Emergency Medicine in Turkey

Emergency Administration

A General Look

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What is Emergency Medicine?

It is the specialized field dealing with evaluating patients, knowing the patient's situation, giving treatment and preventing potential disability or death in cases of unexpected illness or injury.

Who is the Emergency Medicine Doctor?

He is the doctor who organizes the determination of the situation, assessment, care and finalization of the acutely ill or injured patient without loss of time,

carries out administrative approaches,research and education concerning every aspect of emergency medicine

guides the patient towards receiving care within the hospital or in polyclinics outside it.

provides for the availability of emergency medical services prior to the hospital.

Emergency Medicine Specialist

4 Essential Duties

- Teaching
- Research
- Service
- Administration

Objectives

Providing integrated emergency care prior to the hospital, at the hospital and between hospitals

Standardizing and developing the level of emergency medicine

Decreasing the level of deaths and morbidity due to illness or injury.

Conducting research on the progress and treatment of critical diseases

Objectives

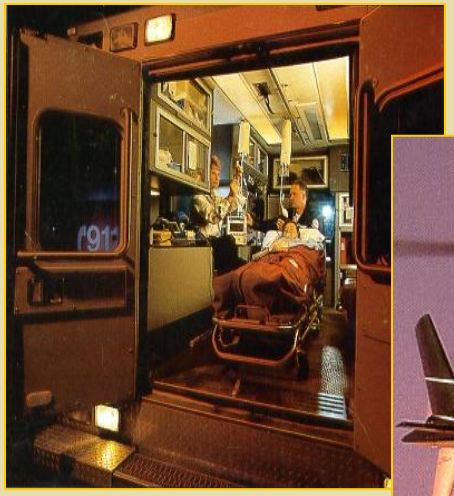
Collection of epidemiological information which may shed light on accidents and other health problems.

Epidemiology and administration of large events and disasters.

Working on problems associated with the ethical aspect of emergency medical care.

Developing clinical guides for the phases of diagnosis and treatment.

Anglo-American Model



Patient to Hospital

Emergency medical specialists start the care at the hospital.

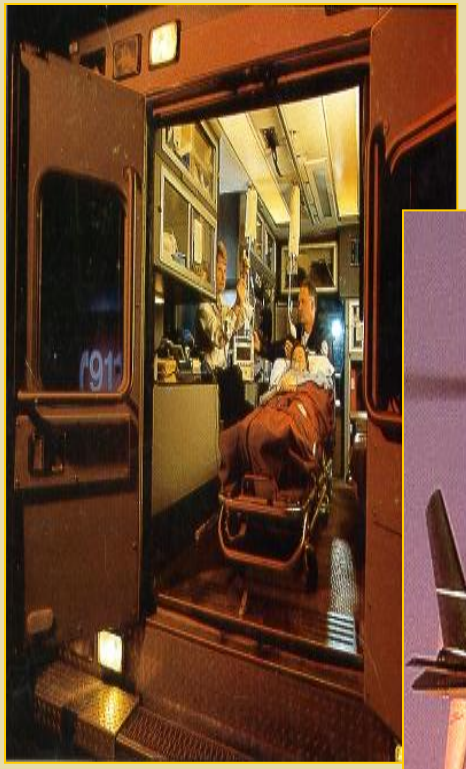
- Emergency medical technicians
- paramedics

Emergency medical specialists continue at the ward.

Emergency Medical Specialists

Emergency Medicine specialized branch is in Australia, Canada, China, Hong Kong, Japan, UK and USA

Franco-German Model



Hospital to Patient

The doctor and the technical equipment are taken to the patient.

Emergency Medicine is applied prior to the hoslpital.

The doctor (general anesthesiologists) Limited resuscitation and checking of pain.

Emergency services have not been developed..

Anesthesiologists

Emergency medicine is not an official specialization

Germany, Poland, Russia,

Sweden, Switzerland, Slovenia

Emergency Medicine – A Chronology

3 main periods

- Before 1960
- Between 1960 and 1990
- After 1990

Development in the world is parallel with that in the USA

Dealing with wars

Every war contributed some developments

1940 – II. World War

1950 – Korean War

1960 – Vietnam War

1990 – War on terror

Before 1960

Generally in a single room

Emergency room (!)

A single nurse / doctor

No private care

1960 - 1990

An increase in sudden deaths arising from accidents and traumas in the society.

The inadequacy of the single room in emergency wards related with these deaths.

An increase in experience on the battlefield.

Adaptation of this experience into civil life.

The opening of multi-room emergency services.

Special teams beginning to work in the newly opened emergency services.

