Organizational Responsiveness and Clinical Practice Quality as Determinants of Patient Experience in Emergency Departments

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Abstract

Background: Patient experience is increasingly recognized as a core indicator of healthcare quality, particularly in emergency departments (EDs) where high patient acuity and operational pressures can influence perceptions of care. Understanding how organizational and clinical factors shape patient experience is essential for improving emergency care delivery.

Objective: This study aimed to examine the association between organizational responsiveness, clinical practice quality, and patient experience in emergency departments in the Kingdom of Saudi Arabia.

Method: A cross-sectional study was conducted using a structured, self-administered questionnaire distributed to patients attending emergency departments across multiple healthcare facilities. A total of 422 participants were included in the analysis. The questionnaire assessed organizational responsiveness, clinical practice quality, and overall patient experience using a five-point Likert scale. Data were analyzed using descriptive statistics, reliability analysis, Pearson correlation, and multiple linear regression, with statistical significance set at $p < 0.05$.

Results: Participants reported moderate to high levels of organizational responsiveness and clinical practice quality. Patient experience demonstrated strong positive correlations with organizational responsiveness ($r = 0.70$, $p < 0.01$) and clinical practice quality ($r = 0.66$, $p < 0.01$). Multiple linear regression analysis revealed that both organizational responsiveness ($\beta = 0.44$, $p < 0.001$) and clinical practice quality ($\beta = 0.36$, $p < 0.001$) were significant predictors of patient experience, collectively explaining 58% of the variance in patient experience scores.

Conclusion: Organizational responsiveness and clinical practice quality are key determinants of patient experience in emergency departments. These findings highlight the importance of integrated organizational and clinical strategies to enhance patient-centered

emergency care and support ongoing healthcare quality improvement efforts in Saudi Arabia.
Keywords: Patient experience; Emergency departments; Organizational responsiveness; Clinical practice quality; Saudi Arabia.

BACKGROUND

Emergency departments (EDs) occupy a critical position within healthcare systems, serving as the first point of clinical contact for acutely ill and injured patients and profoundly shaping their perceptions of overall care quality. Patient experience has emerged as a central dimension of healthcare quality, attracting growing scholarly and policy attention, particularly within emergency departments (EDs) where clinical urgency, uncertainty, and operational strain are inherent (Janerka et al., 2025; Hobani, 2025).

Contemporary evidence extends quality assessment beyond traditional outcome-based metrics to emphasize patient-reported experience measures (PREMs), including communication effectiveness, perceived organizational responsiveness, and interpersonal care quality, as critical determinants of how emergency care is evaluated by patients (de Steenwinkel et al., 2022; Alsubahi et al., 2025). In ED settings, these experiential dimensions consistently shape overall patient satisfaction and perceived care quality, often independently of objective clinical outcomes (Sonis et al., 2018; Alsubahi et al., 2025). Organizational responsiveness, reflecting the extent to which healthcare services anticipate and respond to patients' needs and expectations, has been linked to positive patient experience outcomes and is increasingly recognized as a core element of patient-centered care (Gilmore, 2023). Alongside responsiveness, clinical practice quality including diagnostic accuracy, timeliness, safety, and evidence-based decision-making represents a key technical dimension of care delivery. Emerging evidence suggests that responsiveness and clinical quality interact to shape patients' experiences in high-acuity emergency department settings; however, existing studies often examine patient experience through isolated process indicators rather than integrated empirical models that combine both dimensions (de Steenwinkel et al., 2022; Alsunidi et al., 2023; Jawhari et al., 2023).

In Saudi Arabia, research on ED patient experience and quality of care is both timely and policy relevant. Several recent studies have investigated aspects of patient satisfaction and experience in Saudi ED settings, revealing moderate to high levels of satisfaction with certain domains of service and identifying factors such as waiting time, clarity of information, and staff interactions as influential (Abass et al., 2021; Almass et al., 2022; Jawhari et al., 2023). A large cross-regional study reported moderate satisfaction levels with informational clarity and staff relationships among nearly 3,000 ED patients across Saudi Arabia, emphasizing variation by geographic region and care context (Almass et al., 2022). Descriptive work in tertiary care centers has also noted that providing waiting time estimates and transparent communication may influence patients perceived satisfaction, although associations with objective wait times remain mixed (Jawhari et al., 2023). These findings align with international evidence pointing to communication, perceived responsiveness, and process transparency as recurrent drivers of ED experience (de Steenwinkel et al., 2022; Gilmore, 2023; Alsubahi et al., 2025). Despite these contributions, there remains a gap in research that systematically examines how organizational responsiveness and clinical practice quality jointly determine patient experience in EDs.

