7. Learning From Errors To Prevent Harm

Objectives:

- Define The Basic Two Types Of "Error" Associated With Patient Safety.
- Identify The Steps In The Analysis Of An Adverse Event.
- Apply The Strategies To Reduce Errors.

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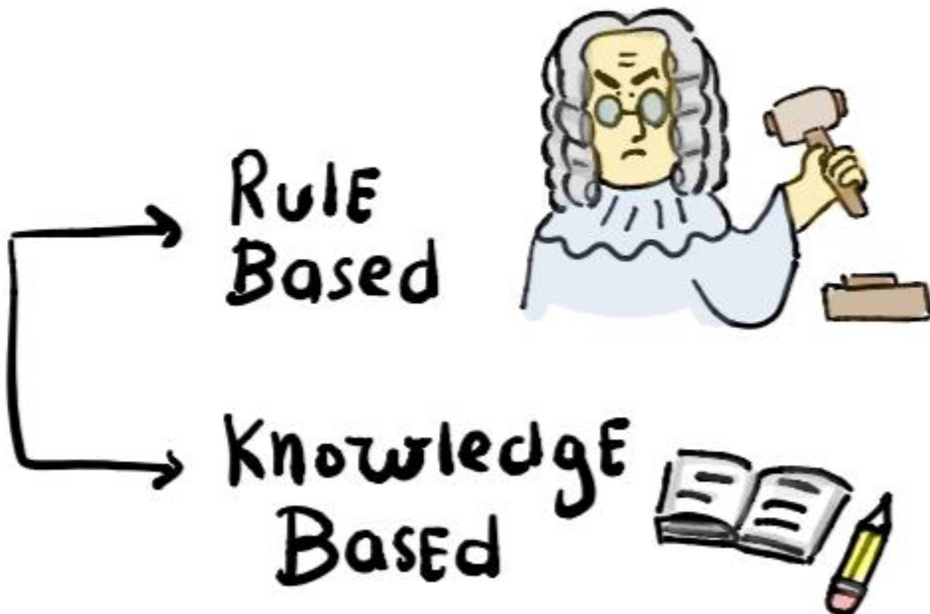
Lecture Overview

ERROR

1. Error of Execution "Accident"

2. Intended Action is wrong



1. Define The Basic Two Types Of "Error" Associated With Patient Safety.

Error

- A simple definition is:

"Doing the wrong thing when meaning to do the right thing."

Bill Runciman

- A more formal definition is:

"Planned sequences of mental or physical activities that fail to achieve their intended outcomes, when these failures cannot be attributed to the intervention of some chance agency."

James Reason

Note: violation:

A deliberate deviation from an accepted protocol or standard of care

Errors and outcomes

Errors and outcomes are not inextricably linked:

- Harm can befall a patient in the form of a complication of care without an error having occurred
- Many errors occur that have no consequence for the patient as they are recognized before harm occurs

Human factors principles remind us that:

- Error is the inevitable downside of having a brain!
- One definition of "human error" is "human nature"