1960 - 1990

Adaptation to the multi-room system.

The emergency service (department) system.

The proliferation of special teams and their grouping.

Teams are officially recognized in their groups.

- Associations, societies,
- Ambulance services

Those institutions which were officially recognized put rules for themselves.

The standardization of the rules.

- Sufficiency rules.

After 1990

- Emergence of the higher levels of specialization
- Broadening web of services
  - First aid
  - Pre-hospital care
  - Unusual situations
  - Terrorism
- Globalization
  - Clash of systems
    - Anglo American
    - Franco German

After 1990

The most important global development: unity of language and meaning

The standardization of terminology

The definition of emergency medicine

The definition of emergency situations

The definition of an emergency patient

The definition of an emergency medicine specialist

The definition of emergency service

were determined.

Emergency Medicine – Developmental

Emergency Medicine System Development Table < 1993 (0 / 15)

Evaluation	Not Developed	Still Developing	Developed
Specialty System			
•National organization	No	Yes	Yes
•Assistance Training	No	Yes	Yes
•Board certification	No	Yes	Yes
•Official Specialist	No	Yes	Yes
Academic Emergency Medicine			
•Specialty Magazine	No	Yes	Yes
•Research	No	Yes	Yes
•Dtabank/system	No	No	Yes
•Sub-branch specialty	No	No	Yes
Patient Care System			
•Emergency doctor	Other doctors	ATU with Assistant Training	ATU with Assistant Training
•ES director	Other doctors	ATU	ATU
•Pre-hospital Care	Private vehicle, taxi	BLS/EMT ambulances	Paramedic/doctor ambulance
•Transfer system	No	No	Yes
•Trauma system	No	No	Yes
Management			
Quality Assessment	No	No	Yes
Pre-evaluation	No	No	Yes
	Lebanon, Nepal, Pakistan, Vietnam, Jamaica, **Turkey**	Hong Kong, Israel, Jordon, South Korea, China	Australia, Canada, USA, England

Emergency Medicine – Developmental

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Emergency Medicine - Developmental

Emergency Medicine System Development Table			2008 (10 / 15)
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	Lebanon, Nepal, Pakistan, Vietnam, Jamaica,	Hong Kong, Israel, Jordon, South Korea, China, Turkey	Australia, Canada, USA, England

Medical Faculties

Aydın Adnan Menderes Ü. Acil Tıp AD
Afyon Kocatepe Ü. Acil Tıp AD
Akdeniz Ü. Acil Tıp AD
Ankara Ü. Acil Tıp AD
Atatürk Ü. Acil Tıp AD
Başkent Ü. Acil Tıp AD
Cumhuriyet Ü. Acil Tıp AD
Çukurova Ü. Acil Tıp AD
Dicle Ü. Acil Tıp AD
Dokuz Eylül Ü. Acil Tıp AD
Düzce Ü. Acil Tıp AD
Ege Ü. Acil Tıp AD
Erciyes Ü. Acil Tıp AD
Osmangazi Ü. Acil Tıp AD
Fırat Ü. Acil Tıp AD
Gazi Ü. Acil Tıp AD
Gaziantep Ü. Acil Tıp AD
Gaziosmanpaşa Ü. Acil Tıp AD
GATA
Hacettepe Ü. Acil Tıp AD

Harran Ü. Acil Tıp AD
İnönü Ü. Acil Tıp AD
İstanbul Bilim Ü. Acil Tıp AD
Kafkas Ü. Acil Tıp AD
Kahramanmaraş Sütçü İmam Ü. Acil Tıp AD
Karadeniz Teknik Ü. Acil Tıp AD
Kırıkkale Ü. Acil Tıp AD
Kocaeli Ü. Acil Tıp AD
Marmara Ü. Acil Tıp AD
Mersin Ü. Acil Tıp AD
Mustafa Kemal Ü. Acil Tıp AD
Ondokuz Mayıs Ü. Acil Tıp AD
Pamukkale Ü. Acil Tıp AD
Selçuk Ü. Acil Tıp AD
Süleyman Demirel Ü. Acil Tıp AD
Ufuk Ü. Acil Tıp AD
Uludağ Ü. Acil Tıp AD
Yeditepe Ü. Acil Tıp AD
Yüzüncü Ü. Acil Tıp AD

