

MEDICAL

ERRORS

Prepared By Dr. Anees AlSaadi
Community Medicine Resident R3
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OUTLINE

- Definitions Related To Medical Errors.
- Classification.
- Burden Of The Medical Errors.
- Settings And The Most Common Type.
- Factors Result In Medical Errors.
- Prevention of The Medical Errors.

Medical Errors

- SIDE EFFECTS.
 - MEDICAL ERROR.
- SENTINEL EVENTS.
 - RISK THEREOF.
 - MEDICATION ERRORS.

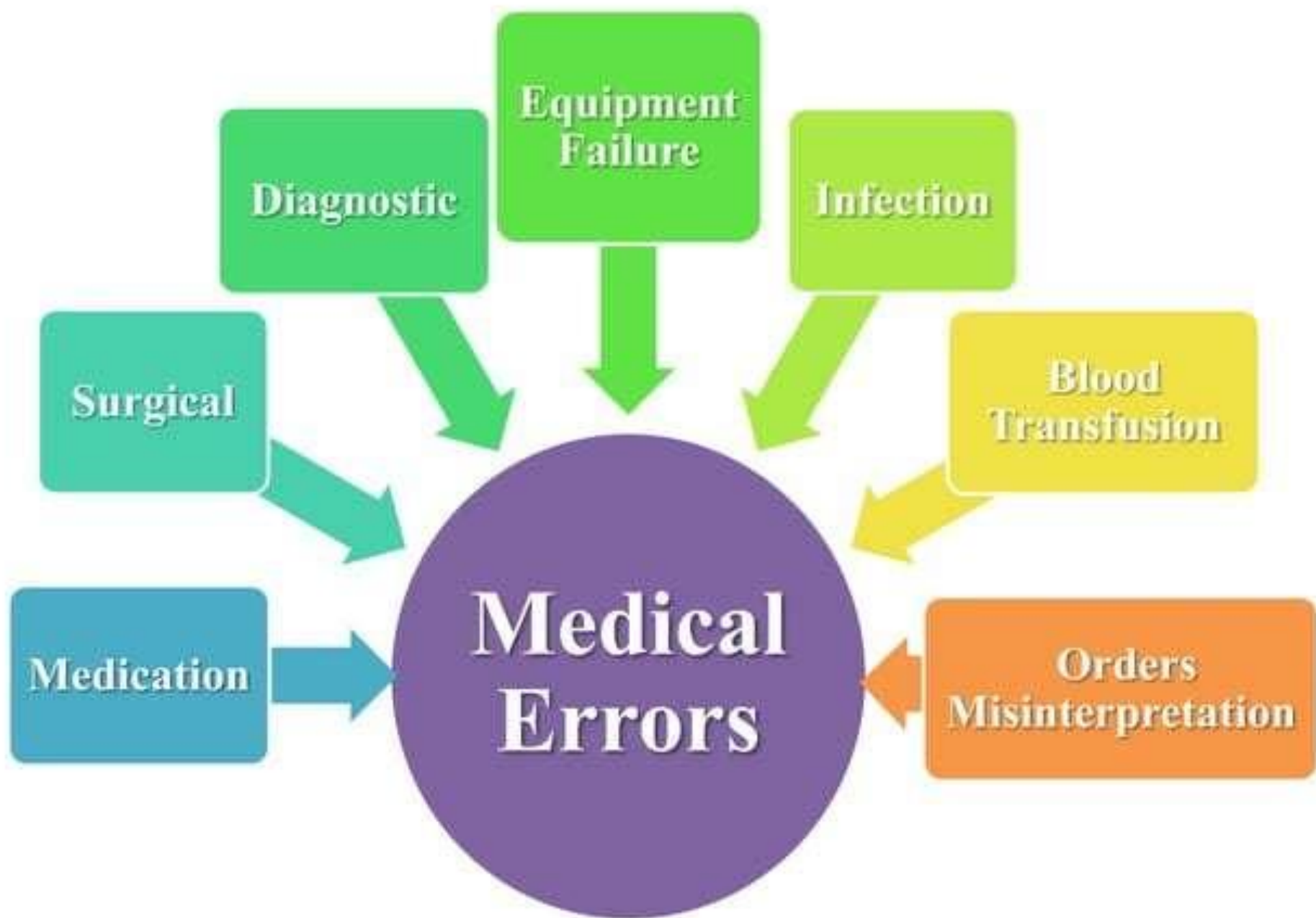
MEDICAL ERROR

- Failure to complete a planned action as intended or the use of a wrong plan to achieve an aim.
- Preventable.
- Where ... ?
- Which step of health care provision?
- What if not preventable. ..?

MEDICAL ERROR

- What Are the **Types** of Medical Errors
How Can we **Classify** Medical Errors. ..?





SENTINEL EVENTS.

- Immediate investigation.
- An unexpected occurrence involving death or serious physical, psychological injury.

Examples

RISK THEREOF.

- Recognition of a variation in process when an unanticipated recurrence carries the risk of a serious adverse outcome.

Examples

MEDICATION ERRORS.

- Adverse Event.
- Adverse drug Reaction.
- Unexpected adverse drug reaction.
- Serious adverse event or adverse drug reaction.

**What About
SIDE
EFFECTS
...?**

Burden of the Medical Errors

- Realization.
- Knowledge.
- Underreporting.
- Management and Political.

Burden of the Medical Errors

How Many of You Know or Had Come
Cross Any Medical Errors.?



“We have an epidemic of medical malpractice, not of malpractice lawsuits.”



