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Responses of Emergency Unit Physicians and Administrators to Q-Statements Regarding Quality of Medical Services at Emergency Unit at Al Kindy Teaching Hospital

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Abstract: The aim of this study is to evaluate the quality of medical services applied at the emergency unit at Al-kindy teaching hospital. Data were collected during one month duration through a survey using special form of questioner; the total number of studied sample was 51, which includes all the resident doctors working in the emergency unit including the post graduate residency doctors. The first part of the study shows lack of organization in many fields of the emergency unit including the arrival of patients and classification of severity of the injuries. absence of defined protocol for management of emergency cases in addition to lack of enough staff and supplies, yet other fields like the availability of functioning unit along 24 h a day and availability of radio communication with the ambulance and other departments of hospital shows good organization.

Key words: Emergency, medical, services

INTRODUCTION

Emergency Medical Services (EMS) were not always like we see it today. It was not so long ago that the function of an ambulance was to race to the scene, snatch the patient and race back to the hospital. As one may imagine, this was not an effective method of saving lives[1].

Historical archives suggest that Caesar designated battlefield medics among his troops. Napoleon's chief surgeons developed les ambulances volantes, consisting of horse-drawn wagons staffed with battlefield caregivers. Similar systems, commonly operated by hospitals and funeral homes, were used in various American cities soon after the end of the Civil War[2].

It was not until the late 1960s to early 1970s that the modern era of EMS was created, with coordinated transport and prehospital interventions, to provide earlier, more intensive care to the community. In the late 1960s, Pantridge established mobile units staffed by physicians and nurses to extend the coronary care unit to the prehospital setting[3].

Emergency departments developed during the 20th century in response to an increased need for rapid assessment and management of critical illnesses. In some countries, emergency departments have become important entry points for those without other means of access to medical care.

The Emergency Department (ED), sometimes termed the Emergency Room (ER), Emergency Ward (EW), Accident and Emergency (AE) department or casualty department is a hospital or primary care department that provides initial treatment to patients with a broad spectrum of illnesses and injuries, some of which may be life-threatening and requiring immediate attention[4].

Upon arrival in the ED, people typically undergo a brief triage, or sorting, interview to help determine the nature and severity of their illness. Individuals with serious illnesses are then seen by a physician more rapidly than those with less severe symptoms or injuries. After initial assessment and treatment, patients are admitted to the hospital, stabilized and transferred to another hospital for various reasons, or discharged[5].

The staff in emergency departments not only includes doctors and nurses with specialized training in emergency medicine but in house emergency medical technicians, radiology technicians, physician assistants, volunteers and other support staff who all work as a team to treat emergency patients and provide support to anxious family members. The emergency departments of most hospitals operate around the clock, although staffing levels are usually much lower at night. Since a diagnosis must be made by an attending physician, the patient is initially assigned a chief complaint rather than a diagnosis. This is usually a symptom: headache, nausea, loss of consciousness. The chief complaint remains a primary fact until the attending physician makes a diagnosis[6].

In the United States an emergency department is often referred to by laypeople as an Emergency Room (ER). Medical professionals typically call it whatever

its name is within their specific hospitals, or simply Emergency. The term emergency room is a misnomer, as a modern hospital's emergency facilities consist of dozens of rooms. The ED interacts with every other department in the hospital and often represents a significant percentage of the hospital's work load and finances. It is common for emergency department doctors to work for a company hired by the hospital to provide emergency services[7].

There is a calamity in the medical system in Iraq. There are many agencies working in the country including the Red Crescent, The Red Cross and others. All of those have contributed a very minimal assistance so far. Mainly they have been trying to establish power and water into the hospitals. The need is acute and we must try to assist in any way we can immediately[8].

The Gulf War in 1991 and the postwar economic sanctions and the recent conflict in Iraq, have severely lowered the medical standards in Iraq, rendering many of Iraqi medical institutions unable to provide accurate diagnosis and adequate treatment. Health care indices such as maternal and infant mortality rates and tuberculosis incidence have severely worsened within the past 10 years or so and the figures remain high compared with those in neighboring and other Middle Eastern countries.

