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Assessing Quality of Care in Emergency Departments in Saudi Public Hospitals: Voices from Healthcare Professionals

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Abstract

This study aims to evaluate healthcare professionals' perceptions of admission and reception procedures, triage processes, and diagnostic assessments in Emergency Departments (EDs) within Saudi public hospitals. Employing the descriptive analytical approach, the research utilized a questionnaire as the primary data collection instrument. The participants included 150 healthcare professionals working in the emergency departments of three governmental hospitals in Riyadh. A sample size of 109 professionals was targeted. The research results revealed that the mean score for admission procedures is (4.02), the mean score for triage procedures is (3.77), and the mean score for diagnostic assessments is (3.80). The analysis revealed generally positive perceptions, particularly regarding the prompt assessment of patients and the straightforward registration process, which are vital for timely care. However, concerns regarding lengthy admission wait times and the adequacy of resources such as beds and diagnostic facilities were noted. Additionally, while capabilities for conducting vital tests and first aid were acknowledged, the availability and promptness of laboratory results were highlighted as areas requiring improvement. Based on these findings, the study recommends prioritizing the reduction of admission wait times through streamlined protocols and increased staffing, investing in additional medical resources, enhancing the speed of laboratory results, and implementing continuous training programs for healthcare staff to improve coordination and communication within the ED. These strategies aim to optimize patient care and enhance overall service quality in emergency settings.

Keywords: Quality, Emergency Departments, Healthcare Professionals, Public Hospitals, Saudi Arabia.

1. Introduction

The quality of care in Emergency Departments (EDs) is a critical component of healthcare systems, particularly within the context of public health (Pearce et al., 2024). Emergency departments are often viewed as the frontline of healthcare, tasked with managing acute illnesses and injuries. The performance of EDs is not only indicative of the efficiency of healthcare systems but also reflects the overall quality of care provided to patients. According to Ahsan et al (2019), emergency services are essential for reducing morbidity and mortality, particularly in low- and middle-income countries.

The quality of care provided in emergency departments is multifaceted and significantly influenced by several interrelated factors (Sax et al., 2023). Among these, the quality of medical exposure for healthcare professionals, the procedures of patient admission, the quality of medical tests and imaging, and the thoroughness of the checking processes play critical roles in determining overall patient outcomes and satisfaction (Mohr et al., 2020).

Quality of care in emergency settings encompasses various dimensions, including patient safety, timeliness of care, and the efficacy of interventions. Donabedian (2002) identifies six key dimensions of healthcare quality: safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity. Each of these dimensions plays a crucial role in shaping the patient experience and outcomes in emergency departments. However, the assessment of quality is often complex, influenced by numerous factors such as staffing levels, resource availability, and organizational culture (Darraj et al., 2023).

Triage is a vital component of emergency care that facilitates the efficient management of patient flow and resource allocation. By systematically assessing and prioritizing patients based on their clinical needs, triage ensures that healthcare providers can deliver timely and effective care in high-pressure environments (Kelen et al., 2021).

The admission process in emergency departments is a critical juncture that can influence the trajectory of a patient's care. Efficient and standardized admission protocols help ensure timely care delivery, reducing wait times and enhancing patient satisfaction (Salehi et al., 2024). The triage process, which categorizes patients based on the severity of their conditions, is a fundamental component of this system. A well-structured triage protocol can facilitate appropriate resource allocation and prioritize patients who require immediate attention (Blackburn et al., 2019).

Moreover, the clarity and efficiency of communication during the admission process are vital. Poor admission procedures can lead to miscommunication, delays in care, and increased patient anxiety (McKenna et al., 2019). Implementing electronic health records (EHRs) and other digital tools can streamline the admission process, ensuring that critical patient information is readily available to healthcare providers, thereby enhancing the quality of care delivered (Fernandes et al., 2020).

