects of urgent care services. These included access and facility experience, reception and administrative services, physician-related care, nursing care, diagnostic services, pharmacy services, and cleanliness of the facility. Patient satisfaction was measured using a 5-point Likert scale ranging from 1 (very dissatisfied) to 5 (very satisfied). A pilot study was conducted before the main data collection to assess clarity, feasibility, and time required for completion of the questionnaire. Feedback from the pilot phase was used to make minor adjustments to improve comprehension and flow. Participants involved in the pilot study were not included in the final analysis. A total Cronbach's alpha of 0.75 was reported for the satisfaction scale.

Ethical approval was obtained from the Institutional Review Board of King Abdulaziz Hospital, National Guard Health Affairs, Al-Ahsa. Participation was voluntary, and informed consent was obtained electronically before questionnaire completion. All responses were anonymous and kept confidential, and data were used strictly for research purposes only.

3. Data analysis

Data were entered, cleaned, coded, and analyzed using the Statistical Package for the Social Sciences (SPSS) software version 28.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics were used to summarize the study variables. Categorical variables were presented as frequencies and percentages. Participants' satisfaction with urgent care services was assessed using multiple items measured on a 5-point Likert scale ranging from 1 (very dissatisfied) to 5

(very satisfied). An overall satisfaction score was calculated by computing the mean composite score of all satisfaction items for each participant. Based on equal interval classification, the overall satisfaction score was categorized into three levels: low satisfaction (1.00–2.33), moderate satisfaction (2.34–3.67), and high satisfaction (3.68–5.00).

The associations between participants' sociodemographic characteristics and overall satisfaction level were assessed using Pearson's chi-square test or Fisher's exact probability test, where appropriate. Correlation between satisfaction with individual healthcare service components and the overall satisfaction score was evaluated using Pearson correlation coefficient analysis. Binary logistic regression analysis was performed to identify independent predictors of high overall satisfaction with urgent care services, and the results were presented as adjusted odds ratios (AORs) with 95% confidence intervals (CIs). Statistical significance was determined at a p-value of less than 0.05.

4. Results

A total of 385 participants were included in the study (Table 1). Most responses were provided by the patients themselves (252, 65.5%), while 133 (34.5%) responses were provided by caregivers. Regarding age distribution, 72 (18.7%) participants were aged 18–25 years, 141 (36.6%) were aged 26–35 years, and 172 (44.7%) were older than 35 years. Female participants constituted 211 (54.8%) of the sample, while males represented 174 (45.2%). The majority of participants were Saudi nationals (377, 97.9%), whereas 8 (2.1%) were non-Saudi. Considering employment status, 224 (58.2%) participants were employees, 114 (29.6%) were unemployed, and 47 (12.2%) were students. Regarding educational level, 234 (60.8%) participants had university education or above, 123 (31.9%) had secondary education, and 28 (7.3%) had educational levels below secondary school. Most participants resided in Al Ahsa city (371, 96.4%), while 14 (3.6%) lived outside the city. Concerning marital status, 236 (61.3%) participants were married, 132 (34.3%) were single, and 17 (4.4%) were divorced or widowed. Additionally, 279 (72.5%) participants reported that the visit was not their first to the primary healthcare center, whereas 106 (27.5%) indicated that it was their first.

Table 1 Sociodemographic characteristics of participants attending urgent care clinics in Primary Health Care Centers at King Abdulaziz Hospital, Al-Ahsa, Saudi Arabia (n = 385)

Variable	Count (%)
Responder	
The patient	252 (65.5%)
Caregiver	133 (34.5%)
Age in years	
18–25	72 (18.7%)
26–35	141 (36.6%)
>35	172 (44.7%)
Gender	
Male	174 (45.2%)
Female	211 (54.8%)
Nationality	
Saudi	377 (97.9%)
Non-Saudi	8 (2.1%)
Employment	
Unemployed	114 (29.6%)
Student	47 (12.2%)
Employee	224 (58.2%)
Educational level	
Below secondary	28 (7.3%)

Secondary education	123 (31.9%)
University / above	234 (60.8%)
Residence	
In Al-Ahsa city	371 (96.4%)
Outside Al-Ahsa city	14 (3.6%)
Marital status	
Single	132 (34.3%)
Married	236 (61.3%)
Divorced / widow	17 (4.4%)
Your first visit for PHC	
Yes	106 (27.5%)
No	279 (72.5%)

