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RESEARCH ARTICLE

QUALITY OF HEALTH CARE SERVICES OF EMERGENCY DEPARTMENTS BETWEEN PUBLIC AND PRIVATE SECTORS FROM THE PATIENTS' COMPANIONS EXPERIENCES

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ABSTRACT

BACKGROUND:

People frequently choose private hospitals despite public healthcare services are provided free of charge in the Kurdistan Region, Iraq. We assessed quality of health services of emergency departments (EDs) between public and private sectors.

METHODS:

In this comparative cross-sectional study, individuals who received health services from either public or private ED in the Kurdistan Region of Iraq were personally invited.

RESULTS:

Most of the admitted patients in both private and public EDs were in the middle age group, female and were from urban areas. A greater proportion of government employees sought care at public EDs (20.0%) than at private ones. A considerable percentage of patients did not trust the competence of medical staff in both public and private ED. But a lower percentage of trust was found in the public ED (35.67% vs. 53.67%; P<0.0001, respectively) compared to the patients in the private ED. The patients in the private ED significantly received great attention from the medical staff, were taken seriously by the medical staff, the medical staff listened to their medical conditions, the patients had better clarity of explanations of the results of examinations. Also, the private ED had better state of seriously taken by medical staff, hygiene, and care rapidity, assessment, and clarity of explanations of the health problem. However, the private ED had worse condition about the information by medical staff on readmission in case of health problems.

CONCLUSION:

This study indicated that the private EDs provide higher quality services across various aspects compared to public EDs.

KEYWORDS

Quality of health care, emergency departments, public sectors, private sectors

INTRODUCTION

Iraq, historically known as Mesopotamia, is a nation situated in the Middle East and is home to a population of around 45 million people. As recently as the 1970s, Iraq had a robust healthcare system and provided health care for all its citizens, a feature enshrined in its constitution and admired by many nations globally. However, fast-forwarding to today, Iraq has endured four devastating conflicts last three decades; the Iran-Iraq war, the 1991 Gulf War, the 2003 US-led invasion, and the attack of Islamic State of Iraq and Syria (ISIS) resulting in significant negative impact to the nation regarding medical services, health promotion, medical surveys and advancements in medical research within the country [1-3]. Official reports indicate that by 2003, approximately 12% of healthcare facilities had been damaged, with an additional 7% subjected to looting. Furthermore, over a third of the establishments offering family planning services were destroyed, and around 15% of community childcare units were closed [4]. While most Iraqis welcomed the liberation from tyranny in 2003, the administration of the 'post-liberation' Iraq turned out to be a significant disappointment for many of them [5].

The northern region of Iraq, specifically the Kurdistan Region, is also experiencing its most severe humanitarian and health crisis in recent years. The influx of refugees and internally displaced individuals from the ISIS has created an overwhelming demand that surpasses available medical supplies and personnel in the region [6]. Moreover, since the disparity between the supply and demand for healthcare services is expanding. The absence of a robust primary care system and relatively low salaries for emergency medical professionals seem to have led to shortages in emergency medical resources. Furthermore, Iraq allocates a comparatively lower expenditure towards healthcare when compared to many other nations [7]. As a result, the rising need for healthcare services is being predominantly fulfilled by private entities. Consequently, the primary challenge lies in harmonizing patient needs with constrained public resources amid the rapid expansion of the private healthcare sector, especially private hospitals. Balancing these dynamics poses a significant challenge in the healthcare landscape [8].

Emergency departments play a crucial role in the healthcare system, providing essential care to many patients. They are accessible to everyone, regardless of their financial situation, and offer services around the clock [9]. Furthermore, the rise of emergency medicine as a specialized field has led patients to view the ED as a provider of high-quality care [10]. Nevertheless, EDs face numerous challenges, including overcrowding, boarding (where patients are held until an inpatient bed becomes available), and an increase in ambulance diversions [11]. Despite the fact that ED crowding leads to delays in care, an increased number of patients leaving without being seen, lower patient satisfaction, and poorer outcomes, including higher inpatient mortality [12, 13], early notification of potential admissions can mitigate ED crowding. By anticipating the demand for inpatient beds, hospitals can allocate additional resources as part of their capacity management strategy [14].

