Perceptions and preferences of patient services in emergency departments in Jeddah: a comprehensive survey

Adeeb Omar Bukhari¹, Sami Omar Baarimah²*, Reem Wajdi Baarimah³, Mayar Adeeb Bukhari⁴

ABSTRACT

Objective: This study investigated the preferences and perceptions of the participants regarding patient services in the emergency department (ED).

Methods: A vast comprehensive survey, targeting a sample size of 597 participants in the Jeddah region, was conducted. The study aimed to understand the appeal and necessity of various features ranging from amenities in the waiting area, specialist care, medical staff professionalism, infrastructural modifications, and procedural changes in the ER departments.

Results: A substantial number agreed on a free coffee/tea service (80%), free Wi-Fi (92.1%), long comfortable seats (84.9%), and a mobile charging station (92%). Interestingly, patients preferred health information on TV (52.5%). Understanding the need for additional amenities, 72% supported the idea of a dedicated play area for children. Almost 73.8% responded in favor of a valet parking service, and 69.9% recognized the importance of personal care services provided by medical staff and nurses. The survey further showed that the presence of a device indicating approximate waiting time was a desired feature (93%). Notably, the qualifications of the emergency physician mattered for 71.7% of participants. Concerning medication delivery, 70.2% of participants preferred receiving them at their location in the ED. Further, 71.1% preferred to have healthy snacks on waiting area, and about 98.2% needed toilets to be cleaned frequently and scented.

Conclusion: This comprehensive survey indicated a significant inclination towards patient-centric modifications in the EDs. Patients valued informational, infrastructural, and service-oriented features, emphasizing the need for a personalized, comfortable, and informed experience.

Keywords: Perceptions, preferences, patient services, emergency departments, Jeddah.

Introduction

The quality of healthcare services and the environment in which they are offered significantly contribute to the overall patient satisfaction rate. For instance, the identification of patient preferences and perceptions is crucial to evaluate the quality of healthcare in emergency departments (EDs) [1]. Patient satisfaction surveys comprehensively assess the main factors that influence patient contentment, with a goal to enhance health outcomes.

Previous studies have determined that ED patients have complex and unique experiences. However, greater research is required to identify the relation of environmental factors that contribute toward positive waiting experiences thereby developing a standardized definition of patient preference and perception in the ED [2].

Patient experiences in ED need attention, as it is a crucial indicator for several significant outcomes [3]. Studies have also acknowledged that satisfied patients might be more compliant with their physicians’ advice, implying that
patient satisfaction might serve as an important component in the promotion of health and well-being [4–6]. Studies have also recommended that satisfaction of patients is one of the important predictors of patient treatment adherences, quality of emergency care and healthcare services outcomes [7–9].

For instance, this study aimed to provide valuable insights into potential improvement areas in the EDs that could enhance patient satisfaction. Through canvassing these patient preferences, the research aspired to contribute to higher quality care settings by informing design principles and patient care strategies. The main areas of interest spanned various elements that influence the ED experience. The objective was to identify key areas to improve in EDs by understanding the appeal and necessity of various features. These features include amenities in the waiting area, specialist care, medical staff professionalism, infrastructural modifications, procedural changes, and amenities such as Wi-Fi, coffee/tea service, and a mobile charging station.

Subject and Methods
A vast comprehensive survey in the Jeddah region was conducted to comprehend patient satisfaction and preference in local EDs. It employed a descriptive cross-sectional design to collect data from a sample of individuals visiting EDs. The study spanned over the duration of 2 months from August to September 2023. The sample size was calculated to be 385, targeting a confidence level of 95% and population size 4,863,000 with margin error 5%. The sample composition was 45% male and 55% female, with different age categories. All adult individuals (above 18 years of age), and individuals who had visited an ED in the last two months within the Jeddah region and were able to provide informed consent were included in the study. However, patients with cognitive impairments, under 18 years of age, or those who did not seek care from the EDs in the specified timeframe were excluded from the study.