The quality of medical tests and imaging is another crucial determinant of care quality in emergency departments (Savioli et al., 2022). Accurate and timely diagnostic testing is essential for effective treatment planning and patient management. Inadequate or delayed testing can result in misdiagnoses, inappropriate treatments, and poor health outcomes (Raita et al., 2019). The reliability of laboratory tests and imaging studies is influenced by several factors, including the technical proficiency of staff, the calibration of equipment, and adherence to established protocols. Continuous quality improvement initiatives, such as the implementation of standardized operating procedures and regular staff training, can enhance the accuracy and reliability of diagnostic tests (Storozuk et al., 2019). Furthermore, prompt communication of test results to healthcare providers is essential for timely decision-making, reinforcing the need for efficient systems that facilitate this communication (Gross et al., 2023).

Healthcare professionals, including doctors, nurses, and allied health personnel, are at the heart of the emergency care system. Their insights are invaluable in understanding the challenges and barriers to providing high-quality care. Previous studies have indicated that the perspectives of healthcare workers can significantly influence the overall performance of healthcare services (Pearce et al., 2024; Sax et al., 2023). Engaging with these professionals allows for a more nuanced comprehension of the operational realities within EDs and highlights opportunities for targeted interventions (McKenna et al., 2019).

In Saudi Arabia, the Ministry of Health (MoH) has acknowledged the necessity of enhancing emergency care services to meet the demands of a growing population and to improve health outcomes (Salama et al., 2024). In the Saudi Context, where the healthcare landscape has undergone significant transformations guided by Vision 2030 due to rapid urbanization, a burgeoning population, and ongoing reforms, the quality of emergency care remains a pivotal area of investigation (Abduljadail et al., 2024).

The Saudi healthcare system is characterized by a mix of public and private providers, with the majority of the population relying on public hospitals for emergency care (Alharbi & Aljuaid, 2024). The public healthcare sector, funded by the government, aims to provide equitable access to services; however, it faces challenges such as overcrowding, long waiting times, and inadequate resources (Alshurtan et al., 2024). These issues can adversely affect the quality of care delivered in emergency departments, leading to increased morbidity and dissatisfaction among patients (Al-Wathinani et al., 2024).

The perspectives of healthcare professionals in Saudi public hospitals are essential in assessing the quality of emergency care. As noted by Salehi et al (2024), involving healthcare workers in quality improvement efforts fosters a culture of safety and collaboration, ultimately benefiting patient outcomes. Therefore, this study seeks to assess the quality of care in emergency departments in Saudi public hospitals from the perspective of healthcare professionals.

1.2. Statement of the Problem

Emergency departments are among the most critical units in public hospitals in the Kingdom of Saudi Arabia, requiring swift and accurate provision of nursing and medical care to promptly diagnose and treat patients with critical conditions. However, several challenges plague these emergency departments, such as insufficient medical staffing, inadequate bed availability, and poor standards of nursing and medical care (Al Abdullah et al., 2024). Furthermore, many hospitals lack effective monitoring and quality assurance systems for their emergency services, resulting in the absence of enforced quality standards (Alqahtani et al., 2024). This deficiency contributes to subpar care levels and patient dissatisfaction with the services provided (Salama et al., 2024).

Additionally, certain emergency departments in public hospitals in Saudi Arabia face specific issues, particularly concerning the registration process and prolonged waiting times for medical evaluation and nursing care (Alharbi & Aljuaid, 2024). Al-Wathinani et al (2024) highlighted that the reception and attention levels in most emergency and urgent care departments in public hospitals fall significantly short of expectations. The quality of care does not correspond to the financial resources available, nor does it meet the demands posed by the high volume of patients and their urgent health conditions.

On the other hand, some studies in the Saudi context (e.g., Abuljadail et al., 2024; Al Shurtan et al., 2024) reported that overcrowding, inadequate infrastructure, staff burnout, communication barriers, insufficient training, limited access to specialty care, high rates of non-emergent visits, and data management issues all contribute to the complexities of delivering high-quality emergency care. Addressing these challenges is crucial for improving patient outcomes and satisfaction, ultimately leading to a more efficient and effective healthcare system

As the researchers work within the healthcare sector in Saudi Arabia, specific challenges observed in the emergency department in public hospitals include patient complaints regarding lengthy waiting periods for medical evaluation and the registration process. Moreover, the emergency units often struggle to accommodate all patients, leading to dissatisfaction among many individuals seeking care**.**

Assessing the quality of care in emergency departments of public hospitals in Saudi Arabia through the voices of healthcare professionals is a vital endeavor to cope up with the targets of the Saudi Vision 2030 (Salama et al., 2024; Alharbi & Aljuaid, 2024). As Saudi Arabia continues to advance its healthcare system, understanding the perspectives of healthcare professionals will be paramount in fostering an environment that prioritizes quality, safety, and patient-centered care in emergency medical settings.

