



Course: Professionalism & Ethics - 1



# Medical Malpractice & Medical Errors

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0597627168

لا أهل النسب والتبعية

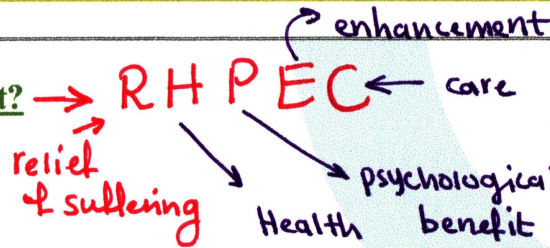
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Faculty of Medicine

2021-2022



What is a health benefit?



- Relief of suffering
- Care
- Prevention of disease, illness, disability
- Health
- Enhancement
- Psychological benefit
- The **WHO definition of 'health'**: 'a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.'

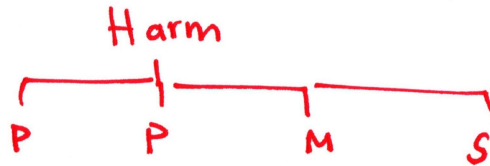
حالة من الصحة الجسدية والعقلية والاجتماعية وليس فقط غياب المرض

## What is a Harm?



What can be harm in the health care setting?

- Physical harm **جرح جسدي**
- Psychological harm **« نفس »**
- Moral harm (harm to interests, harm as unfairness, harm as disrespect) **« أخلاقي »**
- Social/economic harm (consequences for social role, stigmatization **« اجتماعي / اقتصادي »**)  
**« الوصمة »**



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## Case Discussion



- A medical resident in medical ward was asked to perform a procedure. His mentor was called away from the room about an urgent matter and the young resident made a mistake, which led to a complication.
- Try to discuss this case whether the resident did a correct/wrong decision by taking an action without attendance of his mentor

## Definition

ارتكاب خطأ / مغفون عمداً / لغرض إلى  
إصابة



### Malpractice

ارتكابه

- Any act or omission by a health professionals during dealing with a patient that deviates from accepted norms of practice in the medical community and causes an injury to the patient.

### Medical error

- Is the failure of a planned action to be completed as intended: The failure to complete the intended plan of action or implementing the wrong plan to achieve an aim.
- Is a preventable adverse medical offense.
- Deviations from the process of care, which may or may not result in harm.
- When planning or executing a procedure, the act of omission or commission that contributes or may contribute to an unintended consequence.

نقص بلحاظ

## Medical Error

Failure to complete intended plan

implementing wrong plan

= deviation from process of care.

يعني الخطأ

Planing or Executing

or

Executing

## Medical Errors

### Why medical Errors Important?

- Related ethically to patients' rights
- Issues of regulation
- Trust
- Finance for the patient and for medical hospitals.

تتعلق أخلاقياً  
بمقدم المريض

النظمي

الثقة

تكاليف على المريض  
وعلى المستشفى

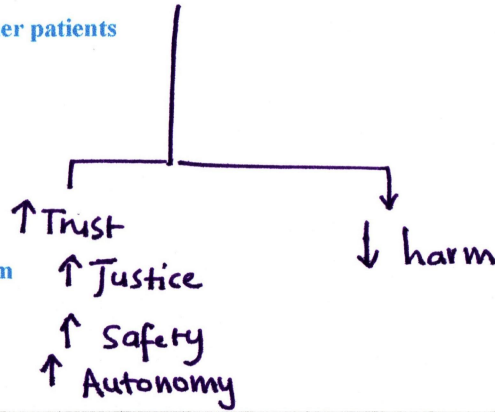


## Medical Errors



• When an Medical Errors occurs, what should you do?

- **Reporting it to the health care system** (and hence, via this channel, to potential future patients) **اكتب تقرير**
- **Disclosing to the patient and administration.** **Why Medical errors should be disclosed?** **خبر المريض و الإدارة**
- **Promote public trust** **ليس لازم أخبر المريض؟! لا**
- **Prevent further harm** to a patient and to other patients
- **Respect personal autonomy**
- **Support principle of justice**
- **Improve the safety** of medical practice
- **Be able to trust the physicians and the system**



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## Medical Errors: Classification



• **Errors of omission occur as a result of actions not taken.**

As: not strapping a patient into a wheelchair.

**إجراء لم يتم**

• **Errors of the commission occur as a result of the wrong action taken.** **الصيام بإجراء خاطئ**

As: administering a medication to which a patient has a known allergy

Not labeling a laboratory specimen.