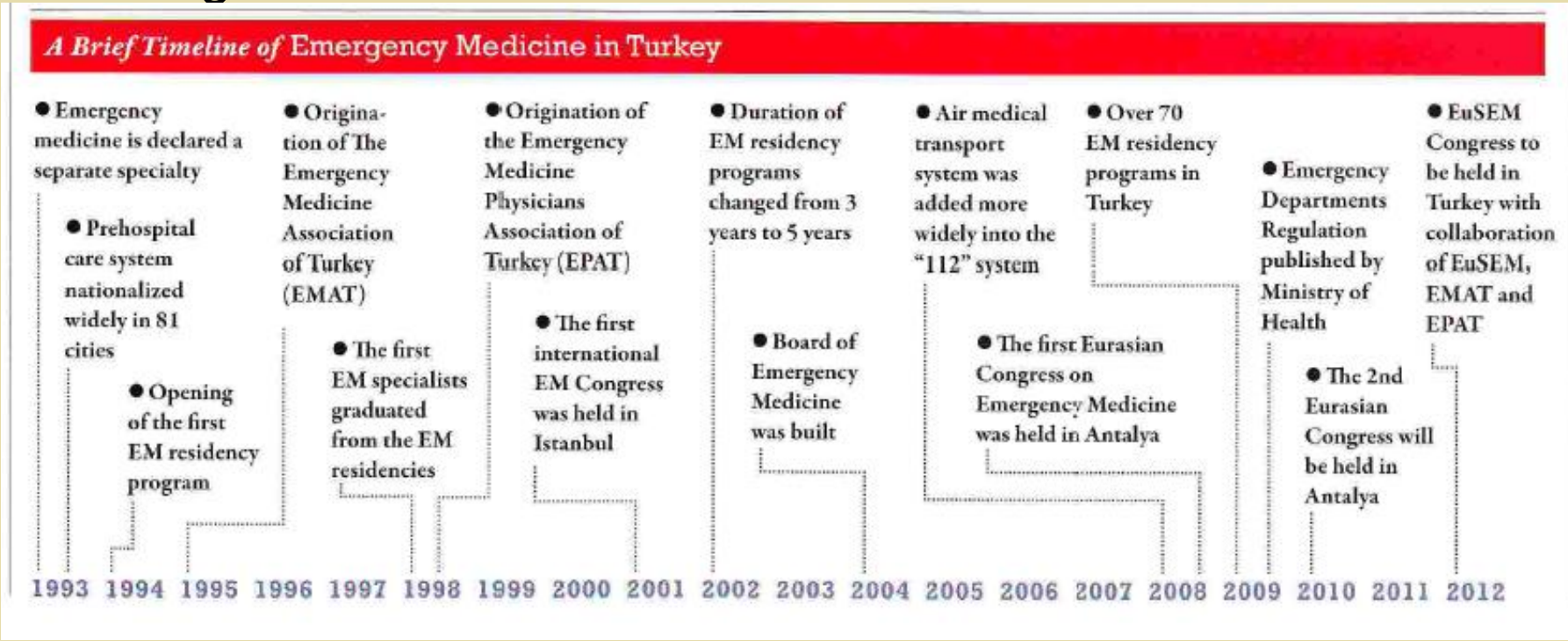
Training and Research Hospitals

Ankara
Atatürk EAH
Dışkapı Yıldırım Beyazıt EAH
Ankara EAH
Keçiören EAH
Numune EAH
İzmir
Tepecik EAH
Atatürk EAH
İzmir EAH
Kayseri, Bursa, Adana……

İstanbul
Bezm-i Alem V.S.V.G. EAH
Bakırköy Dr. Sadi Konuk EAH
İstanbul EAH
Göztepe EAH
Haseki EAH
Haydarpaşa EAH
Kartal Dr. Lütfi Kırdar EAH
Okmeydanı EAH
Şişli Etfal EAH
Taksim EAH

Emergency Medicine – Turkey

- Brandization: “The Eurasian Emergency Medicine Congress”



Emergency Medicine in Turkey, the Future...

- The Specialization System
- Certification by a Board
- Academic Emergency Medicine
  - Associated branch specializations
  - Patient Care System
  - A good pre-hospital care and patient transfer system
  - A trauma system / efforts towards prevention
  - Educating practicing physicians
  - Educating the public
  - Educating medical faculty students
- Administration
  - Kalite kontrol
  - AS Standards

Emergency Services

Units which provide 24-hour uninterrupted emergency health service

They conduct all medical services until the patient is stabilized regardless of whether or not they have medical coverage or what type of social assistance or any other characteristics of the patient.

They support ambulance services, which provide pre-hospital care, and if necessary see that medical guidance is provided.

Emergency Service

Emergency services are not units where patients receive treatment by being hospitalized.

Sick and injured patients should be kept under observation for 24 hours at the most.