1.3. Research Questions

This study seeks to answer the following questions:

1. How do healthcare professionals perceive the current admission and reception procedures in place within EDs in Saudi public hospitals?
2. How do healthcare professionals perceive the current triage procedures in place within EDs in Saudi public hospitals?
3. How do healthcare professionals perceive the current diagnostic assessments in place within EDs in Saudi public hospitals?

1.4. Research Objectives

This study aims to achieve the following objectives:

1. To evaluate healthcare professionals' perceptions of the current admission and reception procedures in EDs in Saudi public hospitals.
2. To assess healthcare professionals' perceptions of the current triage procedures in EDs in Saudi public hospitals.
3. To investigate healthcare professionals' perceptions on the current diagnostic assessments utilized in EDs in Saudi public hospitals.

1.5. Research Significance

The significance of this study lies in its potential to contribute to the body of knowledge regarding emergency care quality in Saudi Arabia. By focusing

on the perspectives of healthcare professionals, the research aims to provide a comprehensive understanding of the current state of emergency care services and to identify actionable strategies for improvement. Ultimately, enhancing the quality of care in emergency departments is crucial for improving patient outcomes and ensuring a more effective healthcare system in Saudi Arabia.

The significance of this research lies in its focus on assessing the quality of care in emergency departments within public hospitals in Saudi Arabia, an area that has received limited scholarly attention despite its critical importance. As emergency departments serve as the frontline of healthcare, addressing the multifaceted challenges they encounter is essential for improving patient outcomes and satisfaction.

While existing literature has examined various aspects of emergency care, studies specifically addressing the quality of care in Saudi public hospitals are sparse. Most research has focused on broader healthcare system challenges or isolated issues within emergency services, such as overcrowding and patient wait times, without fully exploring the comprehensive experiences of healthcare professionals. This gap indicates a need for more targeted research that captures the nuanced perspectives of those who operate within these high-pressure environments. By focusing on the voices of healthcare professionals, this study aims to fill this critical gap in the literature and provide a deeper understanding of the systemic challenges faced in emergency departments.

The quality of care in emergency departments directly impacts patient health outcomes, safety, and overall satisfaction with the healthcare system. Given the increasing demand for emergency services due to population growth and rising incidences of chronic diseases, understanding the factors that influence care quality is paramount. Effective emergency care can reduce morbidity and mortality rates, enhance patient satisfaction, and alleviate the burden on healthcare systems. Furthermore, in the context of Saudi Arabia's ongoing health reforms, improving the quality of emergency care is vital for aligning with national health goals and ensuring equitable access to services for all citizens.

Healthcare professionals are uniquely positioned to provide insights into the challenges and barriers affecting care quality in emergency departments. Their firsthand experiences and knowledge of the operational dynamics within EDs make their perspectives invaluable. Unlike patients, who may only encounter the department during a medical crisis, healthcare workers navigate the complexities of care delivery daily. They can identify systemic inefficiencies, resource limitations, and procedural gaps that may not be apparent to external observers. By engaging healthcare professionals in this research, the study aims to highlight their critical role in shaping quality improvement initiatives and fostering a culture of safety and excellence in emergency care.

Research Scope

This study evaluates the quality of care provided in emergency departments (EDs) within public hospitals in Saudi Arabia. The research specifically targets three large public hospitals located in Riyadh: King Saud Medical City (KSMC), King Fahad Medical City (KFMC), and King Khalid University Hospital (KKUH). These hospitals were selected due to their substantial size and the high volume of patients they accommodate in their emergency departments. The focus of the study is exclusively on healthcare professionals working within these EDs. Additionally, the investigation centers on three key processes as perceived by the participants: the current admission and reception procedures, the existing triage procedures, and the diagnostic assessments currently in use.