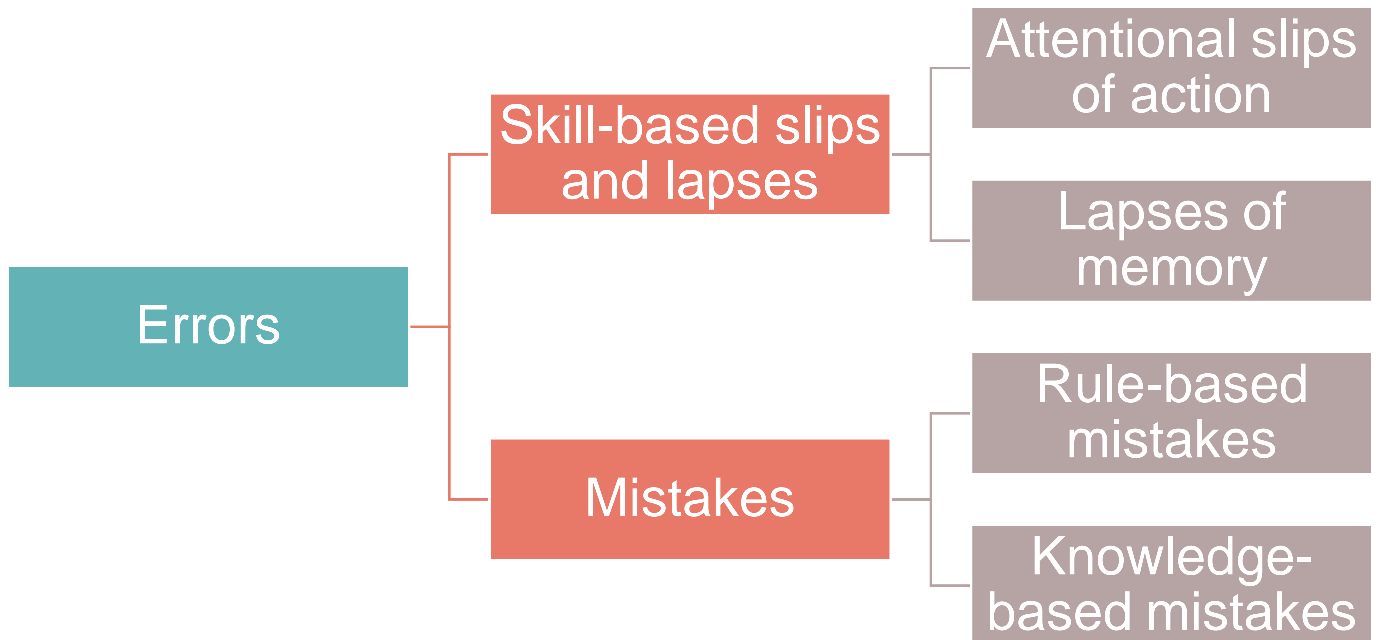
Human Beings Make Mistakes

Regardless of their experience, intelligence, motivation or vigilance, people make mistakes

The Health-care Context Is Problematic

- When errors occur in the workplace the consequences can be a problem for the patient…a situation that is relatively unique to health care
- In all other respects there is nothing unique about "health-care" errors… they are no different from the human factors problems that exist in settings outside health care

Summary Of The Principal Error Types



Situations Associated With An Increased Risk Of Error

1. Inexperience*
2. Time pressures
3. Inadequate checking
4. Poor procedures
5. Inadequate information

* Especially if combined with lack of supervision

Individual Factors That Predispose To Error

1. Limited memory capacity
2. Further reduced by:
3. fatigue
4. stress
5. Hunger
6. illness
7. language or cultural factors
8. hazardous attitudes

Don't Forget If You're

Hungry
Angry
Late
Tired

A Performance-shaping Factors "Checklist"

- **I** : **I**llness
- **M** : **M**edication: prescription, over-the-counter & others
- **S** : **S**tress
- **A** : **A**lcohol
- **F** : **F**atigue
- **E** : **E**motion

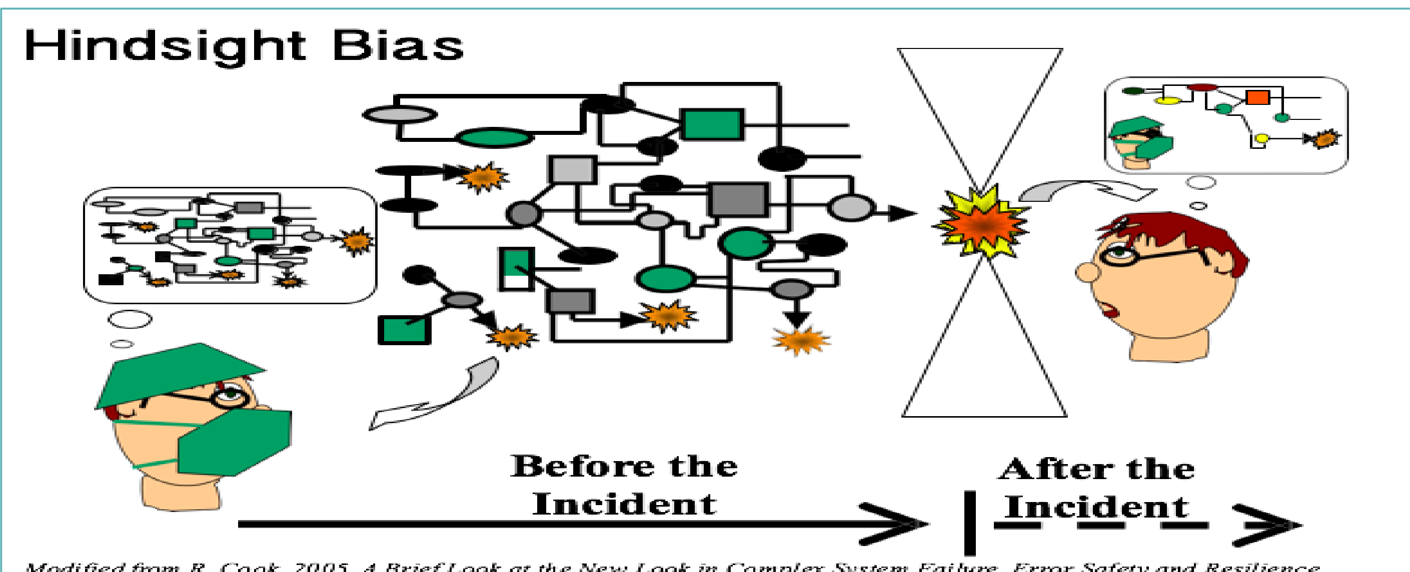
Am I safe to work today?