This study employed a stratified random sampling technique to capture a comprehensive sample. The strata were based on gender and age groups within the population of interest. The study aimed to understand the appeal and necessity of various features ranging from amenities in the waiting area, specialist care, medical staff professionalism, infrastructural modifications, procedural changes, and personal care services provided by medical staff and receptionists (Table 2).

Data collection was performed using an online structured questionnaire administered to the identified sample. The questionnaire consisted of a variety of questions regarding preferred amenities and services at the EDs focusing on aspects of convenience and comfort. The feedback of the participants was collected online, providing significant insights into the potential improvement areas in EDs to enhance patient satisfaction.

Data were purified and managed using Google Forms. Descriptive data were analyzed by mounting frequency tables and conducting cross-tabulation analyses.

Statistical Package for Social Sciences (SPSS) version 26 was used for statistical analysis, and several data presentation methods such as bar charts, pie charts, and frequency polygons were used.

Results
The study included a sample of 597 participants, 45% male and 55% female. The participants spanned a broad age range, representative of the population being studied. A substantial number agreed on a free coffee/tea service (80%), free Wi-Fi (92.1%), long comfortable seats (84.9%), and a mobile charging station (92%) (Table 1).

A large proportion also preferred to take water in a 200 ml bottle (79.1%) (Figure 1).

Interestingly, the type of content that patients preferred on TV revealed that health information scored the highest (52.5%) among a variety of other content like news, educational, religious, or entertainment (Figure 2).

Understanding the need for additional amenities, 72% of participants supported the idea of a dedicated play area for children, and 68.7% showed interest in having a small library with books and magazines. Participants also recognized the importance of personal care services provided by medical staff and nurses (69.9%) (Table 2).

Table 3. Patients’ perception and preference regarding the specialist care, medical staff professionalism, infrastructural modifications, and procedural changes in the ER departments.

<table>
<thead>
<tr>
<th>Additional amenities in the waiting area</th>
<th>Yes N (%)</th>
<th>No N (%)</th>
<th>I don’t care N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is having a device that determines the approximate waiting time an added feature to the place that you would prefer to have?</td>
<td>554 (93)</td>
<td>20 (3.3)</td>
<td>22 (3.7)</td>
</tr>
<tr>
<td>Does it bother you to say that the doctor or nurse is busy with another case (which may be more serious than yours) and you may say to yourself why there are not enough doctors and nurses?</td>
<td>364 (60.9)</td>
<td>215 (36)</td>
<td>18 (3.1)</td>
</tr>
<tr>
<td>Does the qualification of the emergency physician (consultant or experienced resident) make a difference to you when choosing the ED, you prefer?</td>
<td>428 (71.7)</td>
<td>117 (19.6)</td>
<td>52 (8.7)</td>
</tr>
<tr>
<td>Do you prefer that the uniforms of doctors, nurses, and receptionists be specific, or does not make a difference to you?</td>
<td>338 (56.7)</td>
<td>178 (29.8)</td>
<td>81 (13.5)</td>
</tr>
<tr>
<td>Would you like to provide healthy snacks in the waiting area?</td>
<td>425 (71.1)</td>
<td>77 (12.9)</td>
<td>95 (16)</td>
</tr>
<tr>
<td>Would you like to have toilets in the place that are constantly clean and scented, like hotels and malls?</td>
<td>586 (98.2)</td>
<td>5 (0.8)</td>
<td>6 (1)</td>
</tr>
</tbody>
</table>
The survey further showed that the presence of a device indicating approximate waiting time was a desired feature (93%). It was evident that communication matters as 60.9% were bothered by the lack of enough medical staff doctors and nurses. Notably, the qualifications of the emergency physician mattered for 71.7% participants, and 56.7% preferred uniformity in the medical staff’s attire. Moreover, 71.1% prefer to have a healthy snack on waiting area, and about 98.2% need toilets to be cleaned frequently and scented (Table 3).

Concerning medication delivery, 70.2% of participants preferred receiving them at their location in the ED (Figure 3).