Literature Review

Emergency departments serve as critical access points within healthcare systems, providing immediate care to patients experiencing acute medical conditions and traumatic injuries (Pearce et al., 2024). The primary objective of emergency care is to stabilize patients, alleviate suffering, and initiate treatment in a timely manner to prevent morbidity and mortality (Ahsan et al., 2019). Emergency care is characterized by its fast-paced environment, where healthcare professionals must make quick decisions based on incomplete information (Mohr et al., 2020).

Quality of care in emergency departments can be defined as the degree to which health services for individuals and populations increase the likelihood of desired health outcomes while being consistent with current professional knowledge (Sax et al., 2023). This definition underscores the importance of

delivering care that is both effective and aligned with evidence-based practices (Salehi et al., 2024).

The components of quality emergency care typically include several key aspects. Timeliness is one of the most critical factors; the speed with which patients receive care is essential, as delays can lead to significantly worse outcomes (Kelen et al., 2021). Another fundamental component is safety. Ensuring that patients do not suffer harm during their care is paramount. This encompasses minimizing errors in medication administration, ensuring accurate diagnostics, and preventing adverse events. Safety measures are crucial to build trust between patients and healthcare providers, contributing to better health outcomes (Blackburn et al., 2019).

In addition, effectiveness is also a key element of quality care (McKenna et al., 2019). The treatments provided in the ED must be grounded in scientific evidence and best practices. This means that the interventions administered should be proven to yield positive outcomes for patients, reinforcing the need for ongoing training and adherence to clinical guidelines among healthcare professionals (Fernandes et al., 2020).

Moreover, patient-centeredness plays a significant role in quality emergency care (Raita et al., 2019). It is essential to consider the preferences, needs, and values of patients. Effective communication and shared decision-making between healthcare providers and patients are vital components of this approach, ensuring that care is tailored to individual circumstances. Finally, efficiency is critical in the context of emergency departments, where resources are often limited (Storozuk et al., 2019). Utilizing resources in a manner that maximizes patient benefit while minimizing waste is essential for maintaining quality care (Gross et al., 2023).

Several studies have explored the quality of care in emergency departments, shedding light on various factors that influence patient outcomes. For instance, Ahsan et al (2019) assessed the quality of care in EDs by evaluating patient satisfaction and clinical outcomes. The findings indicated that timely care and effective communication were significantly associated with higher patient satisfaction scores. Similarly, a systematic review by Darraj et al (2023) analyzed multiple studies on emergency care quality and concluded that factors such as triage accuracy, adherence to clinical guidelines, and the availability of resources directly impact the quality of care delivered in EDs.

Another notable study by Mohr et al (2020) examined the relationship between emergency department overcrowding and quality of care. The researchers found that overcrowding was linked to increased wait times, reduced patient satisfaction, and higher rates of adverse events, emphasizing the need for effective management strategies to enhance care quality.

Furthermore, the quality of emergency care in Saudi public hospitals has increasingly attracted the attention of researchers in recent years. A variety of studies have been conducted to evaluate existing practices, identify challenges, and suggest potential improvements within these healthcare settings.

One significant study by Alqahtani (2024) assessed the perceptions of healthcare professionals regarding the quality of emergency care in Saudi hospitals. The findings revealed substantial gaps in resource availability and staff training, which were found to negatively impact the quality of care provided. This highlights the pressing need for strategies to address these deficiencies.

In another study, Al Abdullah et al (2024) investigated the impact of triage systems on patient outcomes in Saudi emergency departments. Their research demonstrated that effective implementation of triage protocols significantly reduced wait times and enhanced patient satisfaction. This underscores the importance of standardized protocols in improving the efficiency of emergency care.

Al-Wathinani et al (2024) examined patient safety measures across various public hospitals in Saudi Arabia. This study identified common safety issues, such as medication errors and inadequate communication among healthcare team members. The findings suggest that targeted interventions are necessary to enhance safety protocols and minimize risks associated with emergency care.

Further exploring the challenges faced by emergency departments, Al Shurtan et al (2024) focused on overcrowding in Riyadh's hospitals. Their research indicated that overcrowding not only increased patient wait times but also negatively affected the overall patient experience. This points to an urgent need for effective management strategies to alleviate congestion in emergency departments.

