# **Knowledge about Waiting Time Spent in the Emergency Department for Patients in Saudi Arabia and Overall Patient Satisfaction**

Abdulrahman Saeed Saad Alharbi <sup>1</sup>, Adnan Meteb Mohamed Almezani <sup>1</sup>, Ayman Mamdouh Alrashdi <sup>1</sup>, Hisham Mohammed Almomen <sup>2</sup>

College of Medicine University of Hail <sup>1</sup>, Gulf Medical University Ajman, UAE <sup>2</sup> Corresponding author: Abdulrahman Saeed Saad Alharbi, E-mail: abdulrahmansaeed64@yahoo.com, Phone no: +966540956098

#### **ABSTRACT**

**Background**: Despite the modern society and medical services, waiting in emergency department is taking too long time for patients in Saudi Arabia. Time spent in the emergency department is crucial and can affect the overall health outcomes. Knowing the time spent in the emergency department and overall patient's satisfaction can provide an important information of health care that is provided in Saudi Arabia. Comparing the time spent in the emergency department in Saudi Arabia to other countries will help us know the quality of health care provided.

**Objectives**: Waiting in the emergency department is a global issue not only in the developing countries but also in modern countries. This study aimed at assessing how long is the waiting time spent by patients in the emergency department before receiving the medical care and the overall patients' satisfaction. **Methods**: A cross-sectional study on the time spent in the emergency department before getting help for patients in Saudi Arabia and overall patients' satisfaction was carried out on 528 participants during the period from February to March 2018. **Results**: 42% of the participants, indicated that the main complain that brought them to the emergency department was in the abdominal area and 29.5% of the patients spent more than one hour before getting helped from healthcare providers. 18.8% of the participants evaluated the emergency department service by 1 out of 10. **Conclusion:** Our results showed that large number of patients was suffering from waiting too long time in the emergency department before receiving the required medical care.

**Keywords:** Emergency department, waiting time, Evaluation.

## INTRODUCTION

A hospital is a combination of a social and medical organization which functions to provide complete healthcare in a professional way to the patients through both curative and preventive means. Hospitals are an important facility in the community and an essential center for training the health care workers (5). An emergency department (ED) should offer a fast care for the acutely ill or injured persons that require the attention of specialized nurses and physicians. Emergency department (ED) crowding in the Saudi Arabia has increased significantly these years the same as other countries around the world. Across the United States of America, an ambulance is diverted away from an overcrowded ED approximately once every minute (1). Patients who do arrive in the ED have faced increasingly long average wait times and ED visit increased over the past decade (2,3). Most importantly, this increase has been obvious for patients with the most acute illnesses that need to receive care of their illness (2,3,4). In 2006, the average wait time for emergent patients to acquire an ED provider was 37 minutes, which is above recommended

maximum time of 15 minutes (4). Patients who go to the emergency departments often experience a long waiting time. Waiting is usually due to the triage process which is requested for hospital admission, waiting for a bed for the patients, a shortage of the on-call physicians and an overcrowded emergency department due to a disaster accidents. Because of emergency waiting time can lead to a delay in treating and handling patients who need an immediate medical care. Hospitals spend more efforts on reducing the waiting time for patients who spend long time in the waiting areas (6). Patients either their medical condition may deteriorate, or they could get anxious and worried once they wait too long time to receive medical care (7, 8). Frustration and eventually anger then happen among patients; a condition which is a difficult task for the medical staff members to deal with (9, 10).

## MATERIALS AND METHODS

A cross-sectional study involving 528 participants from all over Saudi Arabia was done during the period from February to March 2018. The selected sample size for this study

Received: 17/9/2018 Accepted: 30/9/2018 was randomly determined. A self-administered questionnaire was developed after a careful review of literatures on the subject and it included 10 questions. The questionnaires consisted of two parts. Part one: demographical data that includes gender, age and marital status. Part two; the participants were asked whether they have been visiting a public hospital or a private one, what was the main complain that brought them to the hospital and how much time they spent waiting to get help from emergency department health care providers. Participants were also asked if they received a professional health care or not, if they were satisfied of the health care that was provided to them or not, there evaluation to the service and whether the emergency department care can be improved in the future or not. Data were collected by one method through a distribution of a survey website-link through participants living in Saudi Arabia in multiple social media platforms. Descriptive statistics were used to describe the answers of the participants in the study using numbers and percentages.

Comparing the answers for different questions within the different groups was done

using Pearson chi-square test. Statistical significance was set at p < 0.05 and analysis was performed using IBM SPSS statistics, version 23 (IBM, Armonk, NY, USA).

The study was done after approval of ethical board of University of Hail.