Incident Reporting/Monitoring

- Involves collecting and analyzing information about any event that could have harmed or did harm anyone in the organization
- A fundamental component of an organization's ability to learn from error

Removing *Error Traps*

- A primary function of an incident reporting system is to identify recurring problem areas - known as *"error traps"* (J.Reason)
- Identifying and removing these traps is one of the main functions of error management



Organizational culture

'Shared values (what is important) and beliefs (how things work) that interact with an organization's structure and control systems to produce behavioural norms (the way we do things around here)' James Reason

Culture In The Workplace

- **It is hard to "change the world" as a junior health-care professional**
- **But …**
- ✓ you can be on the look out for ways to improve the "system"
- ✓ you can contribute to the culture in your work environment

2. Identify The Steps In The Analysis Of An Adverse Event.

Incident Reporting And Monitoring Strategies

Successful strategies include:

- anonymous reporting
- timely feedback
- open acknowledgement of successes resulting from incident reporting
- reporting of near misses
- -free" lessons can be learned
- system improvements can be instituted as a result of the investigation but at no “cost” to a patient

Source: E.B. Larson

Root Cause Analysis (RCA)

A structured approach to incident analysis

Established by the National Center for Patient Safety of the US Department of Veterans Affairs

http://www.va.gov/NCPS/curriculum/RCA/index.html

RCA Model

- A rigorous, confidential approach to answering:
  - What happened?
  - Who was involved?
  - When did it happen?
  - Where did it happen?
  - How severe was the actual or potential harm?
  - What is the likelihood of recurrence?
  - What were the consequences?
- Focuses on prevention, not blame or punishment
- Focuses on system level vulnerabilities rather than individual performance
- It examines multiple factors such as:

- communication
- training
- fatigue/scheduling
- environment/equipment
- rules/policies/procedures
- barriers

3. Apply The Strategies To Reduce Errors.

A Performance-shaping Factors "Checklist"

- I : **I**llness
- M : **M**edication: prescription, over-the-counter & others
- S : **S**tress
- A : **A**lcohol
- F : **F**atigue
- E : **E**motion

I'M SAFE !!!

Important! will come in the exam.

Personal Error Reduction Strategies

- Know yourself: eat well, sleep well, look after yourself
- Know your environment
- Know your task(s)
- Preparation and planning; "What if…?"
- Build "checks" into your routine
- **Ask if you don't know!**

Mental Preparedness

- Assume that errors can and will occur
- Identify those circumstances most likely to breed error
- Have contingencies (provisions for a possible event or circumstance) in place to cope with problems, interruptions and distractions
- Mentally rehearse complex procedures