Despite the absence of health insurance and the provision of free healthcare services for the public in the Kurdistan Region, individuals often opt for private hospitals, believing that they offer superior healthcare services than public hospitals do. In addition, in contrast to other nations where EDs in private sector receive comparatively less investment than other specialties [15], private EDs are crowed in this area. Hence, it's crucial to assess the quality of health care services offered by private hospitals. Studies addressing this issue in Iraq are scarce. After a thoroughly literature search, we only found a study by Ali [16] who examined the quality of nursing care immediately after operation in public and private hospitals in Erbil City, Iraq. His findings revealed a notable discrepancy: the overall quality of nursing care in public hospitals was significantly poorer compared to that in private hospitals. It could be argued that this conclusion stem from research carried out in a surgical unit, potentially presenting differences compared to the ED. This study aims to fill the gap in research by evaluating the quality of healthcare services in EDs across public and private sectors. It focuses on understanding patients' experiences to assess and compare the care provided in these settings, providing valuable insights into the differences, if any, between the two sectors.

METHODS

STUDY DESIGN AND SAMPLING

In this comparative cross-sectional study, patients who received care or health services from public or private emergency hospitals in the Duhok Governorate of the Kurdistan Region of Iraq were personally invited to

participate. Patients' companions were asked to report their experiences of receiving health services. They were invited through personal invitations and convenience sampling techniques. Patients were recruited from the main public and private emergency hospitals in Duhok City in 2023. To obtain a representative sample from both public and private sectors, we endeavored to visit the hospitals at different times, on different days, and during various weeks between June and December 2023 (encompassing the summer and fall seasons).

SETTINGS

In this study, patients were collected from the public sector at Duhok Emergency Hospital and the private sector at Vin Private Hospital in Duhok City, Kurdistan Region. Duhok Emergency Hospital serves as the primary emergency facility in Duhok Governorate, with only Zakho district also housing an emergency hospital. Similarly, Vin Private Hospital serves as the main and sole emergency hospital in Duhok Governorate. By including patients from these two main emergency hospitals across different periods and days, we can assert that the sample in this study is likely representative of outpatients in the Duhok Region.

INCLUSION AND EXCLUSION CRITERIA

The patients aged 18 years and older of both genders who attended the emergency hospitals regardless of socio-demographic aspects were eligible for this study. Only the patients who were not willing to participate were not included in this study. The patients admitted for the less than 12 hours were not included in the study.

DATA COLLECTION AND MEASURES

The requited data of this study were collected from patients' companions. The quality of care was measured by the consumer quality index (CQ-index). It has 20 items to measure the quality of care in emergency hospitals. The items were rated from 1 (no/a big problem/never/not important), to 2 (sometimes/of some importance), 2.5 (a bit of a problem), 3 (a great deal/important), and 4 (yes/not a problem/always/extremely important). The score is obtained by adding the numbers together. A higher score means higher quality of care [17]. The data were collected through a self-reported technique.

STATISTICAL ANALYSES

The general information of the patients is presented in mean (SD) or number (%). The comparisons of scores of quality of care are examined in an independent t-test. The comparisons of the quality care areas between the private and public EDs were examined in Pearson chi-squared test. The significant level of difference was determined in a $p<0.05$. The statistical calculations were performed in JMP Version 17.0. SAS Institute Inc., Cary, NC, 1989–2023.

ETHICAL VIEWS

The ethical approval of this study was obtained from the local health ethics committee. The protocol of this study was registered on 21 August 2022 with the register number 21082022-6-4. We did not apply any force on the patients to participate in this study. We protected the confidentiality of the personal information of patients.

RESULTS

The study found that there was no significant difference in the age and gender distribution of patients admitted to private and public emergency hospitals (p=0.7052 and P=0.0608, respectively). Most of the admitted patients in both private and public EDs were in the middle age group and were female. Regarding arrival times, the study revealed that the majority of patients arrived in the morning at both private (62.33%) and public (62.0%) EDs. Furthermore, most patients were admitted for less than one day in both private (58.33%) and public (60.0%) EDs, with a predominant urban patient demographic. Regarding education levels, the study identified a higher percentage of illiterate patients attending public EDs (38.33%) compared to private EDs (27.0%; P=0.0055). Additionally, a greater proportion of government employees sought care at public EDs (20.0%) than at private ones (11.0%; see Table 1).