In Table 2, Participants reported varying levels of satisfaction across different components of urgent care services. Regarding access and facility experience, 251 (65.2%) participants were very satisfied with the availability of parking spaces, while 120 (31.2%) were satisfied. Concerning waiting time, 144 (37.4%) participants were very satisfied, and 101 (26.2%) were satisfied, whereas 53 (13.8%) and 45 (11.7%) reported being dissatisfied and very dissatisfied, respectively. For the cleanliness of the health center, 266 (69.1%) participants were very satisfied, and 99 (25.7%) were satisfied. Regarding reception and administrative services, 222 (57.7%) participants were very satisfied with the care and ease of reception, while 142 (36.9%) were satisfied. In physician-related care, 230 (59.7%) participants were very satisfied with the physician's attention to their health problem, and 140 (36.4%) were satisfied. Satisfaction with the physician's explanation of the health problem was reported as very satisfied by 223 (57.9%) participants and satisfied by 136 (35.3%). Additionally, 224 (58.2%) participants were very satisfied with physician involvement in decision-making, while 116 (30.1%) were satisfied. Regarding treatment plan explanation, 235 (61.0%) participants were very satisfied, and 131 (34.0%) were satisfied. For nursing care, 203 (52.7%) participants were very satisfied with the nursing care provided, and 159 (41.3%) were satisfied. Satisfaction with the nurse's attention to resolving the health problem was reported as very satisfied by 204 (53.0%) participants and satisfied by 131 (34.0%). Regarding diagnostic services, 149 (49.5%) participants were very satisfied with laboratory services, and 119 (39.5%) were satisfied, while radiology services received very satisfied responses from 142 (50.4%) participants and satisfied responses from 102 (36.2%). Concerning pharmacy services, 225 (58.4%) participants were very satisfied with pharmacists at the center, and 138 (35.8%) were satisfied. Moreover, 253 (65.7%) participants were very satisfied with pharmacists' professionalism and respectfulness, while 119 (30.9%) were satisfied.

Table 2 Distribution of participants' satisfaction levels regarding urgent care services in Primary Health Care Centers at King Abdulaziz Hospital, Al-Ahsa, Saudi Arabia (n = 385)

Domain	Item	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied
Access & Facility Experience	Availability of parking spaces	3 (0.8%)	3 (0.8%)	8 (2.1%)	120 (31.2%)	251 (65.2%)
	Waiting time	45 (11.7%)	53 (13.8%)	42 (10.9%)	101 (26.2%)	144 (37.4%)
	Cleanliness of the health center	0 (0.0%)	9 (2.3%)	11 (2.9%)	99 (25.7%)	266 (69.1%)
Reception & Administrative Services	Care and ease of reception	1 (0.3%)	10 (2.6%)	10 (2.6%)	142 (36.9%)	222 (57.7%)

Physician-Related Care	The physician's attention to your health problem	2 (0.5%)	6 (1.6%)	7 (1.8%)	140 (36.4%)	230 (59.7%)
	Physician's explanation of your health problem	2 (0.5%)	9 (2.3%)	15 (3.9%)	136 (35.3%)	223 (57.9%)
	Physician's involvement in decision-making	3 (0.8%)	11 (2.9%)	31 (8.1%)	116 (30.1%)	224 (58.2%)
	Treatment plan explanation	1 (0.3%)	7 (1.8%)	11 (2.9%)	131 (34.0%)	235 (61.0%)
Nursing Care	Nursing care provided	5 (1.3%)	7 (1.8%)	11 (2.9%)	159 (41.3%)	203 (52.7%)
	The nurse's attention to resolving your problem	4 (1.0%)	9 (2.3%)	37 (9.6%)	131 (34.0%)	204 (53.0%)
Diagnostic Services	Laboratory services	1 (0.3%)	6 (2.0%)	26 (8.6%)	119 (39.5%)	149 (49.5%)
	Radiology services	0 (0.0%)	6 (2.1%)	32 (11.3%)	102 (36.2%)	142 (50.4%)
Pharmacy Services	Pharmacists at the center	4 (1.0%)	6 (1.6%)	12 (3.1%)	138 (35.8%)	225 (58.4%)
	Pharmacists' professionalism & respectfulness	1 (0.3%)	3 (0.8%)	9 (2.3%)	119 (30.9%)	253 (65.7%)

Generally, Figure 1 shows the distribution of participants according to their overall satisfaction level with urgent care services. A high level of satisfaction was reported by 348 (90.4%) participants, while 37 (9.6%) participants had a moderate level of satisfaction. No participants were categorized as having a low level of satisfaction.