Additionally, Alharbi & Aljuaid (2024) explored the role of leadership within emergency

departments in relation to quality improvement initiatives. Their findings revealed that strong leadership was correlated with improved staff morale and better adherence to clinical guidelines, ultimately contributing to enhanced quality of care.

Addressing the training needs of emergency healthcare professionals, Abduljadail et al (2024) found that many practitioners felt underprepared for the complexities of emergency care. This indicates a significant gap in training that necessitates the development of enhanced educational programs to better equip healthcare providers.

Despite the growing body of literature on emergency care quality in Saudi Arabia, several gaps remain. Most existing studies focus on specific components of emergency care, such as crowding systems or patient safety, without providing a comprehensive assessment of the overall quality of care across multiple dimensions. Additionally, there is a lack of research that integrates the perspectives of healthcare professionals with patient outcomes, limiting the understanding of how these factors interact to influence care quality.

Furthermore, while many studies highlight challenges such as overcrowding and resource limitations, there is insufficient exploration of effective interventions that could address these issues holistically. The current research aims to fill these gaps by providing a comprehensive assessment of the quality of care in emergency departments in Saudi public hospitals, incorporating the insights of healthcare professionals and analyzing their implications for patient satisfaction and outcomes.

3. Research Methodology

3.1. Research Design

This study employs the descriptive analytical approach, a research approach designed to provide a detailed description and analysis of a phenomenon or dataset. This approach involves the systematic collection, organization, and analysis of data to derive insights and draw meaningful conclusions. In the context of the descriptive analytical approach, the focus of data analysis is on summarizing and elucidating the collected information.

The research primarily relies on quantitative data obtained through a structured questionnaire aimed at healthcare professionals working in emergency departments. The objective is to gather much information regarding the quality of care provided in three public hospitals in Saudi Arabia. This approach facilitates a comprehensive assessment of the perceptions of healthcare professionals about the current quality of care in these settings.

3.2. Participants

The participants of this study included all healthcare professionals working in the emergency department in three governmental hospitals in Riyadh city, Saudi Arabia. These hospitals are King Saud Medical City (KSMC), King Fahad Medical City (KFMC), and King Khalid University Hospital (KKUH). The research population comprised (150) healthcare professionals. Using the sample size calculator where the confidence level is 95%, margin of error is 5%, the target sample size was (109) healthcare professionals.

3.3. Data Collection

The researcher used a questionnaire as the data collection instrument for this study. The questionnaire was designed based on relevant literature and previous studies that quality of care in emergency departments. The questionnaire consisted of two parts. The first part included the demographics of the participants which comprised three variables: gender, years of experience, and job. The second part consisted of (15) items distributed equally on three sections: the current admission and reception procedures, the existing triage procedures, and the diagnostic assessments currently in use. The five-point Lickert scale is used as the response scale in the questionnaire with the following five options: strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1).

The researcher distributed the questionnaire on the participants in person and got responses from (104) students only with a response rate of more than (95%).

The researcher verified the content validity of the questionnaire by submitting it to a number of juries in healthcare management. The researcher responded to the juries' remarks and modifications and produced a final version of the questionnaire. On the other hand, the researcher used Cronbach's Alpha to verify the reliability of the questionnaire. The findings of Cronbach's Alpha are shown in table 3.1.

Table 3.1
Cronbach's Alpha for Questionnaire Reliability

Sections	No of Items	Cronbach's Alpha
Admission and reception procedures	5	0.772
Triage procedures	5	0.852
Diagnostic assessments	5	0.952

Table 3.1 shows that the reliability coefficient of the questionnaire items ranges between 0.772 and 0.952 which is a good reliability score. This ensures that the questionnaire is a reliable tool for this study.

The participants were informed of the purpose of the questionnaire and provided their consent to participate in the study. They were assured that their responses would remain confidential. Prior to the distribution of the questionnaire, approval was obtained from the hospital management to ensure compliance with institutional guidelines. The questionnaire was administered to participants during their regular working hours, with a request for them to return the completed questionnaires the following day. Upon collecting the data, the researchers conducted a statistical analysis of the data to get the results.