TABLE 1: GENERAL CHARACTERISTICS OF ADMITTED PATIENTS TO PRIVATE AND PUBLIC EMERGENCY HOSPITALS

Characteristics (n=600)	Emergency department no (%)		
	Private emergency hospital (n=300)	Public emergency hospital (n=300)	P
Age mean (SD)	40.51 (16.88)	41.92 (16.71)	
Range	18-83	18-78	
Age category			
18-19	9 (3.00)	8 (2.67)	
20-29	100 (33.33)	86 (28.67)	
30-39	50 (16.67)	53 (17.67)	0.7052
40-49	51 (17.00)	49 (16.33)	
50-59	41 (13.67)	47 (15.67)	
60-69	20 (6.67)	25 (8.33)	
70-79	27 (9.00)	32 (10.67)	
80-89	2 (0.67)	0 (0.00)	
Gender			
Male	118 (39.33)	96 (32.00)	0.0608
Female	182 (60.67)	204 (68.00)	
Education			
Illiterate	81 (27.00)	115 (38.33)	
Under high school	45 (15.00)	56 (18.67)	0.0055
High school	48 (16.00)	42 (14.00)	
Associate degree	43 (14.33)	30 (10.00)	
College graduate	83 (27.67)	57 (19.00)	
Occupation			
Unemployed	102 (34.00)	51 (17.00)	
Govt. employee	33 (11.00)	60 (20.00)	
Housewife	105 (35.00)	133 (44.33)	<0.0001
Military staff	4 (1.33)	10 (3.33)	
Retired	6 (2.00)	8 (2.67)	
Self-business	36 (12.00)	29 (9.67)	
Student	14 (4.67)	9 (3.00)	
Arrival time			
Morning	187 (62.33)	186 (62.00)	0.9329
Afternoon/evening	113 (37.67)	114 (38.00)	
Admission time			
< one day	175 (58.33)	180 (60.00)	0.1312
1-3 days	124 (41.33)	114 (38.00)	
> 3 days	1 (0.33)	6 (2.00)	
Residency			
Rural	60 (20.00)	60 (20.00)	1.0000
Urban	240 (80.00)	240 (80.00)	

The study showed that a considerable percentage of patients did not trust the competence of the medical staff in both the public and private ED, but a lower percentage of trust was found among the patients who were admitted in the public ED (35.67% vs. 53.67%; P<0.0001, respectively) compared to the patients in the private ED. In addition,