University of Pennsylvania law professor Tom Baker

Burden of the Medical Errors

- (2004) HealthGrades report stated that **annual deaths** attributable to medical errors may be as high as **195,000 deaths**.
- This number compared to other causes of death is **exceeded only by heart disease** (700,142) and **cancer** (553,768).

Burden of the Medical Errors

- The Institute of Medicine's (IOM) estimated as many as 98,000 people die every year at a cost of \$29 billion.

Leading Cause of Death in United States

1	Heart Disease	652,091
2	Cancer	559,312
3	Stroke	143,579
4	Chronic Lower Respiratory Disease	130,933
5	Accidents (unintentional injuries)	117,809
	Preventable Medical Errors	98,000
6	Diabetes	75,119
7	Alzheimer's Disease	71,599
8	Influenza/Pneumonia	63,001
9	Nephritis/Nephrosis	43,901
10	Septicemia	34,136

¹To Err Is Human: Building a Safer Health System, Institute of Medicine, 1999

²Deaths/Mortality, 2005, National Center for Health Care Statistics at the Centers for Disease Control, viewed at <http://www.cdc.gov/nchs/fastats/deaths.htm>,

Burden of the Medical Errors

- (2010) Department of Health and Human Services found **one in seven Medicare recipients.**
- Accountable for an estimated **180,000** patients deaths annually.

Burden of the Medical Errors

- 37.6 \$ billion each year and about **17\$ billion** of these costs are directly associated with medical errors that are **preventable**.

Burden of the Medical Errors

- Indirect cost:
 - patient:
 - Family.
 - Job.
 - Health Care Provider.

Medical Errors Setting

Sentinel Event Setting	#	%
General hospital	4347	67.6%
Psychiatric hospital	687	10.7%
Psych unit in general hospital	319	5.0%
Emergency department	301	4.7%
Behavioral health facility	288	4.5%
Long term care facility	168	2.6%
Ambulatory care	166	2.6%
Home care	119	1.9%
Office-based surgery	21	0.3%
Clinical laboratory	10	0.2%
Health care network	2	0.0%

**What Is
The Most Common
Types Of
Medical Errors ?**



The Most Common Type

- Wrong-site surgery (13.4%)
- Patient suicide (11.9%)
- Operative & postoperative complications (10.8%)
- Delay in treatment (8.6%)
- Medication errors (8.1%)
- Patient falls (6.4%)

Medication Errors



- Rheumatoid arthritis Patient died after receiving an overdose of methotrexate--a 10-milligram **Daily Dose Of The Drug Rather Than The Intended 10-milligram Weekly Dose.**

Medication Errors



- One patient died because 20 units of insulin was abbreviated as **"20 U,"** but the "U" was mistaken for a "zero." As a result, a dose of **200 units** of insulin was accidentally injected.

What Are The Causes Of Medical Errors ...?



Causes Of Medical Errors

- Researchers for *The Journal of the American Medical Association*:
 - Reluctance of doctors to admit errors .
 - Lack of leadership .
 - Insurance reimbursement system.

Causes Of Medical Errors

- Incomplete patient information.
- Unavailable drug information.
- Miscommunication.
- Lack of appropriate labeling.
- Environmental factors.

Causes Of Medical Errors

“The leading cause of medical mistakes as the increasing **complexity of health care**”



Donald M. Berwick Administrator of the Centers for Medicare and Medicaid Services, USA.

Prevention

- It is simply **NOT ACCEPTABLE** for patients to be harmed by a health care system that is there to offer healing and comfort.

Prevention

- There is no one single solution to this on-going problem but rather **MANY SOLUTIONS AND SYSTEMS** that must be in place and working properly to decrease the risk of medical errors.

Prevention

- The focus must not be **ON BLAMING INDIVIDUALS** but on **LEARNING FROM PAST** errors and preventing future ones.

**How Can We
Prevent
Medical Errors ... ?**



Prevention

- **Agency for HealthCare Research and Quality (AHRQ).** 30 Safe Practices for improving patient safety.
- **Systems** provided by Organizations:
 - The Leapfrog Group.
 - Joint Commission on Accreditation of HealthCare Organizations (JCAHO).
 - Hospital Medication Error Management.
(CPOE)

Prevention

Nine Patient Safety Solutions:

- ***Look-Alike, Sound-Alike Medication Names.***
- ***Patient Identification.***
- ***Communication During Patient Hand-Overs.***
- ***Performance Of Correct Procedure At Correct Body Site.***
- ***Control Of Concentrated Electrolyte Solutions.***

Look-Alike, Sound-Alike Medication Names.



- **METADATE 10 mg** tablets.
(ADHD).
- Pharmacy dispensed
METHADONE 10 mg tablets.
Heroin substitution therapy and
analgesic.

Prevention Nine Patient Safety Solutions:

- *Patient Identification.*
- *Communication During Patient Hand-Overs.*
- *Performance Of Correct Procedure At Correct Body Site.*
- *Control Of Concentrated Electrolyte Solutions.*

Prevention

Nine Patient Safety Solutions:

- ***Medication Accuracy At Transitions In Care.***
- ***Avoiding Catheter And Tubing Mismatches.***
- ***Single Use Of Injection Devices.***
- ***Improved Hand Hygiene To Prevent Health Care-Associated Infection.***

Summary

- Medical error of great importance due to high burden.
- Ongoing problem worldwide but it is preventable.
- Most common in hospitals & in psychiatric units.
- Wrong site in surgery is the most common.
- Prevention is one single solution to this on-going problem but rather many solutions and systems and learning from the past errors.

- HIPPOPOTOMONSTROSESQUIPPEDALIOPHOBIA
 - Fear of long words.

- • ARACHIBUTYROPHOBIA
 - Fear of peanut butter sticking to the roof of the mouth.