Therefore, this study aims to explore the relationships between organizational responsiveness, clinical practice quality, and patient experience in emergency departments in Saudi Arabia.

MATERIALS AND METHODS

Study Design:

This study adopted a cross-sectional study design to examine the relationships between organizational responsiveness, clinical practice quality, and patient experience in emergency departments. Data were collected using a structured online questionnaire distributed via Google Forms between Dec 2025 to Jan 2026.

Study participants and Sampling:

The study population consisted of patients attending emergency departments in hospitals across the Kingdom of Saudi Arabia. The target population included adult patients who received emergency care services during the study period. A non-random convenience sampling technique was employed due to the operational characteristics and time-sensitive nature of emergency department settings. Inclusion criteria were: patients aged 18 years and above, receipt of emergency department services, clinical stability at the time of data collection, and voluntary consent to participate in the study. Patients who were critically ill, required immediate life-saving interventions, had cognitive impairment, or were unable or unwilling to provide informed consent were excluded. Based on the estimated volume of emergency department patients, a 95% confidence level and 5% margin of error were applied to calculate the minimum required sample size. To account for potential non-response or incomplete questionnaires, an additional 10% was added, resulting in a final sample size of 422 patients.

Questionnaire

Data were collected using a structured questionnaire developed based on a comprehensive review of previously published and validated instruments assessing patient experience, organizational responsiveness, and clinical practice quality in emergency department settings (Sonis et al., 2018; de Steenwinkel et al., 2022; Almass et al., 2022; Aleksandrovskiy et al., 2022). The questionnaire was designed to capture patient perceptions of organizational and clinical determinants of experience during emergency department visits, while ensuring contextual relevance to the Saudi healthcare setting.

The questionnaire consisted of four main sections. The first section collected sociodemographic information, including age, gender, educational level, and frequency of emergency department visits. The second section measured organizational responsiveness, which constituted one of the independent variables and included items related to clarity of communication, timeliness of services, staff responsiveness to patient concerns, coordination of care, and perceived respect and attentiveness. The third section assessed clinical practice quality, the second independent variable, capturing patients' perceptions of clinical assessment accuracy, appropriateness and timeliness of treatment, professionalism of healthcare providers, and perceived safety of care. The fourth section measured patient experience, which represented the dependent variable of the study and reflected patients' overall evaluation of their emergency department encounter.

All questionnaire items were measured using a five-point Likert scale, ranging from strongly disagree (1) to strongly agree (5), with higher scores indicating more favorable perceptions. Composite scores for organizational responsiveness, clinical practice quality, and patient experience were calculated by averaging item responses within each domain. The questionnaire was reviewed by experts in emergency care and healthcare management to ensure content clarity and relevance. A pilot test was conducted on a small sample of patients to assess item comprehensibility and completion time, and minor wording adjustments were made accordingly prior to final data collection.

Data Analysis:

Statistical analysis was carried out using the Statistical Package for the Social Sciences (SPSS Inc., Chicago, IL, USA), version 26. Descriptive statistics were used to summarize the study variables; categorical variables were presented as frequencies and percentages, while continuous variables were expressed as means and standard deviations (SD). Pearson correlation analysis was conducted to examine the relationships between organizational responsiveness, clinical practice quality, and patient experience. Multiple linear regression analysis was performed to identify the predictive effects of organizational responsiveness and clinical practice quality on patient experience in emergency departments. All statistical tests were two-tailed, and a p-value of < 0.05 was considered statistically significant.

Ethical Consideration

Ethical approval for the study was obtained from the Research Ethics Committee of the relevant institution in Saudi Arabia. The purpose and objectives of the study were clearly explained to participants in an introductory letter at the beginning of the survey. The letter emphasized that participation was completely voluntary, and that responses would remain anonymous. Written informed consent was obtained electronically prior to survey completion.

RESULTS

As shown in (Table 1), a total of 422 participants responded to the questionnaire. The majority of respondents were male (55.0%), and most participants were aged between 25 and 44 years, representing the most common age group among emergency department attendees. Approximately three-quarters of the sample were Saudi nationals (75.4%). Regarding educational, the largest proportion of participants held a bachelor's degree (37.0%), followed by those with secondary education or below (31.3%). Nearly two-thirds of respondents reported more than one emergency department visit during the previous 12 months, indicating recurrent utilization of emergency services. In terms of visit characteristics, the most common length of stay ranged between one and six hours. Regarding workload indicators, the participating emergency departments reported a mean daily patient volume of 46.12 ± 12.69 patients, with an average of 23.23 ± 9.24 prescriptions issued per day during emergency department visits, reflecting a moderate to high operational workload during the study period.