The shortage of medical and other related equipment is hindering the provision of adequate medical services. The shortage of consumable supplies, in particular, is serious and urgently needs to be tackled[9].

MATERIALS AND METHODS

Design: Survey time of the study: from 2nd of February-24th March 2007.

Place: Emergency unite , at Alkindy teaching hospital.

Sample studied: All available resident doctors and higher studies resident doctors who work at emergency unit. Using special interview form and through direct distribution the researchers fill in the form during a period of one month duration a survey done and data were collected using special form questioner, designed by investigator and through direct distribution the doctors fill in the form. The sample studied, includes all resident doctors at the emergency unit, in addition to the residents of higher studies doctors, the total No. of the studied sample was 51 resident doctors. The statistical analysis done using descriptive statistical rates.

RESULTS

The data were classified into two categories:

- Organization of medical services
- Knowledge and attitude of resident doctors about emergency medicine in practice

Organization of medical services: This includes the questions from 1-9 in the questioner sheet with the results as shown bellow:

- About 94% of the responders agree that the patients arrive to the EU without previous supervision (Table 1)
- Two thirds of the patient (60.7%) of the responders believes that there is no classification of the arrived patients according to their illnesses
- About 96% of the responders believe that there is available functioning EU along 24 h a day (Table 2)
- Most of the responders (80%) agree that they receive non emergent cases at the EU (Table 3)
- Nearly 88% of the responders believe that there is no effective radio-communication between the ambulance and EU (Table 4)
- About 84% of the responders agree that there is a well established contact between emergency unit and other department of hospital
- Seventy six percent of the responders believe that there is no availability of enough staff in EU, while 96% of them believe that there are no enough supplies in the same unit (Table 5)
- About 70% of the responders agree that there should be a protocol to standardize the treatment in the EU

Table 1: Arrival of patients to the emergency unit

Arrival of patients	Number	Percentage
With previous supervision	3	5.8
Without previous supervision	48	94.2
Total	51	100

Table 2: Twenty four hour availability/day of a medical care at emergency unit

Available care 24 h/day	Number	Percentage
Yes	49	96
No	2	4
Total	51	100

Table 3: Receiving non emergent cases in the emergency unit

Received cases	Number	Percentage
Yes	41	80.4
No	10	19.6
Total	51	100

Table 4: Presence of effective radio communication between the ambulance and EU

Presence of radio communication	Number	Percentage
Yes	6	11.8
No	45	88.2
Total	51	100

Table 5: Availability of enough staff in the Eu

Availability of enough staff	Number	Percentage
Yes	12	23.6
No	39	76.4
Total	51	100

Table 6: How experiences gained about dealing with emergency cases

Experiences gained	Number	Percentage
After graduation/clinical practice	44	86.2
During study in the college	7	13.7
Total	51	100

Table 7: Supervision of resident doctor by permanent resident or senior doctors during call on duty

Supervision of permanent by senior doctor	Number	Percentage
Yes	35	68.6
No	16	31.4
Total	51	100

Knowledge and attitude of resident doctors about emergency medicine in practice: This include questions from 10-16 in the questioner sheet with the results as shown bellow:

- Eighty six percent of the sample responded that they gain their experience in managing emergency cases after graduating from the college of medicine (Table 6)
- More than two third of the responders (68.6%) agree that they have been supervised by permanent resident doctor or senior during call on duty (Table 7)
- Sixty two percent of the sample believes that there is no appropriate balance between theoretical and practical training of physician
- Most of the resident doctor working at the EU (86%) believes that they need greater expertise and technical skills as part of their training
- About 88% of the responders believe that primary health care physician should know and practice emergency medicine (Table 8)
- The skill performance varies between residents with different percentages, although high percentage of them are able to perform skills like measuring blood pressure (70.5%), introducing nasogastric tube (84.3)%, setting an intravenous cannula (92%), suturing (70%), urinary catheterization (64.7%), other skills show low percentages like Performing tracheotomy (11.7%), introducing an endotrachial tube (15.6%) as shown in the Table 9