• **Types of Medical Errors** → **نوع الخلف**

- 1○ Active Error
- 2○ Adverse effects
- 3○ Latent Error
- 4○ Negligence
- 5○ Negligent Adverse Events
- 6○ Never Event
- 7○ Noxious Episode



## Medical Errors - Types

### Active Errors

الخطأ يرتب وقت العمل (خطأ) وليس الهام

- Errors taking place between a person and an aspect of a larger system at the point of contact.
- Made by people on the front line such as clinicians and nurses: as operating on the wrong eye or amputating the wrong leg are classic examples of an active error.

### Adverse Events

- Is a type of injury due to an error in medical or surgical treatment rather than the underlying medical condition of the patient.

It include:

- Unintended injury إعانة جبرية بسبب العلاج
- Prolonged hospitalization, or physical disability that results from patient management.
- Complications resulting from prolonged hospitalization or healthcare system related factors.

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المضاعفات تنتج من دخول  
المستشفى لفترة طويلة

## Medical Errors - Types

### Latent Errors

النظام  
مسائل في > العملي

(خلل في الأدوار أو  
النظام)

- Errors in system or process design: as failure of installation or maintenance of equipment, or ineffective organizational structure.

قد لا يتكشف

- May go unnoticed for a long time with no ill effect.
- The active human error triggers the latent error, resulting in an adverse event.

Active error → latent error



## Medical Errors - Types

الإهمال

### Negligence

فشل معايير الرعاية المتوقعة

- Failure to meet the reasonably expected standard of care of an average, qualified healthcare worker looking after a patient in question within similar circumstances.
- As: the healthcare worker may not check up on the pathology report which led to a missed cancer or the surgeon may have injured a nerve by mistaking it for an artery.

↓  
↓  
إهمال

### Negligent Adverse Events

- A subcategory of preventable, adverse events that satisfy the legal criteria used in determining negligence.
- The injury caused by substandard medical management.

خرج عن الأعراف الجائزة والتي يتطبع عليها شروط الإهمال

لدى العلاج تمت الحياة الطبيب (إهمال)

+ إهمال

## Medical Errors - Types

### Never Event

المفروض ما يصير أبداً

أنظمة

- Errors that should not ever have happened.
- A classic example is the development of pressure ulcers or wrong-site surgery.
- The National Quality Forum has identified the following as Serious Reportable Events:

!! also active

← أمثلة خطيرة  
تم التقرير عنها

- Care Management
- Device/Product
- Environmental
- Patient Protective
- Surgical
- Radiological





## Medical Errors - Types

### Noxious Episode

- Unwanted events, complications, and mishaps that result from acceptable diagnostic or therapeutic measures that are deliberately instituted. عمداً

✓ For example, sending a hemodynamically unstable trauma patient for prolonged imaging studies instead of the operating room. The result could be a traumatic arrest and death.

مضاعفات = خطأ مع إجراءات مقبولة  
ولكن لمريض غلط !!

## Medical Errors: Prevalence



- In Us السبب الثالث للوفاة  
Is **third** leading cause of death in US  
It occur in **3.1%** of admission  
**0.7%** of deaths  
Cost \$887 million to an estimated 850,000 medical errors (2000)
- Globally: **7 – 40%**
- In 2013 in Middle: **7 – 90%**
- In Saudi Arabia: **44.4%** (Almalki, Z. S., Alqahtani, N., Salway, N. T., Alharbi, M. M., Alqahtani, A., Alotaibi, N., ... & Alshammari, T. (2021). Evaluation of medication error rates in Saudi Arabia: A protocol for systematic review and meta-analysis. *Medicine*, 100(9)

More common in surgical specialties (**56.7%**) than non-surgical specialties (**44.3%**)

Ghaffar, U. B., Ahmed, S. M., & Faraz, A. (2015). A review of the frequency of medical error in Saudi Arabia: an emerging concern. *Journal of Evidence Based Medicine and Healthcare*, 2(52), 8692-5

## Malpractice & Medical Errors



### • Ethical Issues

- Patient autonomy **استقلالية المريض**
- The beneficence of the patient and non-beneficence **الإيمان / الفائدة**
- Justice **العدالة** **عدم الامتياز / الضرر**
- Truth telling **السفقة**
- Confidentiality **حساسية**
- Informed consent

### • Islamic Issues

- لا ضرر ولا ضرار
- من تطيب و لم يعلم منه طب فهو ضامن

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## Discussion

## Case 1



A 70-year-old lady sadly passed away after suffering from cancer of the ureter. Her family sought legal advice after they were told an important scan was lost, causing a delay in her diagnosis of cancer.