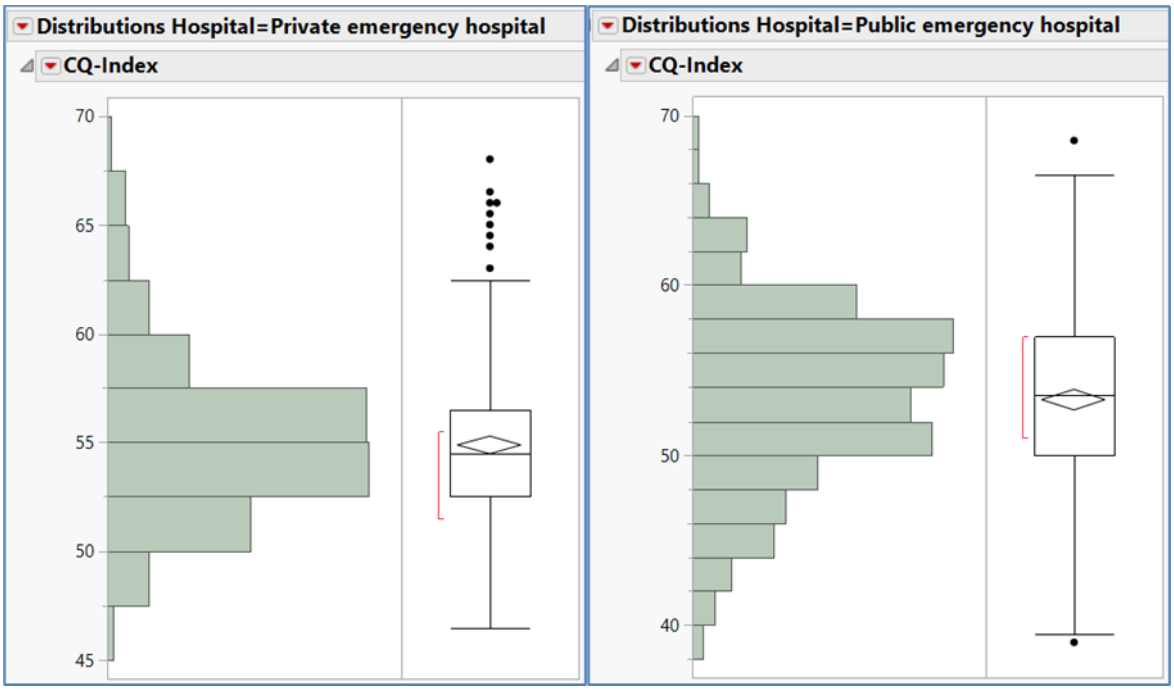
the healthcare needs of the patients significantly received great attention from the medical staff in the private ED (47.67% vs. 27.33%; P<0.0001). The patients who were admitted to the private ED were taken seriously by the medical staff (62.00% vs 36.79%; P<0.0001). The patients reported the great importance of cooperation between medical staff in the private ED (55.33% vs.32.00%; P<0.0001). The patients reported a higher percentage of consistency of the provided information in a great important in the private ED compared to the public ED (70.0% vs. 35.00%; P<0.0001). The patients who were admitted to the ED reported that the medical staff listened to their medical conditions (75.0% vs. 39.33%l P<0.0001). Also, the patients were taken seriously by the reception staff member at the reception desk in the private ED (58.67% vs. 36.67%; P<0.0001; Table 2; figure 1).

TABLE 2: VIEWS OF PATIENTS TOWARDS HEALTHCARE PROFESSIONALS BETWEEN PRIVATE AND PUBLIC ED

Views of patients towards medical staff (n=600)	Emergency department no (%)		P
	Private emergency hospital (n=300)	Public emergency hospital (n=300)	
CQ-index Mean (SD)	54.89 (3.66)	53.28 (5.19)	<0.0001
Range	46.5-68	39-68.5	
Trust in competence of medical staff			
no/a big problem/never/not important	0 (0.00)	1 (0.33)	<0.0001
sometimes/of some importance	72 (24.00)	71 (23.67)	
a bit of a problem	57 (19.00)	104 (34.67)	
a great deal/important	161 (53.67)	107 (35.67)	
yes/not a problem/always/extremely important	10 (3.33)	17 (5.67)	
Patients' healthcare needs			
no/a big problem/never/not important	1 (0.33)	10 (3.33)	<0.0001
sometimes/of some importance	2 (0.67)	31 (10.33)	
a bit of a problem	18 (6.00)	28 (9.33)	
a great deal/important	143 (47.67)	82 (27.33)	
yes/not a problem/always/extremely important	136 (45.33)	149 (49.67)	
Being taken seriously by medical staff			
no/a big problem/never/not important	5 (1.67)	12 (4.01)	<0.0001
sometimes/of some importance	36 (12.00)	56 (18.73)	
a bit of a problem	40 (13.33)	71 (23.75)	
a great deal/important	186 (62.00)	110 (36.79)	
yes/not a problem/always/extremely important	33 (11.00)	50 (16.72)	
Cooperation between medical staff			
no/a big problem/never/not important	6 (2.00)	17 (5.67)	<0.0001
sometimes/of some importance	48 (16.00)	79 (26.33)	
a bit of a problem	50 (16.67)	56 (18.67)	
a great deal/important	166 (55.33)	96 (32.00)	
yes/not a problem/always/extremely important	30 (10.00)	52 (17.33)	
Consistence of the provided information			
no/a big problem/never/not important	5 (1.67)	13 (4.33)	<0.0001
sometimes/of some importance	23 (7.67)	71 (23.67)	
a bit of a problem	44 (14.67)	49 (16.33)	
a great deal/important	210 (70.00)	105 (35.00)	
yes/not a problem/always/extremely important	18 (6.00)	62 (20.67)	