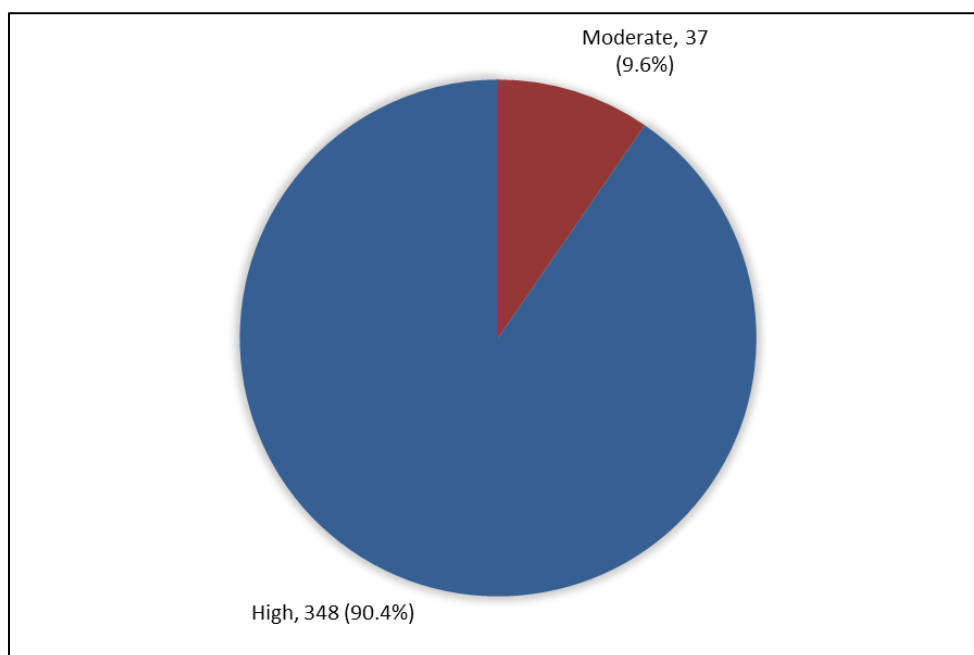


Figure 1 Overall satisfaction level of participants with urgent care services in Primary Health Care Centers at King Abdulaziz Hospital, Al-Ahsa, Saudi Arabia (n = 385)

Table 3 assesses the association between participants' sociodemographic characteristics and overall satisfaction level with urgent care services. Regarding age, high satisfaction was reported among 64 (88.9%) participants aged 18–25

years, 127 (90.1%) aged 26–35 years, and 157 (91.3%) aged more than 35 years, with no statistically significant association observed ($p = 0.835$). A statistically significant association was identified between gender and overall satisfaction level ($p = 0.049$), where high satisfaction was reported among 196 (92.9%) female participants compared with 152 (87.4%) male participants. Concerning nationality, all non-Saudi participants 8 (100.0%) demonstrated high satisfaction compared with 340 (90.2%) Saudi participants, with no statistically significant association ($p = 0.351$). Regarding employment status, high satisfaction was reported among 104 (91.2%) unemployed participants, 44 (93.6%) students, and 200 (89.3%) employees, without a statistically significant association ($p = 0.616$). Similarly, educational level showed no statistically significant association with overall satisfaction ($p = 0.461$), as high satisfaction was observed among 27 (96.4%) participants with below secondary education, 112 (91.1%) with secondary education, and 209 (89.3%) with university education or above. Regarding residence, high satisfaction was reported among 336 (90.6%) participants residing in Al Ahsa city and 12 (85.7%) residing outside Al Ahsa city, with no statistically significant association ($p = 0.545$). Marital status also showed no statistically significant association with overall satisfaction level ($p = 0.515$), where high satisfaction was reported among 120 (90.9%) single participants, 214 (90.7%) married participants, and 14 (82.4%) divorced or widowed participants. In addition, no statistically significant association was identified between first visit status and overall satisfaction level ($p = 0.646$), as high satisfaction was reported among 97 (91.5%) first-visit participants and 251 (90.0%) participants with previous visits.