Table 1. Demographic characteristics of the study participants (n = 422)

Variable		N	%
Your gender	male	232	55.0%
	Female	190	45.0%
Your age	20-24 years	64	15.2%
	25-29 years	118	28.0%
	30-34 years	104	24.6%
	35-39 years	78	18.5%
	More than 40 year	58	13.7%
Nationality	Saudi	318	75.4%
	Non-Saudi	104	24.6%
Highest qualification achieved	Secondary or below	132	31.3%
	Diploma	74	17.5%
	Bachelor's	156	37.0%

	Postgraduate	60	14.2%
ED visits in last 12 months	once	136	32.2%
	2–3	168	39.8%
	4–5	78	18.5%
	>5	40	9.5%
Length of stay in ED (hr.)	<1	46	10.9%
	1–3	164	38.9%
	3-6	142	33.6%
	>6	70	16.6%
patients/day (mean ± SD)	46.12 ± 12.69		
prescriptions/day (mean ± SD)	23.23 ± 9.24		

As shown in Table 2, participants reported a generally moderate to favorable level of organizational responsiveness in emergency departments, with an overall mean score of 3.78 ± 0.79. The highest-rated items were related to respectful treatment and privacy, indicating strong interpersonal aspects of care delivery. In contrast, the lowest mean score was observed for communication regarding waiting times, highlighting a potential area for improvement in emergency department responsiveness. These findings suggest that while staff interactions were largely perceived as positive, operational communication, particularly around delays, remains a key challenge under high workload conditions.

Table 2. rganizational Responsiveness in Emergency Departments (n = 422)

No.	**Item**	**Mean**	**SD**	**Mean**
1	Staff promptly responded when I requested assistance.	3.89	0.77	77.8
2	I was treated with respect and courtesy throughout my visit.	4.08	0.65	81.6
3	The ED staff listened carefully to my concerns.	3.96	0.71	79.2
4	The ED team kept me informed about what was happening during my care.	3.63	0.82	72.6
5	I received clear explanations about expected waiting times or delays.	3.24	0.89	64.8
6	The ED process (registration, triage, assessment) was well organized.	3.76	0.78	75.2
7	Communication between staff members appeared to be coordinated and consistent.	3.71	0.80	74.2
8	My privacy was respected during examinations and discussions.	4.02	0.69	80.4
9	The staff considered my needs and preferences when possible.	3.68	0.83	73.6
10	The ED environment supported my comfort (e.g., cleanliness, noise, space).	3.57	0.85	71.4
11	I felt that staff took my questions seriously and answered them clearly.	3.91	0.74	78.2
12	Overall, the ED responded effectively to my needs during the visit.	3.94	0.72	78.8
Average		**3.78**	**0.79**	**75.6**

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Table 3. Clinical Practice Quality in Emergency Departments (n = 422)

No.	Item	Mean	SD	Mean
1	I received a timely clinical assessment after arriving at the ED.	3.83	0.76	76.6
2	Healthcare providers appeared competent and professional.	4.12	0.58	82.4
3	The examination and evaluation I received were thorough.	3.97	0.69	79.4
4	The treatment or interventions provided were appropriate to my condition.	4.01	0.66	80.2
5	Medications or procedures were explained in a way I could understand.	3.78	0.81	75.6
6	Staff checked important details (e.g., allergies, medical history) before treatment.	3.92	0.73	78.4
7	I felt safe during my ED care (e.g., infection control, careful procedures).	4.06	0.63	81.2
8	The care team communicated clearly about my diagnosis or main problem.	3.84	0.77	76.8
9	My pain or discomfort was assessed and managed appropriately.	3.46	0.84	69.2
10	Discharge instructions or next steps were clear and practical.	3.88	0.72	77.6
11	The ED staff showed attention to preventing mistakes during my care.	4.02	0.65	80.4
12	Overall, the clinical care I received in the ED was of high quality.	4.09	0.61	81.8
Average		**3.95**	**0.71**	**79.0**

As shown in Table 4, overall patient experience in emergency departments was rated as moderately positive, with a mean score of 3.74 ± 0.75. The highest-rated item reflected patients' confidence in the care received, indicating trust in emergency services and clinical decision-making. In contrast, the lowest mean score was observed for meeting patient expectations, suggesting that operational factors such as waiting times and communication during delays may influence patients' overall perception of their emergency department experience. Collectively, these findings indicate that while patient experience outcomes are generally favorable, there remains scope for improvement in aligning service delivery with patient expectations.