Data Analysis

The Statistical Package for the Social Sciences (SPSS) software was utilized for data analysis. The following statistical tools were employed in this research:

1. **Percentage and Frequency:** they are used to indicate the percentage and frequency for each data point.
2. **Standard Deviation:** This is employed to indicate the degree of variation present among participants' responses.
3. **Mean:** This measure was used to determine the relative importance of items in relation to the study outcomes.

4. Results & Discussion

This part presents the research findings. It presents the results of the questionnaire and a discussion of these results based on the relevant literature.

Table 4.1

Demographics of the Participants

Gender	Frequency	Percentage
Male	85	%81.70
Females	19	%18.30
Total	**104**	**%100**
Years of Experience	**Frequency**	**Percentage**
Less than 2 Years	4	%3.80
2-5 Years	35	%33.70
6-10 Years	50	%48.10
More than 10 Years	15	%14.40
Total	**104**	**%100**
Job	**Frequency**	**Percentage**
Physician	21	20%
Nursing	54	52%
Allied Health Professionals	29	28%
Total	**104**	**%100**

The data presented in the table 4.1 provides a clear overview of the demographic characteristics of the study participants, categorized by gender, years of experience, and job role. The gender distribution reveals a significant disparity, with males comprising 81.70% (85 participants) of the sample, while females account for only 18.30% (19 participants).

In terms of professional experience, the majority of participants (48.10%, or 50 individuals) fall within the 6-10 years category, indicating a relatively experienced workforce. The second largest group consists of those with 2-5 years of experience (33.70%, or 35 participants). A smaller proportion of the participants (3.80%) have less than 2 years of experience, while 14.40% have more than 10 years of experience. This distribution suggests that the majority of healthcare professionals in the study possess a moderate to high level of experience, which is beneficial for providing quality care in emergency settings.

Regarding job roles, the largest group is composed of nursing professionals, who account for 52% (54 participants) of the sample. This is followed by allied health professionals at 28% (29 participants) and physicians at 20% (21 participants). The predominance of nurses indicates the critical role they play in emergency departments, as they are

often the first point of contact for patients and are vital in managing patient care.

Table 4.2

Healthcare Professionals' Perceptions of the Current Admission and Reception Procedures in Emergency Departments

s	Statements	Responses					Mean	Standard Deviation
		Strongly Agree	Agree	Neuter	Agree	Strongly Disagree		
1	Upon arrival at the ED, the patient's condition is quickly assessed to identify any symptoms.	54	36	7	5	2	4.30	1.17
2	The patient experiences a lengthy wait to complete the admission process in the ED.	32	28	14	16	14	3.46	1.05
3	The registration process in the ED is straightforward and easy to understand.	39	47	12	5	1	4.13	1.11
4	The patient's vital signs are taken immediately upon entering the ED.	47	37	10	9	1	4.15	1.12
5	Patients are prioritized and given the necessary equipment for their care.	46	29	19	7	3	4.04	1.09
Total Mean		**4.02**						

The perceptions of healthcare professionals regarding the current admission and reception procedures in emergency departments, as reflected in table 4.2, reveal a generally positive outlook, as indicated by a total mean score of 4.02. One of the standout aspects is the prompt assessment of patients upon arrival, with a high mean score of 4.30. This suggests that healthcare professionals believe that identifying symptoms quickly is a priority, reflecting an understanding of the urgency often associated with emergency care.

Conversely, the statement regarding lengthy wait times for completing the admission process received a lower mean score of 3.46. This indicates a concern among professionals that while initial assessments are timely, the overall admission process could be improved to minimize delays for patients. Addressing these wait times could enhance the overall efficiency of the ED and improve patient satisfaction.

Moreover, the straightforward nature of the registration process, with a mean score of 4.13, suggests that healthcare professionals find it user-friendly and accessible. This is crucial, as an uncomplicated registration process can help streamline patient flow and reduce confusion. Additionally, the immediate measurement of vital signs (mean score of 4.15) further underscores the department's focus on patient safety and care.