Table 3 Factors associated with the overall satisfaction level with urgent care services in Primary Health Care Centers at King Abdulaziz Hospital, Al-Ahsa, Saudi Arabia (n = 385)

Variable	Overall satisfaction level		p-value
	Moderate	High	
Age in years			.835
18–25	8 (11.1%)	64 (88.9%)	
26–35	14 (9.9%)	127 (90.1%)	
>35	15 (8.7%)	157 (91.3%)	
Gender			.049*
Male	22 (12.6%)	152 (87.4%)	
Female	15 (7.1%)	196 (92.9%)	
Nationality			.351^
Saudi	37 (9.8%)	340 (90.2%)	
Non-Saudi	0 (0.0%)	8 (100.0%)	
Employment			.616
Unemployed	10 (8.8%)	104 (91.2%)	
Student	3 (6.4%)	44 (93.6%)	
Employee	24 (10.7%)	200 (89.3%)	
Educational level			.461
Below secondary	1 (3.6%)	27 (96.4%)	
Secondary education	11 (8.9%)	112 (91.1%)	
University / above	25 (10.7%)	209 (89.3%)	
Residence			.545^
In Al-Ahsa city	35 (9.4%)	336 (90.6%)	
Outside Al-Ahsa city	2 (14.3%)	12 (85.7%)	
Marital status			.515
Single	12 (9.1%)	120 (90.9%)	

Married	22 (9.3%)	214 (90.7%)	.646
Divorced/widowed	3 (17.6%)	14 (82.4%)	
Your first visit for PHC			
Yes	9 (8.5%)	97 (91.5%)	
No	28 (10.0%)	251 (90.0%)	

P: Pearson X² test; ^: Exact Probability test; * P < 0.05 (significant)

Table 4 presents the correlation between satisfaction with different urgent care service components and the overall satisfaction level. Statistically significant positive correlations were observed between all assessed service components and overall satisfaction ($p = 0.001$ for all items). The strongest correlations with overall satisfaction were reported for physician-related factors, including physician involvement in decision making ($r = 0.861$), physician's explanation of the health problem ($r = 0.853$), physician's attention to the health problem ($r = 0.841$), and treatment plan explanation ($r = 0.827$). Moderately strong positive correlations were also observed for nurse's attention ($r = 0.736$), cleanliness of the center ($r = 0.705$), pharmacists' professionalism ($r = 0.661$), nursing care ($r = 0.649$), laboratory services ($r = 0.630$), availability of parking spaces ($r = 0.629$), radiology services ($r = 0.612$), waiting time ($r = 0.579$), care and ease of reception ($r = 0.574$), and pharmacists at the center ($r = 0.518$).

Table 4 Correlation between satisfaction with urgent care service components and overall satisfaction level among participants, King Abdulaziz Hospital, Al-Ahsa, Saudi Arabia ($n = 385$)

Item	Overall satisfaction	
	r	p-value
Availability of parking spaces	0.629	0.001*
Care & ease of reception	0.574	0.001*
Waiting time	0.579	0.001*
Physician's attention	0.841	0.001*
Physician's explanation	0.853	0.001*
Physician's involvement in decision-making	0.861	0.001*
Treatment plan explanation	0.827	0.001*
Nursing care	0.649	0.001*
Nurse's attention	0.736	0.001*
Laboratory services	0.630	0.001*
Radiology services	0.612	0.001*
Pharmacists	0.518	0.001*
Pharmacists' professionalism	0.661	0.001*
Cleanliness of the center	0.705	0.001*

r: Pearson correlation coefficient; * P < 0.05 (significant)

Binary logistic regression analysis identified several significant predictors of high overall satisfaction with urgent care services (Table 5). Female participants had significantly higher odds of reporting high satisfaction compared with male participants (ORA = 1.89, 95% CI: 1.01–3.56, $p = 0.047$). Among the evaluated service components, physician-related factors showed the strongest predictors of high overall satisfaction. Participants who reported higher satisfaction with physician involvement in medical decision making had more than three times higher odds of reporting high overall satisfaction (ORA = 3.12, 95% CI: 2.06–4.73, $p < 0.001$). Similarly, satisfaction with the physician's attention to the health problem was significantly associated with high overall satisfaction (ORA = 2.85, 95% CI: 1.94–4.18, $p < 0.001$). Satisfaction with the physician's explanation of the health problem also showed a significant positive association (ORA = 2.67, 95% CI: 1.83–3.91, $p < 0.001$). Also, satisfaction with treatment plan explanation was identified as a significant predictor of high satisfaction (ORA = 2.41, 95% CI: 1.68–3.47, $p < 0.001$). Regarding other healthcare service