In the matter of advanced medical care and treatment being found inadequate, transfer may be recommended.

Transfer is only carried out after the patient has been stabilized.
Coordination must be established with the transfer hospital

The Importance of Well Planned Emergency Services

ES, directed towards the public “window of the hospital”

Public opinion about the hospital are often based on experiences suffered in the emergency service

25-75 % of hospitalizations originate in the emergency service.

The quality of patient care is better; patient «flow» is faster and more economical.

Health personnel are more appreciative.

Physical Characteristics of an Emergency Service

It is on the entrance floor of the hospital, on a main street near, but separate from the main entrance, where ambulances may go in and out easily.

It is located so that access to imaging facilities, laboratories, the operating room, the intensive care unit and the morgue is convenient.

In hospitals where there is more than one building on the same site, transfer of patients should be carried out under cover.

Physical Characteristics of an Emergency Service

According to the level of the emergency service, there should be an adequate number of and quality for first examination, intervention, observation and waiting rooms to fit the minimum standard.

There should be a cafeteria able to serve patient families 24 hours, a public address system, a patient family bulletin board, a dressing room for personnel and a relaxation area for personnel, as well as a security room, toilets, and sinks.

Physical Characteristics of an Emergency Service

Floors should be of sturdy material, matte in surface and non-slippery, even and easy to clean.

The entrance for ambulances and transferred patients should be separate from the one for walk-in patients.

There should be a suitable and large enough parking area separate from the ambulance area.

There should be signs and symbols in the nearby streets showing the way to the emergency service.

Physical Characteristics of an Emergency Service

Emergency services buildings should have good lighting and signs for «EMERGENCY SERVICE» visible from at least 20 meters away.

Specialist duty doctors, doctors and other personnel with their branches and degrees should be listed on a preferably well lit sign, and on call pharmacies should also be shown.

Types of Emergency Services

They may be divided into first, second and third levels.

Capacity for emergency patients

The nature of the cases and the incidence of cases according to branches

The physical conditions, the provided materials, the medical equipment and the quality of the personnel

Characteristics of the area in which it gives service, its location, the status of the institution in which it operates

Level 1 Emergency Services

These are emergency services in which sick and injured patients are tracked without the need of basic life support systems, trauma, resuscitation, advanced life support systems or intensive care units.

Level 2 Emergency Services

These are emergency services where in addition to the conditions existing at Level 1 emergency services, there are also evaluations done at the level of specialists and computerized imaging techniques such as tomography and ultrasound are used.

Level 3 Emergency Services

These are emergency services in which 24-hour specialist level examination and treatment is provided in addition to what is offered at Level 1 and Level 2 services,.

Tedavi alanı			400 m² ye kadar	400–800 m²	800 m2 nin üzeri
Bekleme alanı (m²)			30–50 m2	50–100 m2	100 m2 . nin üzeri
			I.Seviye	**I.Seviyeye ilave olarak;**	**I ve II. seviyeye ilave olarak;**
Bulunması gereken birimler			*Muayene alanları *Resüsitasyon odası *Müşahede odası, *Müdahale odası, *112 istasyon birimi (Bakanlık hastaneleri için zorunludur)	*Triyaj (Hemşire/ATT/sağlık memuru düzeyinde), *Primer tedavi birimi, *Görüntüleme Ünitesi, *İzolasyon/Dekontaminasyon Odası	*Triyaj (tabip düzeyinde), *Travma odası, *Kritik- Yoğun Bakım Birimi (tercihli) *Muayene Odası (her bir branş için)
Müşahede odası yatak sayısı			4–6	6–12	12–20
			I. Seviye	**I. Seviyeye ilave olarak**	**I. ve II. seviyeye ilave olarak**
Verilmesi gereken sağlık hizmeti			*Temel Yaşam Desteği, *İleri Travma Yaşam Desteği, *İleri Kardiyak Yaşam Desteği, *Yoğun bakım gerektirmeyen hastaların müşahede biriminde takibi. *Ayaktan hasta bakımı.	*Uzman düzeyinde değerlendirme, *Bilgisayarlı tomografi, ultrasonografi gibi görüntüleme imkanları.	*İleri tetkik yapabilme imkanı, *24 saat uzman düzeyinde hizmet. *Kritik ve yoğun hasta bakımını sağlayacak donanım (tercihli).
Personel Durumu	Tabip / Asistan	Kamu Sağlık Tesisleri (Her vardiya için)	1–2	2–4	4+
		Özel Sağlık Tesisleri (Her vardiya için)	1-2	1-2	1-2
	Hemşire / ATT / Sağlık Memuru	Kamu Sağlık Tesisleri (Her vardiya için)	1–2	2–7	7+
		Özel Sağlık Tesisleri (Her vardiya için)	1–2	1-2	1-2
Helikopter Ambulans için alan ayrılması			1 adet helipet alanı (Fiziki şartları uygun olan hastaneler için geçerlidir)	1 adet helipet alanı (Fiziki şartları uygun olan hastaneler için geçerlidir)	1 adet heliport alanı (Fiziki şartları uygun olan hastaneler için geçerlidir)

Emergency Service Units

The characteristics of the materials found at emergency service units differ according to the type of unit it is.