The prioritization of patients and the provision of necessary equipment received a mean score of 4.04, demonstrating that healthcare professionals feel confident in the ED's ability to manage resources effectively. This prioritization is essential in emergency settings, where timely access to care and equipment can significantly impact patient outcomes. Overall, while there are positive perceptions regarding many aspects of the admission and reception procedures, the feedback highlights areas for potential improvement, particularly concerning wait times.

Table 4.3
Healthcare Professionals' Perceptions of the Current Triage Procedures in Emergency Departments

S	Statements	Responses					Mean	Standard Deviation
		Strongly Agree	Agree	Neuter	Agree	Strongly Disagree		
1	An emergency physician is promptly allocated to the patient.	28	41	19	11	5	3.73	1.08
2	There is an adequate number of nursing staff in the emergency department to assist patients.	31	36	20	12	5	3.73	1.06
3	The emergency department has enough beds, all fully equipped for patient care.	25	26	28	15	10	3.39	1.04
4	The patient receives necessary first aid as required.	40	44	12	4	4	4.08	1.12
5	Each patient is allotted sufficient time for their medical examination by the physician	31	46	18	6	3	3.92	1.09
Total Mean		**3.77**						

The perceptions of healthcare professionals regarding the current triage procedures in emergency departments, as reflected in Table 4.3, present a mixed but generally positive picture, with a total mean score of 3.77. A notable aspect of the findings is the prompt allocation of emergency physicians to patients, which received a mean score of 3.73. This indicates that healthcare professionals recognize the importance of timely physician intervention, although there may still be room for improvement in ensuring that all patients receive immediate attention upon arrival.

Similarly, the perception of nursing staff adequacy also garnered a mean score of 3.73. This suggests that while professionals feel there are sufficient nurses to assist in the ED, there may be instances where staffing could be enhanced to further improve patient care and support. This balance is crucial in emergency settings, where the demand for nursing assistance can fluctuate significantly.

The statement regarding the availability of adequately equipped beds in the emergency department received a lower mean score of 3.39. This points to a potential concern regarding the physical resources available for patient care. Ensuring that there are enough equipped beds is essential for managing patient flow and providing timely care, especially during peak times.

On a more positive note, the provision of necessary first aid, which received a mean score of 4.08, indicates that healthcare professionals believe that patients are receiving appropriate initial treatment when required. This is a critical component of emergency care, as timely first aid can significantly affect patient outcomes. Additionally, the perception that each patient is allotted sufficient time for their medical examination, with a mean score of 3.92, reflects a commitment to thorough evaluations, although it highlights the need for continuous improvement in the overall efficiency of the triage process.

While the perceptions of healthcare professionals regarding triage procedures are largely positive, the feedback suggests that there are areas needing attention, particularly in staffing adequacy and resource availability, to enhance the overall effectiveness of emergency care.

This finding aligns with the conclusions of Pearce et al (2024) and Ahsan et al (2019) which emphasized that human resources are the most critical component in healthcare services. The

success of healthcare delivery relies heavily on the expertise and qualifications of the healthcare staff, as well as their interaction with patients. Additionally, this result is consistent with the findings of Salama et al (2024) which highlighted that emergency departments must prioritize patient care by providing all necessary treatment resources, including equipment, medications, and comprehensive medical examinations.

The previous result is consistent with the assertions made Mohr (2020) and Sax (2023) which emphasized that operational procedures in hospitals rely on coordination, organization, monitoring, and the management of all system elements by a professional workforce. Furthermore, this finding corroborates the conclusions of Alharbi & Aljuaid (2024) which indicated that emergency departments require a high level of coordination and oversight due to the involvement of multiple specialties and the collaboration of various therapeutic units within the hospital.