Discussion

The primary focus of this study was to fathom patient satisfaction and preferences in the local EDs within the Jeddah region. The current study revealed that a substantial number of participants agreed on a free coffee/tea service (80%), free Wi-Fi (92.1%), long comfortable seats (84.9%), and a mobile charging station (92%) in the waiting area.

In comparison with international studies like the U.S. ED Patient Experiences with Care (EDPEC), the focus on comfort and convenience is a consistent theme [10]. However, the current study results also highlighted the culture-specific necessities, such as content preference on TV and uniformity in attire, emphasizing the importance of a contextual approach to healthcare quality enhancement. Future research should delve into the implementation of these findings and the consequent impact on patient satisfaction levels.
Interestingly, the type of content that patients preferred on TV revealed that health information scored the highest (52.5%) among a variety of other content like news, educational, religious or entertainment. Similarly, one such study conducted by Steenwinkel et al. [11] revealed that most of the participants preferred the dispensation of medical information.

Studies have demonstrated that substantial dispensation of information is necessary to improve the perception and experience of patients. Realizing the kind of information patients preferred is important to optimize the delivery of information in the EDs and patient satisfaction [12–15]. Moreover, participants also recognized the importance of personal care services provided by medical staff and nurses (69.9%). Additionally, it was evident that communication matters as 60.9% were bothered by the lack of enough medical staff doctors, and nurses. Likewise, other studies described that there was a similar perspective and importance of personal care among the administrative staff, patients, primary care nurses, and general practitioners, despite differences in their roles. The study defines that personal care is promoted by factors like human communication, patient, and provider relationship; and individualized care [16,17].

The survey further showed that the presence of a device indicating approximate waiting time was a desired feature (93%). One such study determined that estimation of waiting time in an ED can help in the improvement of the overall satisfaction of the patient and thereby prevent abandonment [18].

Additionally, the current study determined that the qualifications of the emergency physician mattered for 71.7% participants and 56.7% preferred uniformity in the medical staff’s attire. Similarly, another study suggested that patients might potentially be influenced by physicians’ experience and demographics, if given a choice [19].

This study primary limitations included its cross-sectional design, limited geographical location, and self-reported data, which could lead to recall bias. Additionally, cultural, social, and economic factors which might also influence patient satisfaction were not considered. The sample was based on a single region (Jeddah), and hence, the results might not be generalized to other contexts or countries. Future studies should consider these variables and expand the geographical scope for a more comprehensive insight.

**Conclusion**

This comprehensive survey indicated a significant inclination towards patient-centric modifications in the EDs. Patients valued informational, infrastructural, and service-oriented features, emphasizing the need for a personalized, comfortable, and informed experience. The current study data plays a pivotal role in informing ED design principles and patient care strategies regionally and might provide useful comparative insights for similar global environments.

**Acknowledgment**

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**List of Abbreviations**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tr>
<td>ED</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>EDPEC</td>
<td>Emergency Department Patient Experiences with Care</td>
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</tbody>
</table>

**Conflict of interests**

The authors declare that there is no conflict of interest regarding the publication of this article.

**Funding**

None.

**Consent for participation**

Informed consent was obtained from all the participants.

**Ethical approval**

It was a survey not needing IRB approval, but we followed international standards; requested at the beginning of the questionnaire for approval of participation and agreement for sharing of information in our article from each participant, ensuring anonymity and confidentiality.

**Author details**

Adeeb Omar Bukhari1, Sami Omar Baarimah2, Reem Wajdi Baarimah3, Mayar Adeeb Bukhari4

1. Consultant, Emergency Medicine, Saudi Board Emergency Medicine, King Abulaziz University, Jeddah, Saudi Arabia
2. Staff Physician, Emergency Medicine, Royal College of Emergency Medicine, Jeddah, Saudi Arabia
3. General Practitioner, King Abulaziz University, Jeddah, Saudi Arabia
4. Medical Student, King Abulaziz University, Jeddah, Saudi Arabia

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