## **RESULT**

A total of 528 participants participated in the study, 72% were males and 28% were females (Table 1). More than half of the participants 63.6% were married and 36.4% were single (Table 2), Also, 40% of the participants were between the ages of 20 to 30 years old (Table 3). Regarding the hospital that the participants were visiting, 87.3% of the participants were visiting a public hospital where 12.7% were visiting a private one (Table 4). The most common complain that brought the participants to the emergency department was in the abdominal area (Table 5). As regarding the time spent waiting for a medical help, 29.5% had been waiting more than one hour to get help (Table 6). Concerning the general evaluation, 18.8% of the participants evaluated the emergency department health care as 1 out of ten (Table7).

Table (1): Sex distribution of the participants

Sex	Frequency	Percent
Male	380	72
Female	148	28
Total	528	100

**Table (2):** Marital status of the participants

Marital	Frequency	Percent
Status		
Married	336	63.6
Single	192	36.4
Total	528	100

**Table (3):** Age distribution of the participants

Age	Frequency	Percent
0-10 years	4	0.8
10-20 years	37	7
20-30 years	211	40
30-40 years	142	26.9
40-60 years	116	22
>60 years	18	3.4
Total	528	100

Table (4): Type of hospital were visited

Type of hospital were visited	Frequency	Percent
Public	461	87.3
Private	67	12.7
Total	528	100

**Table (5):** The main complain area of the body

Area	Frequency	Percent
Abdomen	215	42
Chest	143	27.9
Head and neck	120	23.4
Peripheral limbs	83	16.2
Back	74	14.5
Genitalia	34	6.6
Total	528	100

**Table (6):** Waiting time spent before getting help

Time spent	Frequency	Percent
5 minutes	45	8.5
10 minutes	65	12.3
15 minutes	63	11.9
20 minutes	58	11
30 minutes	75	14.2
40 minutes	66	12.5
>1 hour	165	29.5
Total	528	100

Table (7): General evaluation out of ten

Evaluating number	Frequency	Percent
1	99	18.8
2	26	4.9
3	59	11.2
4	56	10.6
5	87	16.5
6	44	8.3
7	38	7.2
8	50	9.5
9	31	5.9
10	38	7.2
Total	528	100

# **DISCUSSION**

In the present study, 87.3% of the participants were visiting a public hospital while 12.7% were visiting a private one. The main complain that brought the patients to the hospital was in the abdominal area with a 42% while only 6.6% of the participants complain of back symptoms that brought them to the emergency department. Regarding waiting time in the emergency department, 29.5% of the participants had been waiting more than one hour before they got

helped by healthcare providers, while only 8.5% of the participants had waited just five minutes to get helped. A study was done by Mohammed Hanaffi Abdullah in a hospital in Malaysia to determine the outpatient department waiting time and to look for the factors which are responsible for patients waiting period in the outpatient department of the hospital. His study revealed that there are multiple factors responsible for waiting period

such as registration procedure, number of the staff working at the center and insufficient physicians (11). One reason for minimizing nonacceptable waiting is that it is a social necessity since waiting is experiential and can be affected by the actions of the medical staff. The waiting experience may lead to anxiety, worries among both patients and staff members (12, 13). An unfamiliar and unknown environment with many ill people in combination with concerns about their own condition make patients at the emergency department get worried and anxious. Therefore, medical staff should pay more attention in providing an immediate care for patients as soon as they enter the waiting room. The patients need the presence of the staff, but also available information since wellinformed patients are calmer. This is part of a process control that is provided in the emergency department (14).

The properties of waiting management that involve covering up to change the patient experience of waiting seem not so well studied systematically. In one study "Covering up for the doctor" was used in physician consultations by interpreters to avoid that threatening information was experienced as coming from the interpreters who can translate the nonunderstandable language in a quick way for patients who speak a different language (15). There were 47.5% of the participants complaining that they did not receive a professional medical healthcare when visiting the emergency department. Regarding patient's evaluation, 18.8% of the participants evaluated the emergency department service as one out of ten while only 7.2% of the participants gave a score of ten out of ten. It turns that waiting time in the emergency departments is increasing significantly not only worldwide but also in Saudi Arabia.

This result would mean that a quick action has to be made by the ministry of health in Saudi Arabia to minimize the time that patients usually spend during the emergency department visit to improve the overall outcomes and to get a higher patients satisfaction.

## CONCLUSION

We can conclude that waiting time at hospitals waiting to receive medical care has been increasing these years all over Saudi Arabia. Patients are spending so much time before they get a medical care. The ministry of health and emergency departments must play a

professional role in reducing the time spent in emergency department and provide a good health care service to the patients who will be satisfied if the waiting time in hospitals during visiting the emergency department timing issue has been reduced to avoid the unpleasant feelings of the patient especially those suffering from serious illness. Ministry of health should give great consideration to assure the satisfaction of every patient seeking rapid emergency medical help all over the day (24 hours service).

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