Listening to patients by medical staff			
no/a big problem/never/not important	4 (1.33)	30 (10.00)	<0.0001
sometimes/of some importance	6 (2.00)	48 (16.00)	
a bit of a problem	30 (10.00)	84 (28.00)	
a great deal/important	225 (75.00)	118 (39.33)	
yes/not a problem/always/extremely important	35 (11.67)	20 (6.67)	
Feeling safe in the Accident & Emergency Department			
a bit of a problem	4 (1.33)	9 (3.00)	0.0046
sometimes/of some importance	0 (0.00)	5 (1.67)	
a great deal/important	112 (37.33)	81 (27.00)	
yes/not a problem/always/extremely important	184 (61.33)	205 (68.33)	
Being taken seriously by the reception staff member at the reception desk			
no/a big problem/never/not important	1 (0.33)	43 (14.33)	<0.0001
sometimes/of some importance	33 (11.00)	45 (15.00)	
a bit of a problem	41 (13.67)	24 (8.00)	
a great deal/important	176 (58.67)	110 (36.67)	
yes/not a problem/always/extremely important	49 (16.33)	78 (26.00)	

FIGURE 1: DISTRIBUTION OF QUALITY OF HEALTHCARE OF PRIVATE AND PUBLIC EDS



The obtain to healthcare expectations were low in both the private and public ED, but the patients who were admitted to the private ED reported that they were less likely to obtain their healthcare expectations in a great important competed to those in the private ED (15.33% vs. 22.33%; P=0.0001). However, the patients reported that the private ED had better clarity of explanations of the results of examinations compared to the public ED (52.0% vs. 29.67%; P<0.0001). In terms of the hospital environment, the patients reported that the private ED had better hygiene of great importance compared to the public ED (75.0% vs. 47.0%, P<0.00001). The availability of a parking space near the Accident & ED was a problem in both public and private ED, but the private ED had a worse situation (6.67% vs. 15.33%; P<0.0001). But the finding of the Accident & Emergency Department in the private ED was better compared to the public ED (53.33% vs. 39.00%; P<0.0001; Table 3).

The information by the healthcare professionals on danger signals to watch out for after leaving the Accident & Emergency Department was low in both private and public EDs. However, the private ED had a worse situation compared to the private ED (15.67% vs. 19.33%; P<0.0001). However, the private ED had better situation about the explanation of the aim of new medication and information on side-effects medication (Table 4).

In terms of the general information and rapidity of care, the patients reported that the private ED had better situation about the rapidity of treatment (56.67% vs. 32.67%; P<0.0001). A similar pattern was found for assessment by the acuity of the patient's problem (52.33% vs. 28.00%; P<0.0001), and clarity of explanations of the health problem (69.67% vs. 40.33%; P<0.0001). However, the private ED had worse condition about the information by medical staff on readmission in case of health problems (12.33% vs. 15.33%l P<0.0001; Table 5).

TABLE 3: VIEWS OF PATIENTS TOWARDS INFORMATION AND EXPLANATION GIVEN BY MEDICAL STAFF AND A&E ENVIRONMENT BETWEEN PRIVATE AND PUBLIC ED