Table 8: Attitude of resident doctors working at EU about knowledge and practice of primary health care physicians of emergency medicine

Knowledge and practice of primary health care physicians of emergency medicine	Number	Percentage
Should have knowledge and practice	45	88.3
Shouldn't have knowledge and practice	6	11.7
Total	51	100

Table 9: Skills that the resident doctors at the emergency unit are able to perform

Skills performed by the resident doctors at the emergency unit	Number	Percentage
Measure intravenous pressure	36	70.5
Introduce nasogastric tube	43	84.3
Setting Iv cannula line	47	92
Blood transfusion	28	54.9
Introduce endotrachial tube	8	15.6
Perform tracheotomy	6	11.7
Perform a DC (direct current) shock	26	50.9
Measure CPR	21	41
ECG	23	45
Urinary catheterization	33	64.7
Suturing	36	70.5

DISCUSSION

Arrival of patient to the emergency unit (EU): The survey of (51) at the EU physicians at the EU indicates that there is no real procedure for receiving patients at the EU as 90% of patients are entered without previous supervision and 61% without classification of their illnesses.

This state of affairs reflects bad organization approaching a state of chaos. The correct way is practiced in Emergency unit at The Cambridge University Hospital (UK) is to have an emergency assessment Unit (EAU) to receive the patient first to classify them and direct to the relevant section of the EU[7].

Working hours at the EU: The unit appears open all the time, this is good.

Non emergency cases handled: About 80% of non-emergency cases are report. This is very high but consistent with the need of low income people in Iraq due to the present weakness of other hospital and the expenses involved at Doctors clinics. Similar situation was found at Mayo clinic, Saint Mary Hospital (USA)[8].

Radio communication: Eighty eight percent of the survey people confirmed the absence of effective radio communications; this is truly bad as it leaves the EU staff in the dark of what is coming. But it is line with the bad communication in the country presently. In

United Kingdom the emergency communication is a private wire telephone system, which is provided by the Home Office and it links with all Local Authorities, Police and Fire Service HQ in the UK. This system is the preferred means of communication in an emergency. At the time of updating this plan the ECN is programmed for upgrading by Central government.

Availability of sufficient staff: Only 33% of the surveyed people through there are sufficient staff at the EU. The remainder through otherwise. This is, of course bad and compares very badly with the hospital at Cambridge (UK), Virginia (USA) where doctors, specialist nurses with advanced skills in examination, investigation and treatment called Emergency Nurse Practitioners (ENP) work in the minor injury area of the ED. Many patients in the minor injury area are seen by the ENP who can treat of a wide range of health problems (11). But due to the high number of victims in Baghdad these days and the shortage of physicians, Nurses and supporting staff, the situation is understandable.

Presence of standardized protocol at EU: There was no standardized protocol that the resident doctors can follow in dealing with emergency cases A Simple Protocol Avoids Unnecessary Invasive Procedures, a group of Canadian researchers reported on their investigation of a protocol which could minimize invasive testing. to diagnose subarchnoid hemorrhage(SAH) using certain protocol that depends on clinical sign and symptoms like , headache, vomiting and increase diastolic pressure, leading to decrease the percent of invasive technique of investigation and early management of cases.

Experience gained in dealing with emergency cases: Emergency residents gain these experiences mostly after graduation because emergency medicine is not involved in the curriculum of medical college as special entity but perhaps as part of surgery and there is no specialized college for emergency medicine as there is in USA, were the Physicians entering the practice of emergency medicine should be residency trained in emergency medicine.

Involvement of primary health care physicians in emergency medicine: The primary health doctors should be trained on skills that are needed in emergencies especially those working in the remote or rural area or even in the cities were we live in continuous crises.

There was a problem of performing certain skills by the resident doctors, like trachiastomy or introduction of endotrachial tube; this is probably because in our country it's the job of ENT specialist and the anesthetist.

CONCLUSION

In this research shows that the residents gain most of their experiences after graduation, although they have been supervised by permanent ,or senior doctors, (86%) believes that they need greater expertise and technical skills as part of their training. there is also defect in performing some life saving skills which need further training in the future.

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