components, satisfaction with the cleanliness of the center significantly increased the likelihood of high overall satisfaction (ORA = 2.14, 95% CI: 1.48–3.09, $p < 0.001$). Participants satisfied with nursing care were also more likely to report high overall satisfaction (ORA = 1.96, 95% CI: 1.37–2.81, $p < 0.001$). Furthermore, satisfaction with pharmacists' professionalism and respectfulness was significantly associated with higher overall satisfaction (ORA = 1.88, 95% CI: 1.29–2.74, $p = 0.001$). Satisfaction with waiting time was another significant predictor, with participants demonstrating higher satisfaction with waiting time showing greater odds of high overall satisfaction (ORA = 1.74, 95% CI: 1.29–2.34, $p < 0.001$).

Table 5 Binary logistic regression analysis showing predictors of high overall satisfaction with urgent care services among participants attending Primary Health Care Centers at King Abdulaziz Hospital, Al-Ahsa, Saudi Arabia (n = 385)

Predictor	ORA	95% CI	p-value
Gender (Female vs. Male)	1.89	1.01–3.56	0.047*
Waiting time satisfaction	1.74	1.29–2.34	<0.001*
Physician's attention	2.85	1.94–4.18	<0.001*
Physician's explanation	2.67	1.83–3.91	<0.001*
Physician involvement in decision-making	3.12	2.06–4.73	<0.001*
Treatment plan explanation	2.41	1.68–3.47	<0.001*
Nursing care	1.96	1.37–2.81	<0.001*
Pharmacists' professionalism	1.88	1.29–2.74	0.001*
Cleanliness of the center	2.14	1.48–3.09	<0.001*

ORA: Adjusted odds ratio; CI: Confidence interval; * $P < 0.05$ (significant)

5. Discussion

This study aimed to assess patient satisfaction with urgent care services in Primary Healthcare Centers within the National Guard hospital in Al-Ahsa, Saudi Arabia, and to identify key factors influencing patient perceptions. The findings revealed a high level of overall satisfaction, with no participants reporting low satisfaction. Overall Satisfaction with Urgent Care Services. In this study, the vast majority of participants reported high satisfaction with urgent care services. This finding reflects that the urgent care clinics in this setting are performing exceptionally well from the patients' perspective. Comparatively, high satisfaction levels have been reported in other urgent care settings; however, the complete absence of low satisfaction in this study is reported. A study by Pines et al. found that satisfaction in emergency and urgent care settings often ranges between 70% and 85% (15). The higher rate in the present study may reflect the organized nature of care within the National Guard health system or specific cultural expectations of the patient population in Al-Ahsa. As for waiting Time and patient satisfaction, while about two-thirds of participants were either very satisfied or satisfied with waiting time, a one-fourth expressed dissatisfaction. Furthermore, satisfaction with waiting time was a significant but relatively weaker predictor of overall satisfaction compared to clinical factors. This finding is consistent with the literature, indicating that waiting time is an important but not always dominant factor. Bleustein et al. [16] demonstrated that while long waits reduce satisfaction, excellent clinical care can partially mitigate this negative effect. Similarly, a study in Saudi primary care centers by Alshahrani et al. [17] found that waiting time was a moderate predictor of satisfaction, ranking below communication with physicians, which was also confirmed in many other studies in Saudi Arabia [18-20]. Thus, the present study supports the finding that patients may tolerate reasonable waits if subsequent clinical care is perceived as high quality.

Considering demographic factors that may influence patient satisfaction, among all demographic variables (age, gender, education, employment, marital status, residence, and visit history), only gender showed a statistically significant association with overall satisfaction. Female participants had nearly twice the odds of reporting high satisfaction compared to males. No significant associations were found for age, education, or other factors. This gender difference aligns with some but not all previous studies. Hall and Dornan's meta-analysis [21] found that female patients tend to report higher satisfaction than males, possibly due to different communication expectations or health-seeking behaviors. However, other studies in Saudi urgent care settings have reported no gender difference. A study by Alrasheed et al. [22] in Riyadh found no significant gender effect on satisfaction in primary care. The discrepancy may be related to cultural factors in Al-Ahsa, where female patients might have different interaction patterns with healthcare

providers. The lack of association with education level is questionable, as some literature suggests that lower education predicts higher satisfaction [23]. The absence of this association in the present study may reflect the relatively high educational level of the sample (60.8% university educated).