Table 4.4
Healthcare Professionals' Perceptions of the Current Diagnostic Assessments in Emergency Departments

S	Statements	Responses					Mean	Standard Deviation
		Strongly Agree	Agree	Neuter	Agree	Strongly Disagree		
1	All vital tests and necessary examinations are conducted in the emergency department.	37	50	8	4	5	4.06	1.14
2	Further tests may be requested to ensure an accurate diagnosis and determine the appropriate treatment.	32	50	11	8	3	3.96	1.12
3	The emergency department is equipped with facilities for X-rays and MRIs.	31	34	23	12	4	3.73	1.06
4	There is a dedicated emergency laboratory that allows for quick testing.	29	42	17	10	6	3.75	1.08
5	Laboratory test results and X-ray findings are available promptly, without delays.	26	31	23	19	5	3.52	1.02
Total Mean		**3.80**						

The perceptions of healthcare professionals regarding the current diagnostic assessments in emergency departments, as outlined in Table 4.4, indicate a generally favorable view, with a total mean score of 3.80. A strong point noted by the professionals is that vital tests and necessary examinations are typically conducted within the emergency department, achieving a commendable mean score of 4.06. This reflects a belief that the department is effectively managing critical diagnostic procedures, which is essential for timely patient care.

However, while the necessity for further testing to ensure accurate diagnoses received a solid mean score of 3.96, it suggests that additional assessments are recognized as a vital part of the diagnostic process. This highlights the importance of thorough evaluations to guide appropriate treatment decisions effectively.

On the other hand, the availability of facilities for X-rays and MRIs scored a mean of 3.73, indicating that while the emergency department is somewhat equipped, there may be concerns regarding the sufficiency or accessibility of these critical diagnostic tools. Similarly, the presence of a dedicated emergency laboratory, which garnered a mean score of 3.75, underscores the need for efficient testing capabilities, although it suggests

that further enhancements could improve service delivery.

One area of concern is the prompt availability of laboratory test results and X-ray findings, which received a lower mean score of 3.52. This indicates potential delays that could impact clinical decision-making and patient care. Addressing this issue is crucial, as timely access to diagnostic results is fundamental in emergency settings where rapid intervention can greatly influence outcomes.

While healthcare professionals generally view the diagnostic assessment procedures in emergency departments positively, there are clear areas for improvement, particularly regarding resource availability, speed of test result delivery, and the overall efficiency of diagnostic processes. Enhancing these aspects could lead to better patient care and outcomes in emergency situations.

This finding aligns with the assertions made by Blackburn et al (2019) which indicated that patient satisfaction with the quality of medical laboratories depends on the efficiency of laboratory staff, as well as the speed and accuracy of medical tests. Additionally, this result is consistent with the conclusions of Fernandes et al (2020) and Alqahtani et al (2024) which highlighted that medical equipment in emergency units significantly enhances service performance and improves the quality of care provided to patients. Moreover, this finding correlates with the research of Raita et al (2019) which demonstrated that equipping medical laboratories with modern devices contributes to increased patient satisfaction regarding the healthcare services offered.

5. Conclusion & Recommendations

The analysis of healthcare professionals' perceptions provides valuable insights into the efficacy of admission, triage, and diagnostic assessment procedures in emergency departments. The overall mean scores indicate a generally positive perception, particularly regarding the prompt assessment of patients and the straightforward registration process, which are crucial for ensuring timely care. However, concerns regarding lengthy wait times during the admission process and the availability of adequate resources, such as beds and diagnostic facilities, highlight potential areas for improvement.

Furthermore, while the emergency departments are noted to have sufficient capabilities for conducting vital tests and first aid, the availability and promptness of laboratory results remain a concern. The need for effective coordination among healthcare professionals is underscored, especially in triage situations, where the involvement of multiple specialties is essential for comprehensive patient care. Overall, while the findings reflect a commitment to quality emergency care, they also suggest that further enhancements are necessary to optimize patient outcomes.

Based on the research results, several recommendations can be made. First, addressing the issue of lengthy wait times during the admission process should be prioritized. Implementing streamlined admission protocols and increasing staffing levels during peak hours may significantly improve patient flow and reduce delays.

Second, investing in additional medical resources, including more equipped beds and diagnostic facilities, is vital. This could involve upgrading existing equipment and ensuring that emergency departments are adequately staffed with trained personnel who can efficiently manage patient care.

Third, improving the speed of laboratory test results and X-ray findings is crucial. Establishing dedicated pathways for urgent cases and utilizing advanced technologies for rapid testing can contribute to timely clinical decision-making.

Finally, continuous training and development programs for healthcare staff should be instituted to enhance coordination and communication among various specialties within the emergency department. By implementing these strategies, emergency departments can better meet the needs of patients and improve overall service quality.

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