Table 4. Patient Experience in Emergency Departments (n = 422)

No.	Item	Mean	SD	Mean
1	Overall, my experience in the ED was positive.	3.76	0.73	75.2

2	I felt confident in the care I received.	3.89	0.69	77.8
3	I would recommend this emergency department to others.	3.68	0.81	73.6
4	My main concerns were addressed during the visit.	3.72	0.75	74.4
5	The ED visit met my expectations for emergency care.	3.64	0.78	72.8
Average		**3.74**	**0.75**	**74.8**

As presented in Table 5, patient experience demonstrated a strong positive correlation with organizational responsiveness ($r = 0.70$, $p < 0.01$) and a moderate-to-strong positive correlation with clinical practice quality ($r = 0.66$, $p < 0.01$). In addition, organizational responsiveness was significantly correlated with clinical practice quality ($r = 0.62$, $p < 0.01$), indicating that higher levels of responsiveness tend to coexist with better perceived clinical care.

Table 5. Pearson Correlation Matrix Between Study Variables

Variable	**1**	**2**	**3**
1. Organizational Responsiveness	1.00		
2. Clinical Practice Quality	0.62**	1.00	
3. Patient Experience	0.70**	0.66**	1.00

$p < 0.01$

As shown in Table 6, multiple linear regression analysis revealed that both organizational responsiveness and clinical practice quality were significant predictors of patient experience in emergency departments. Organizational responsiveness emerged as the strongest predictor ($\beta = 0.44$, $p < 0.001$), followed by clinical practice quality ($\beta = 0.36$, $p < 0.001$). Together, the model explained approximately 58% of the variance in patient experience scores ($R^2 = 0.58$), indicating a strong explanatory power.

Table 6. Multiple Linear Regression Analysis Predicting Patient Experience

Predictor		**B**	**SE**	**β**	**t**	**p-value**
Organizational Responsiveness		0.43	0.05	0.44	8.60	<0.001
Clinical Practice Quality		0.35	0.06	0.36	5.83	<0.001
Constant		0.52	0.21	—	2.48	0.014
	Model Statistics			**Value**		
	R^2			0.58		
	Adjusted R^2			0.57		
	F-statistic			289.4		
	p-value			<0.001		

Dependent variable: Patient Experience

As shown in Table 7, patient experience scores differed significantly across several sociodemographic and emergency department visit characteristics. Higher patient experience scores were observed among female participants, those with higher educational, and patients with shorter emergency department length of stay. In addition, patients attending the emergency department for the first time reported more favorable experience scores compared to frequent visitors. Length of stay demonstrated the strongest association with patient experience, with a clear decline in scores as time spent in the emergency department increased.

Table 7. Multiple Linear Regression Analysis Predicting Patient Experience

Variable	**Category**	**(Mean ± SD)**	**p-value**
Gender	Male	3.70 ± 0.74	0.042*

	Female	3.81 ± 0.71	
Age (years)	20-24 years	3.62 ± 0.78	0.031*
	25-29 years	3.78 ± 0.71	
	30-34 years	3.82 ± 0.69	
	35-39 years	3.71 ± 0.74	
	More than 40 year	3.68 ± 0.76	
Nationality	Saudi	3.76 ± 0.73	0.118
	Non-Saudi	3.69 ± 0.77	
Education level	Secondary or below	3.66 ± 0.79	0.047*
	Diploma	3.71 ± 0.75	
	Bachelor's degree	3.82 ± 0.70	
	Postgraduate	3.85 ± 0.68	
ED visits (last 12 months)	First visit	3.82 ± 0.69	0.018*
	2–3 visits	3.74 ± 0.73	
	4–5 visits	3.66 ± 0.77	
	>5 visits	3.61 ± 0.81	
Length of stay in ED	< 1 hour	3.92 ± 0.63	<0.001*
	1–3 hours	3.86 ± 0.67	
	3–6 hours	3.68 ± 0.75	
	> 6 hours	3.52 ± 0.83	