The study also assessed the association between patient satisfaction and specific healthcare service factors, including communication, cleanliness, staff behavior, and accessibility. All examined components showed statistically significant positive correlations with overall satisfaction. The strongest correlations were consistently for physician-related factors: physician involvement in decision-making, physician's explanation of the health problem, and physician's attention to the health problem. Cleanliness also showed a strong correlation, while nursing care and pharmacy professionalism showed moderately strong correlations. Accessibility-related factors such as parking availability and waiting time had weaker but still significant correlations. These findings are highly consistent with international literature. A systematic review by Batbaatar et al. [24] identified provider communication and interpersonal skills as the strongest predictors of patient satisfaction across multiple healthcare settings. Specifically, the high correlation for physician involvement in decision-making reflects the growing emphasis on patient-centered care, which has been shown to enhance satisfaction and treatment adherence [25]. The strong correlation with cleanliness is also well-documented; a multinational study found cleanliness to be one of the top three determinants of patient satisfaction in primary care [26]. The relatively weaker correlation for waiting time and parking compared to physician factors means that, in this setting, clinical and interpersonal quality compensate for logistical convenience.

Binary logistic regression confirmed that physician-related factors were the strongest predictors. Satisfaction with physician involvement in decision-making produced the highest odds ratio (ORA = 3.12), followed by physician's attention (ORA = 2.85) and physician's explanation (ORA = 2.67). Cleanliness (ORA = 2.14), nursing care (ORA = 1.96), pharmacy professionalism (ORA = 1.88), and waiting time (ORA = 1.74) were also significant but weaker predictors. Female gender remained a significant predictor even after adjusting for service factors. These predictors align well with the findings of other regression-based studies in urgent care. A study by Bleich et al. [27] in multiple countries found that respectful treatment and provider communication were the most powerful predictors, with physical environment factors playing a secondary role, and the same finding was also confirmed by Ozaltin E [28]. The present study extends these findings by showing that even after controlling for multiple factors, physician involvement in shared decision-making triples the odds of high satisfaction. This signifies the importance of training physicians not only in clinical skills but also in communication and participatory decision-making.

Strengths and Limitations

This study has several strengths. First, the sample size of 385 participants is adequate for statistical analysis, and the use of binary logistic regression allowed for the identification of independent predictors of satisfaction while controlling for confounders. Second, the study comprehensively assessed multiple domains of urgent care services, including physician-related factors, nursing care, pharmacy services, diagnostics, and facility characteristics, providing a holistic view of patient satisfaction. Third, the inclusion of both patient-reported and caregiver-reported data reflects real-world urgent care practice, where family members often accompany patients. However, several limitations should be reported. The study was conducted in a single institution (National Guard Hospital in Al-Ahsa), which limits the generalizability of findings to other primary healthcare settings in Saudi Arabia, particularly non-military or rural facilities. Second, the absence of participants with low satisfaction (0% in this sample) may indicate some bias, where patients felt reluctant to express negative opinions about a government healthcare facility. Third, the study did not assess clinical outcomes or technical quality of care, focusing only on patient perceptions.

6. Conclusions and recommendations

In summary, this study found that patient satisfaction in urgent care clinics at the National Guard hospital in Al-Ahsa is exceptionally high. Gender was the only demographic factor that significantly influenced satisfaction, with females reporting higher satisfaction. Among all service components, physician-related factors-particularly involvement in decision-making, explanation of the health problem, and attention to the problem-were the strongest correlates and predictors of overall satisfaction. Cleanliness, nursing care, pharmacy professionalism, and waiting time were also significant but secondary predictors. These findings reveal that efforts to further improve satisfaction should prioritize enhancing physician-patient communication and shared decision-making, while maintaining high standards of cleanliness and supportive staff behavior.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of ethical approval

Ethical approval for this study was obtained from the Institutional Review Board of King Abdulaziz Hospital, National Guard Health Affairs, Al-Ahsa, Saudi Arabia.

Statement of informed consent

Participation was voluntary, and informed consent was obtained electronically from all participants prior to data collection. All responses were collected anonymously and kept strictly confidential. Data were used exclusively for research purposes, and participants had the right to withdraw at any stage without any consequences.

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