**What type of medical malpractice and medical error occur?**

## Case 2



Forty four patients, have been identified as developing pseudomonas infections after undergoing routine cystoscopies, at the Urology Department.

**What type of medical malpractice and medical error occur?**

### Case 3



A male medical student received the first dose of COVID-19 vaccine 3 days ago, he started to develop a pain and swelling in left calf muscle, which diagnosed by US as DVT

**What type of medical malpractice and medical error occur?**

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### Case 4



A 65-year-old male with fracture pelvis admitted to orthopedic ward. 4 week later he started to develop ulcers in his back.

**What type of medical malpractice and medical error occur?**

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### Case 5



A 25-year-old female, sustained three penetrating dog bites to her right lower leg. The nurse proceeded to superficially clean our client's wounds using a small amount of saline cleaning solution and then closed the wounds and send her home. Around five days later her condition deteriorated. The ER physician examined her wounds and noticed that they were oozing a foul-smelling discharge and were very sore.

**What type of medical malpractice and medical error occur?**

### Case 6



A 65-year-old female admitted to ICU because of COVID-19 infection, she was intubated. Patient was arrested and CPR had been established but unsuccessful and required DC shock. The defibrillator not working at that time.

**What type of medical malpractice and medical error occur?**

## Case 7



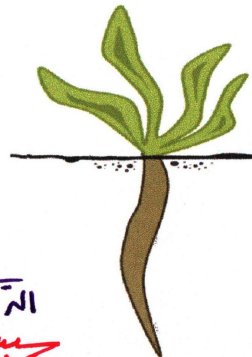
A 63-year-old male underwent a successful operation to remove the cancerous part of his bowel. 3 days after surgery he developed DVT. He didn't receive any sort of prophylaxis post-surgery.

What type of medical malpractice and medical error occur?

## Root Cause Analysis



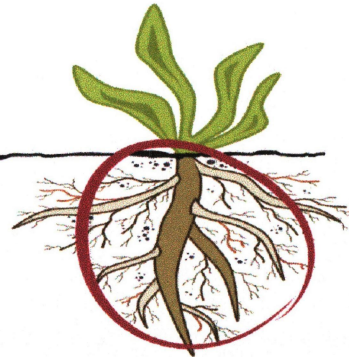
Conventional approach



التركيز على  
سبب واحد  
==

"The Root Cause"  
"right answer" thinking  
limited solution set

Cause Mapping method



"The Root" is a system...  
multiple optional solutions  
select the best  
عدة أسباب  
(شجرة)

## Root Cause Analysis



### • Definition

- Is a structured and systematic approach to analysing serious adverse events.

لتحديد الاسباب الجائبة الخطيرة

### • Purpose is to identify:

- Active failures- occurring at the point of interface between humans and a complex system
- Latent failures- hidden problems within health care systems that contribute to adverse events.

### • Process

- Generally follows a protocol
- Interviews with those involved
- Review of patient records/other documentation
- A multidisciplinary team then identify the causes of the incident, and make recommendations based upon these causes for preventing future incidents.

مكرر

## Root Cause Analysis



التي تؤدي إلى حادث

### • Approaches

- Events and causal factor analysis: this process uses evidence gathered quickly and methodically to establish a timeline for the activities leading up to the accident
- Change analysis: It explores changes made in people, equipment, information, and more that may have contributed to the change in performance. الكف عن التغييرات التي قد سببت الخطأ
- Barrier analysis: This technique focuses on what controls are in place in the process to either prevent or detect a problem, and which might have failed. هو موانع الخطأ التي فشلت
- Management oversight and risk tree analysis: One aspect of this approach is the use of a tree diagram to look at what occurred and why it might have occurred. موانع / مراجعة

هو موانع الخطأ وليس لها

## Root Cause Analysis



### Steps

- Step 1: What is the problem?

Define the issue by its impact to overall goals.

سؤال

- Step 2: Why did it happen?

Break the problem down into a visual map.

Provides a thorough explanation revealing all of the causes required to produce the problem.

لماذا حدثت

- Step 3: What will be done?

Prevent any negative impact to the goals by selecting the best solutions.

Effective solutions should make a change to how people execute work process.

سواءً

## Root Cause Analysis



### Analysis Tools

- 1. Five Whys Analysis

By asking the question "Why?" five times, you can go deeper into the problem and find that the answers to the questions

- 2. Failure Mode and Effects Analysis  
FMEA

- 3. Fault Tree Analysis

- 4. Fishbone Diagram