The Triage Room

The triage room is where the medical priorities of the sick or injured patients who come to the emergency service are determined and they are given guidance by health personnel.

Information is collected from sick or injured patients who walk in regarding their complaints, allergies, medicines used by them and vital signs.

The Triage Room

It should be easily found and accessible.

Stretchers and wheelchairs should be provided.

There should be direct access to the units where sick and injured people are examined.

Color coding of red, yellow and green gives effective providing of services.

Examination Room/Area

It should be located near the emergency entrance.

It should be located near the secetaries' rooms and the police bureau.

Stretchers and examination tables should be conveniently positioned depending on the situation and curtains or screens should be provided for privacy.

The Resuscitation Room

This is the place where the first examination and treatment of patients who for whatever reason have respiratory or cardiac arrest, or are sick or injured patients likely to have one.

Observation Room/ Area

This place is for patients who have had their first examination and treatment, but have not been discharged and/or hospitalized to be cared for and treated for a maximum of 12 hours.

Intervention Room / Area

This is the room where every type of stitches are appliedor removed, casts are put on and other small surgical work is done.

It ought to be big enough for surgical intervention to be carried out.

The room should be furnished with an examination/intervention table appropriate for carrying out surgical interventions and a table for gynecological examinations.

Number of Stretchers

To arrive at the number of patient beds needed for observation, it is suggested that plans be made for serving 2,000 patients a year.

There should be 8 to 10 stretchers per doctor on duty (for low to medium critical patients).

For more critical patients, there should be 1 to 3 stretchers per doctor on duty.

For small emergency services there shoud be a minimum of 6 stretchers.

Calculation of the minimum number of strechers for an emergency service

Number of stretchers = 1.5 x { (number of patients applying to the emergency service in 24 hours x duration of time spent in the emergency service by every patient) / 24}

Example: Average daily number of patients :100 (per year :36,000) Average duration of stay in the emergency service (for all patients) : 2 hours

Minimum number of stretchers = 1.5 x{ (100 x 2) / 24} = 12

The Emergency Laboratory

It is the section where the analyses of blood and urine are done only for patients applying to the emergency service.

Imaging Unit

It is a unit consisting of medical equipment like mobile and stationary x-ray, BT and USG providing 24-hour services to emergency patients nearby or within the facility.

Recording of Information and Cashier

It is the section where the files of sick and injured patients are kept.

These records are carried out after the first examination for critical and unstable patients.

Waiting Area

An ergonomic seating arrangement, windows, access to the emergency entrance, and availability to the canteen.

A Critical Patients Care Unit

It is an area where the first resuscitation and treatment of patients who are not yet stabilized remain in it for observation and treatment within a limit of 24 hours.

Primary Treatment Unit

This is an area where patients who walk into the emergency service with no need for observation, are listened to and their treatment is planned.

Trauma Room / Area

This is an area where the first examination, treatment and care of sick or injured patients who have suffered trauma are given as well as interventional advanced life support for trauma.

Treatment Area

The treatment area refers to the places where all of the diagnoses and treatments are carried out other than the waiting room, the support area, the imaging unit and the laboratories.

The Decontamination Area

It is an area equipped with an adequate number of showers, where people exposed to nuclear, chemical or biological agents are decontaminated.

The 112 Station Unit

This is a unit where a B type radio station and crew are located within the facility of an emergency service and where there is at least one room which gives 24-hour ininterrupted assistance to ambulances and emergency health services integrated with hospital emergency services and first level health institutions.

Security Precautions at Emergency Services

It is required that the administrations of a health institution take the necessary steps to ensure the safety of patients, patient families and employees.

This is carried out with official security forces or private agencies and a sufficient number of security cameras.

Doors which open according to the nature of the person who wants to enter may be employed to prevent irrelevant people from entering and personnel other than those who on duty there from approaching critical units such as areas where medical or surgical procedures are carried out, operating rooms and intensive care units.

Thanks for your time...