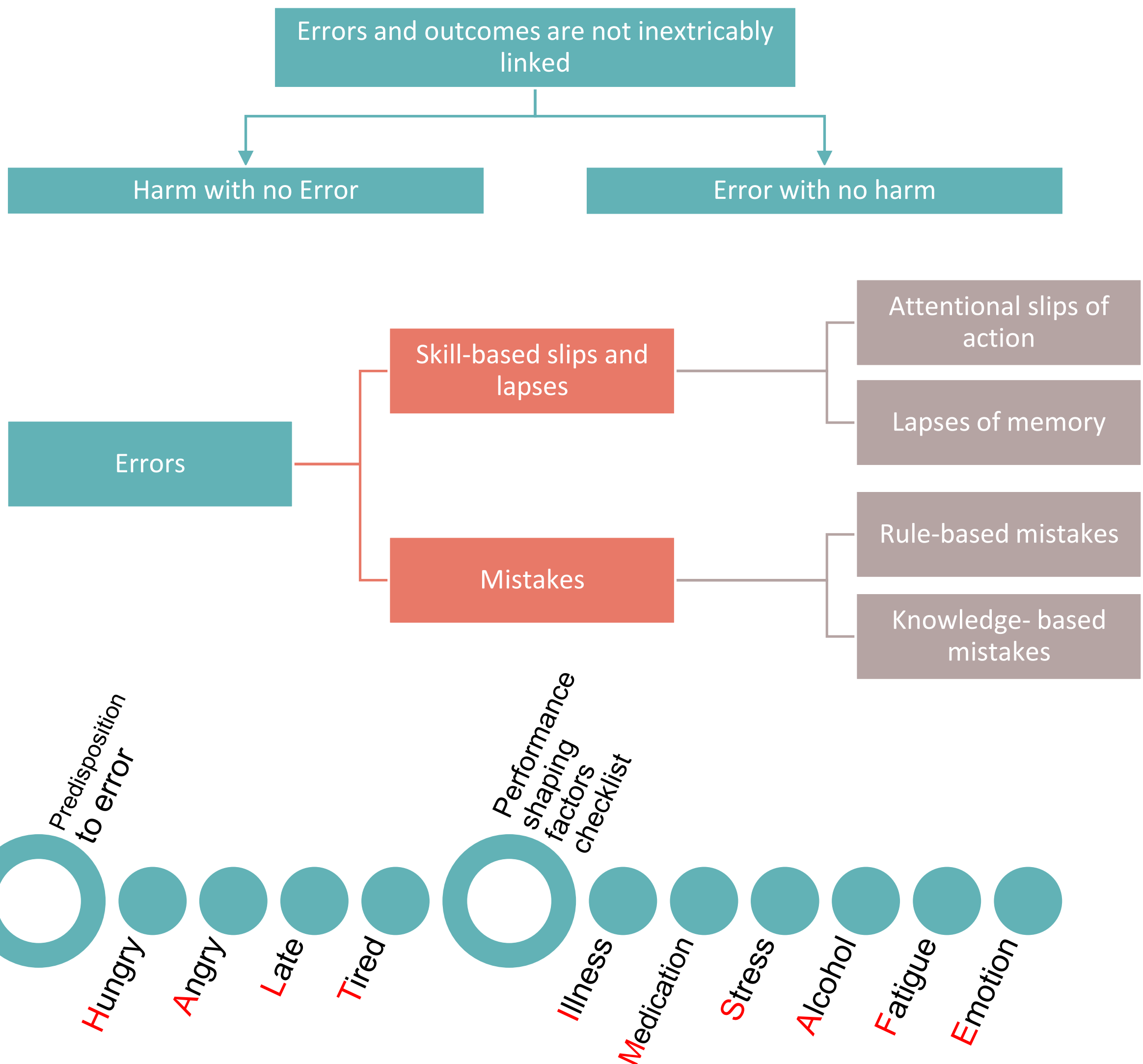
Summary

- Health-care error is a complex issue, but error itself is an inevitable part of the human condition
- Learning from error is more productive if it is considered at an organizational level
- Root cause analysis is a highly structured system approach to incident analysis

You're DONE!

Summary

- **Error**: Planned sequences of mental or physical activities that fail to achieve their intended outcomes
  - Error vs Violation (A deliberate deviation from an accepted protocol or standard of care)



- **Incident Reporting/Monitoring**: Involves collecting and analyzing information about any event that could have harmed or did harm anyone in the organization
- **Culture**: Shared values and beliefs that interact with an organization's structure and control systems to produce behavioural norms

Summary

Incident Reporting strategies

- Anonymous reporting
- Timely feedback
- Reporting near misses

RCA model

- A rigorous, confidential approach to answering:
  - What happened?
  - People involved?
  - When?
  - Where?
  - Harm severity?
  - Recurrence?
  - Consequences?

Personal error reduction strategies

- Know your:
  - Self
  - Environment
  - Task
- Planning
- Build ”checks”
- Ask

Mental preparedness

- Rehearse procedure
- Assume errors will occur
- Identify circumstances leading to errors
- Have contingencies

Questions

Q1: Define "violation".

- A deliberate deviation from an accepted protocol or standard of care

Q2: List 5 individual factors that predispose to error.

1. fatigue
2. stress
3. hunger
4. illness
5. language or cultural factors

Q3: Successful strategies for incident reporting should include: (mention 3)

1. anonymous reporting
2. timely feedback
3. reporting of near misses

Q4: Choose the correct answer

i. One definition of human error is:

A. Human fault
B. Human nature
C. Perfection
D. Irresponsible

ii. A fundamental component of an organization's ability to learn from error is through:

A. Shaming and blaming
B. Applying firm punishment
C. Incident reporting
D. Covering up the incident

iii. A primary function of an incident reporting system is to:

A. Identify error traps
B. Find out who is responsible and fire them
C. Publicize the event so everyone knows who did it
D. Reward the informant

iv. Which of the following is a situation associated with an increased risk of error?

A. Over-staffed ward
B. Poor procedures
C. Adequate checking
D. High tech equipment with training

v. RCA model focuses on:

A. Prevention and blaming
B. Prevention and not blaming
C. Blaming and not preventing
D. Neither preventing nor blaming

i: B – ii: C – iii: A – iv: B – v: B

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References: Doctors' slides (WHO, Patient Safety Curriculum Guide) & notes.