Patients' views	Emergency department no (%)		
Information and explanation	**Private emergency hospital (n=300)**	**Public emergency hospital (n=300)**	**P**
Patients' healthcare expectations			
no/a big problem/never/not important	22 (7.33)	30 (10.00)	0.0001
sometimes/of some importance	72 (24.00)	92 (30.67)	
a bit of a problem	158 (52.67)	103 (34.33)	
a great deal/important	46 (15.33)	67 (22.33)	
yes/not a problem/always/extremely important	2 (0.67)	8 (2.67)	
Clarity of explanations of results of examinations			
no/a big problem/never/not important	8 (2.67)	15 (5.00)	<0.0001
sometimes/of some importance	44 (14.67)	64 (21.33)	
a bit of a problem	36 (12.00)	65 (21.67)	
a great deal/important	156 (52.00)	89 (29.67)	
yes/not a problem/always/extremely important	56 (18.67)	67 (22.33)	
A& E environment	**Private emergency hospital (n=300)**	**Public emergency hospital (n=300)**	**P**
Hygiene in the Accident & Emergency Department			
no/a big problem/never/not important	1 (0.33)	5 (1.67)	<0.0001
sometimes/of some importance	3 (1.00)	22 (7.33)	
a bit of a problem	16 (5.33)	53 (17.67)	
a great deal/important	225 (75.00)	141 (47.00)	
yes/not a problem/always/extremely important	55 (18.33)	79 (26.33)	
Availability of a parking space near the Accident & Emergency Department			
no/a big problem/never/not important	72 (24.00)	68 (22.67)	<0.0001
sometimes/of some importance	172 (57.33)	112 (37.33)	
a bit of a problem	18 (6.00)	60 (20.00)	
a great deal/important	20 (6.67)	46 (15.33)	
yes/not a problem/always/extremely important	18 (6.00)	14 (4.67)	
Finding the Accident & Emergency Department in the hospital			
no/a big problem/never/not important	10 (3.33)	7 (2.33)	<0.0001
sometimes/of some importance	31 (10.33)	19 (6.33)	
a bit of a problem	52 (17.33)	15 (5.00)	
a great deal/important	160 (53.33)	117 (39.00)	
yes/not a problem/always/extremely important	47 (15.67)	142 (47.33)	

TABLE 4: VIEWS OF PATIENTS TOWARDS LEAVING THE ACCIDENT AND EMERGENCY HOSPITAL BETWEEN PRIVATE AND PUBLIC ED

Leaving the accident and emergency (n=600)	Emergency department no (%)		
	Private emergency hospital (n=300)	Public emergency hospital (n=300)	P
Information by the healthcare professionals on danger signals to watch out for after leaving the Accident & Emergency Department			
no/a big problem/never/not important	25 (8.33)	50 (16.67)	<0.0001
sometimes/of some importance	51 (17.00)	95 (31.67)	
a bit of a problem	142 (47.33)	55 (18.33)	
a great deal/important	47 (15.67)	58 (19.33)	
yes/not a problem/always/extremely important	35 (11.67)	42 (14.00)	
Explanation of the aim of new medication			
no/a big problem/never/not important	61 (20.33)	79 (26.33)	0.0001
sometimes/of some importance	98 (32.67)	122 (40.67)	
a bit of a problem	96 (32.00)	47 (15.67)	
a great deal/important	35 (11.67)	44 (14.67)	
yes/not a problem/always/extremely important	10 (3.33)	8 (2.67)	
Information on side-effects of the medication			
no/a big problem/never/not important	159 (53.00)	203 (67.67)	<0.0001
sometimes/of some importance	85 (28.33)	46 (15.33)	
a bit of a problem	30 (10.00)	10 (3.33)	
a great deal/important	19 (6.33)	22 (7.33)	
yes/not a problem/always/extremely important	7 (2.33)	19 (6.33)	

TABLE 5: VIEWS OF PATIENTS TOWARDS GENERAL INFORMATION AND RAPIDITY OF CARE BETWEEN PRIVATE AND PUBLIC ED

General information and rapidity of care (n=600)	Emergency department no (%)		
	Private emergency hospital (n=300)	Public emergency hospital (n=300)	P
Rapidity of the treatment			
no/a big problem/never/not important	5 (1.67)	6 (2.00)	<0.0001
sometimes/of some importance	41 (13.67)	80 (26.67)	
a bit of a problem	37 (12.33)	59 (19.67)	
a great deal/important	170 (56.67)	98 (32.67)	
yes/not a problem/always/extremely important	47 (15.67)	57 (19.00)	
Assessment by the acuity of the patient's problem			
no/a big problem/never/not important	17 (5.67)	16 (5.33)	<0.0001
sometimes/of some importance	39 (13.00)	68 (22.67)	
a bit of a problem	39 (13.00)	78 (26.00)	
a great deal/important	157 (52.33)	84 (28.00)	
yes/not a problem/always/extremely important	48 (16.00)	54 (18.00)	