DISCUSSION

The present study examined the relationships between organizational responsiveness, clinical practice quality, and patient experience in emergency departments (EDs) in Saudi Arabia. Overall, the findings indicate that both organizational responsiveness and clinical practice quality are significantly and positively associated with patient experience, explaining a substantial portion of variance in patient experience scores ($R^2 = 0.58$). These results align with existing evidence highlighting the multidimensional nature of patient experience and its dependence on both structural and interpersonal aspects of care delivery. Consistent with literature emphasizing the centrality of communication and operational responsiveness in shaping ED experiences, our findings confirm that perceived responsiveness including clear staff communication, respect, and timely interaction is a strong determinant of patient experience (Sonis et al., 2018; de Steenwinkel et al., 2022). Systematic and scoping reviews similarly identify communication quality, staff engagement, and empathy as recurring themes influencing ED patients' perceptions of care (Oyegbile & Brysiewicz, 2020; Sonis et al., 2018). In environments characterized by uncertainty and urgency, delays or lack of clear information can exacerbate anxiety and negatively influence overall experience, a pattern reflected in our data where items related to information about waiting times scored relatively lower. This reinforces the notion that information dispensation is a critical yet often under-addressed dimension of ED responsiveness (de Steenwinkel et al., 2022; Welch et al., as cited in de Steenwinkel et al., 2022). The positive association between clinical practice quality and patient experience also resonates with prior research demonstrating that patients interpret quality not only through outcomes but through their perception of care delivery accuracy of assessment, professionalism, safety practices, and clarity of treatment explanation (Almass et al., 2022; Abass et al., 2021). Although clinical competence is conventionally measured through clinical indicators, patient perception of clinical practice quality remains a vital component of the broader quality construct. This is reflected in the high mean scores for items related to professional

conduct and treatment appropriateness in our study, indicating that patients valued these aspects and that they contributed substantially to their overall experience.

Our findings extend earlier work by integrating both responsiveness and clinical quality into a unified predictive model. While much prior literature has examined individual factors such as waiting time or communication in isolation, the current study demonstrates that organizational responsiveness and clinical quality operate synergistically to shape ED experience. This holistic framing is supported by studies employing comprehensive patient experience tools, such as the Emergency Department Patient Experience of Care (EDPEC) survey, which emphasize the importance of multiple interacting dimensions of care (Weinick et al., 2014; Ye et al., 2022). Moreover, patient experience frameworks increasingly advocate for composite measures that reflect both interpersonal and technical domains, aligning with the present conceptualization (Gilmore et al., 2023). The contextual relevance of our findings is further underscored by national healthcare transformation efforts in Saudi Arabia, which prioritize patient-centered care, service efficiency, and quality improvement within Vision 2030 initiatives. While direct national benchmarks for ED experience in Saudi Arabia remain limited, existing Saudi studies have reported moderate satisfaction in emergency care, with communication, waiting times, and staff interactions frequently emerging as influential determinants (Jawhari et al., 2023; Alsunidi et al., 2023). The replication of these patterns in our study suggests that the observed associations are not only statistically robust but also reflective of real-world service dynamics in the Saudi context.

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Overall, the findings of this study reinforce the conceptualization of patient experience in emergency departments as a multidimensional construct shaped by both organizational and clinical determinants. The strong associations observed between organizational responsiveness, clinical practice quality, and patient experience highlight the interdependent nature of service delivery processes and clinical care in high-acuity settings. The significant contribution of perceived clinical practice quality confirms that technical competence and safety remain foundational to positive patient experience. Together, these findings suggest that improvements in emergency department performance cannot be achieved through isolated clinical or operational interventions alone, but rather through integrated approaches that address both organizational behaviors and clinical care processes within the emergency care environment.

CONCLUSION

This study indicates that organizational responsiveness and clinical practice quality are key determinants of patient experience in emergency departments in Saudi Arabia. The findings highlight that patient experience is shaped not only by clinical care, but also by how services are organized, communicated, and delivered in high-acuity settings. Organizational responsiveness emerged as a particularly influential factor, emphasizing the importance of timely communication, respect, and attentiveness, alongside the foundational role of

clinical competence and safety. This study provides evidence to support integrated approaches to improving patient-centered emergency care within the Saudi healthcare system.

Limitations

This study has several limitations. The cross-sectional design limits the ability to infer causal relationships between organizational responsiveness, clinical practice quality, and patient experience. In addition, the use of a self-administered questionnaire may introduce recall or social desirability bias. The reliance on convenience sampling may also limit the generalizability of the findings across different emergency department settings. Despite these limitations, the study provides valuable evidence that contributes to understanding key organizational and clinical determinants of patient experience in emergency departments and offers a foundation for future research in this area.

Data Availability Statement

The data supporting the findings of this study are available from the author upon request.

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Disclosure of Conflict of Interest

The authors declare that they have no known financial interests or personal relationships that could influence the work described in this paper.

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