Clarity of explanations of the health problem			
no/a big problem/never/not important	6 (2.00)	26 (8.67)	<0.0001
sometimes/of some importance	28 (9.33)	44 (14.67)	
a bit of a problem	32 (10.67)	54 (18.00)	
a great deal/important	209 (69.67)	121 (40.33)	
yes/not a problem/always/extremely important	25 (8.33)	55 (18.33)	
Information by medical staff on readmission in case of health problems			
no/a big problem/never/not important	46 (15.33)	46 (15.33)	<0.0001
sometimes/of some importance	98 (32.67)	148 (49.33)	
a bit of a problem	91 (30.33)	44 (14.67)	
a great deal/important	37 (12.33)	46 (15.33)	
yes/not a problem/always/extremely important	28 (9.33)	16 (5.33)	

DISCUSSION

A glance of the results of the current study indicates that patients experienced high-quality care from private emergency departments in nearly every aspect when compared to those in the public sector. This suggests that the service quality of the emergency department in private hospitals was superior to that of public hospitals. These findings align with studies conducted across various countries, including Australia [18, 19], and Middle East [20]. In contrary to our findings, a study by Jin, Zhang, Seery, Fu, Yu, Zhang, Sun, Tian, Xu, Yue [15] in China revealed that public EDs deliver higher-quality healthcare services than private emergency facilities. This superiority is attributed to the significantly greater presence of doctors, nurses, and monitoring beds in public EDs in comparison to private hospitals. However, it's important to note that the overall length of stay in public EDs was found to be significantly longer compared to private EDs. Moreover, a systematic review by Basu, Andrews, Kishore, Panjabi, Stuckler [21] assessed the relative performance of private and public healthcare systems in low- and middle-income countries. Studies reviewed in this systematic analysis did not provided evidence to support the assertion that the private sector is typically more efficient, accountable, or medically effective than the public sector. However, the public sector is often noted for its deficiency in terms of timeliness and patient hospitality.

The findings revealed that a majority of patients seeking admission to private EDs were from urban areas. This trend could be associated with higher economic status, as public healthcare services are provided free of charge in this particular region despite the substandard quality of care offered by the public sector. This study identified a significant association between education levels and the preference for public sector utilization, with the majority of patients attending public EDs being illiterate. In line with these findings, it has been discovered that among the personal factors significantly linked to the utilization of public or private healthcare services are income, self-perceived health status, educational attainment, gender, possession of health insurance, and nationality [22]. Our findings also indicate that a larger percentage of government employees sought medical attention at public EDs compared to private ones. This trend may be attributed to the fact that healthcare services provided by the government in this area are offered free of charge, and there is no provision for health insurance. Contrary to our findings, in certain nations, individuals are required to utilize public healthcare services, whether they are employees or retirees, due to the inclusion of basic medical insurance provided by their employers. They can seek reimbursement for expenses incurred for ambulatory health services, hospital admissions, and medications from retail pharmacies, all of which are authorized under these insurance schemes [23].

The findings of this study indicated that patients lacked confidence in the competence of medical personnel in both public and private EDs. A study conducted in Northern Iraq found that the majority of patients expressed satisfaction with private healthcare services, whereas they were not satisfied with the healthcare services provided by public hospitals [24]. This could be attributed to the fact that many of these staff members work in both public and private EDs, especially during evening and night shifts. In this region, medical staff members have limited hours working in government agencies, leaving them with free

time to take on additional shifts in the private sector. Patients expressed greater trust in the services provided by private EDs compared to public ones. This could be due to the availability of facilities offered by private EDs compared to public ones. In this area, there is a limited budget for the public healthcare system, compounded by economic crises. This is because, Kurdistan Region is experiencing its most severe humanitarian and health crisis in recent years, with the demands of refugees and internally displaced people surpassing available medical supplies and personnel; additionally, political wrangling in central government has meant that no general budget has been passed for many years to this region, moreover, conflict and war have also resulted in the physical deterioration of health infrastructure, exacerbating the brain drain of many healthcare personnel [6]. Therefore, it has been suggested that establishing a quality management system will be directly linked to enhancing patient satisfaction [8].

In this study, patients reported receiving greater attention not only from the medical staff in private EDs regarding their healthcare needs as well as taken seriously by the medical staff but also by the reception staff member at the reception desk compared to public EDs. Additionally, patients reported the great importance of cooperation between medical staff in the private ED. This could be attributed to the stringent measures in terms of rules and regulations implemented by emergency management. To mitigate this inconsistency, it might be better to highlight the importance of implementing policy programs for rewards and punishments in the public sector [16]. Concerning providing information clarity of explanations of the health problem, and listening to their medical conditions at ED, patients reported a higher consistency in the information provided and that the healthcare professionals listened to their medical conditions, which they deemed critically important, in private EDs compared to public ones. They also reported better clarity of explanations of the health problems and results of examinations in private ED compared to the public ED. Similarly, a study by Mollaoğlu, Çelik [25] found that the patient satisfaction rate regarding the level of information provided by health care personals concerning drug application, nutrition, and tests in ED was low. Therefore, to ensure adequate information for patients and their relatives in EDs, it is essential to enhance the educational skills among healthcare professionals. Additionally, obstacles hindering communication between healthcare professionals and patients should be eliminated. The EDs should maintain appropriate settings that allow patients and relatives to be adequately informed, and hospitals should encourage such initiatives. We posit that the satisfaction of medical staff in private EDs plays an essential role in providing patients with relevant and comprehensive information. Research has demonstrated that health professionals employed in public EDs tend to experience notably lower levels of job satisfaction compared to their counterparts in private EDs, largely due to fewer opportunities for promotion and less competitive compensation [26, 27].

In terms of the hospital environment, our findings indicated that patients reported better hygiene, which they deemed of great importance, in private EDs compared to public ones. This is likely a result of strong financial capabilities of private sector driving the rapid advancement of healthcare markets, intensifying competition among both public and private providers, and the expanding diversity of patients' requirements [8]. On the other hand, parking availability near the Accident and ED was an issue in both public and private EDs, although the private facility experienced a more severe situation. Primarily, the limited space allocated by the government to the public sector contributes to this situation, as most private hospitals are situated near city centers and are typically smaller in size. In contrary it has been argued that inadequate public funding has resulted in a void being filled by a large and unregulated private sector [28]. Since private EDs play a significant role in delivering acute medical care, granting access to private hospitals can potentially easing the burden on public EDs [29]. During the COVID-19 pandemic, private EDs proved crucial and saved numerous lives despite the considerable expense of treatment [30]. Thus, the future policy in supporting the private sector should be made by the government to create opportunities aimed at overcoming obstacles.

This study also found that patients are depriving from basic needs that must be provided by the hospitals. Some services such as the locating of the Accident & Emergency Department was easier for patients in the private ED compared to the public one. Additionally, the provision of information by healthcare professionals regarding warning signs to monitor after discharge from the ED was inadequate in both public and private settings. However, the private ED exhibited a more deficient situation in this regard compared to the public ED. Despite having considerably greater healthcare

services by private ED, making investments in these services should prioritize the public sector to uphold patients' rights.

Several research findings indicate that one of the principal issues considered by patients for utilizing private EDs is attributed to overcrowding in the public sector and the lengthy wait times. Nevertheless, public ED patients primarily consider out-of-pocket payment as the principal issue when contemplating accessing private EDs [18, 22]. Consistent with these findings, our results suggested that the speed of treatment in private EDs surpassed that of public EDs.

Given the information presented earlier, it becomes evident that private EDs outweighed their public counterparts in nearly every aspect of healthcare service provision. To the best of our knowledge, this is a unique study assessed quality of healthcare service of EDs between public and private sectors in this region. Few limitations of the study warrant attention. The study focused solely on EDs, neglecting healthcare services provided by other departments within hospitals. Therefore, it would be beneficial for future studies to encompass a broader scope within hospital settings.

CONCLUSION

This study provides the initial public portrayal of patients seeking care at private EDs in Kurdistan Region. The empirical evidence indicates that private EDs offer superior quality services in numerous aspects compared to public EDs. Private EDs are shown to have a substantial impact on the community, potentially relieving pressure on public EDs.

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