PATIENT SAFETY

Dr Aljohara Almeneessier

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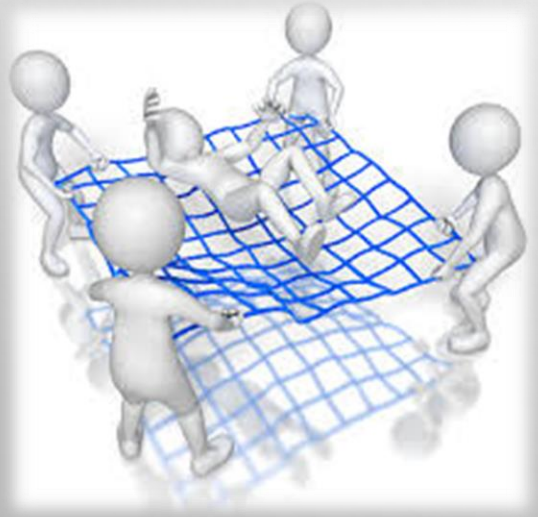


By end of this session the student will be able to understand:

1. Elements of Quality
2. What does it mean by policy and procedure?
3. Patient safety areas
4. Meaning by ROP
5. Meaning by OVR

Learning objective

- Understand the discipline of patient safety and its role in minimizing the incidence and impact of adverse events, and maximizing recovery from them

- Understand human factors and its relationship to patient safety

What is patient safety?

Patient Safety Is

- Absence of preventable harm: avoidance of errors in clinical care resulting in injury to our patients

Patient safety is a discipline in the health care sector that applies safety science methods toward the goal of achieving a trustworthy system of health care delivery.

It is also an attribute of health care systems; it minimizes the incidence and impact of, and maximizes recovery from, adverse events.

What is an error?

- The failure of a planned action to achieve its intended outcome
- A deviation between what was actually done and what should have been done

- James Reason stated a definition that may be easier to remember is:

  “Doing the wrong thing when meaning to do the right thing”.

Elements of Quality

Quality is:

- Doing the right thing the first time
- Exceeding the customer’s expectations.
- The degree to which health services increase the likelihood of desired health outcomes and are consistent with current professional knowledge.
- Doing the right thing right the first time and at the right cost

Clinical Quality is defined as care that is uniformly:

- **Safe**: patients are not harmed by care intended to help them
- **Effective**: based on evidence and produces better outcomes than alternatives
- **Patient-centered**: focuses on patient's experience, needs, and preferences
- **Timely**: provides seamless access to care without delays
- **Efficient**: avoids waste including unnecessary procedures and rework
- **Equitable**: assures fair distribution of resources based on patients' needs

Policy and Procedure (P&P)

Policies and procedures are designed to **influence and determine** all **major decisions and actions**, and **all activities take place within the boundaries set by them.**

Procedures are the specific methods employed to **express policies** in action in day-to-day operations of the organization.

Policies → Procedures

Required Organizational Practices (ROPs),

An integral part of the accreditation process, represent essential practices that minimize risk and improve patient safety.

Examples of ROPs include:

- Comparing medication lists when patients are admitted/transferred/discharged (**medication reconciliation**),
- Reporting incidents and accidents to the appropriate supervisor and the Quality, Patient Safety and Performance Department,(OVR)
- Speaking with the patient if an issue occurs which requires disclosure,
- Staff education on hand-hygiene, and the prevention of falls, etc.

Occurrence Variance Reporting (OVR)

- Occurrence variance reporting (OVR) is very essential for ensuring patient and staff safety, quality of care and risk management.

- **Variance** is any **event or circumstance not consistent with the standard routine operations** of the hospital and its staff or **the routine care of a patient/visitor.**

Occurrence Variance Reporting (OVR)

A Sentinel Event is defined as an unexpected occurrence involving the death or serious physical or psychological injury, or risk, including loss of limb or function, signaling the need for immediate investigation and response.

A Major Event is defined as any occurrence which did not affect the outcome but for which a recurrence carries a significant chance of a serious adverse outcome.

An Occurrence is defined as any event or circumstance that deviates from established standards or care.

Near Miss is defined as any process variation which did not affect the outcome (by chance or intervention), but for which a recurrence carries a significant chance of serious adverse outcomes.

Learning from errors to prevent harm

Error

A simple definition is:
“Doing the wrong thing when meaning to do the right thing.”

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.”

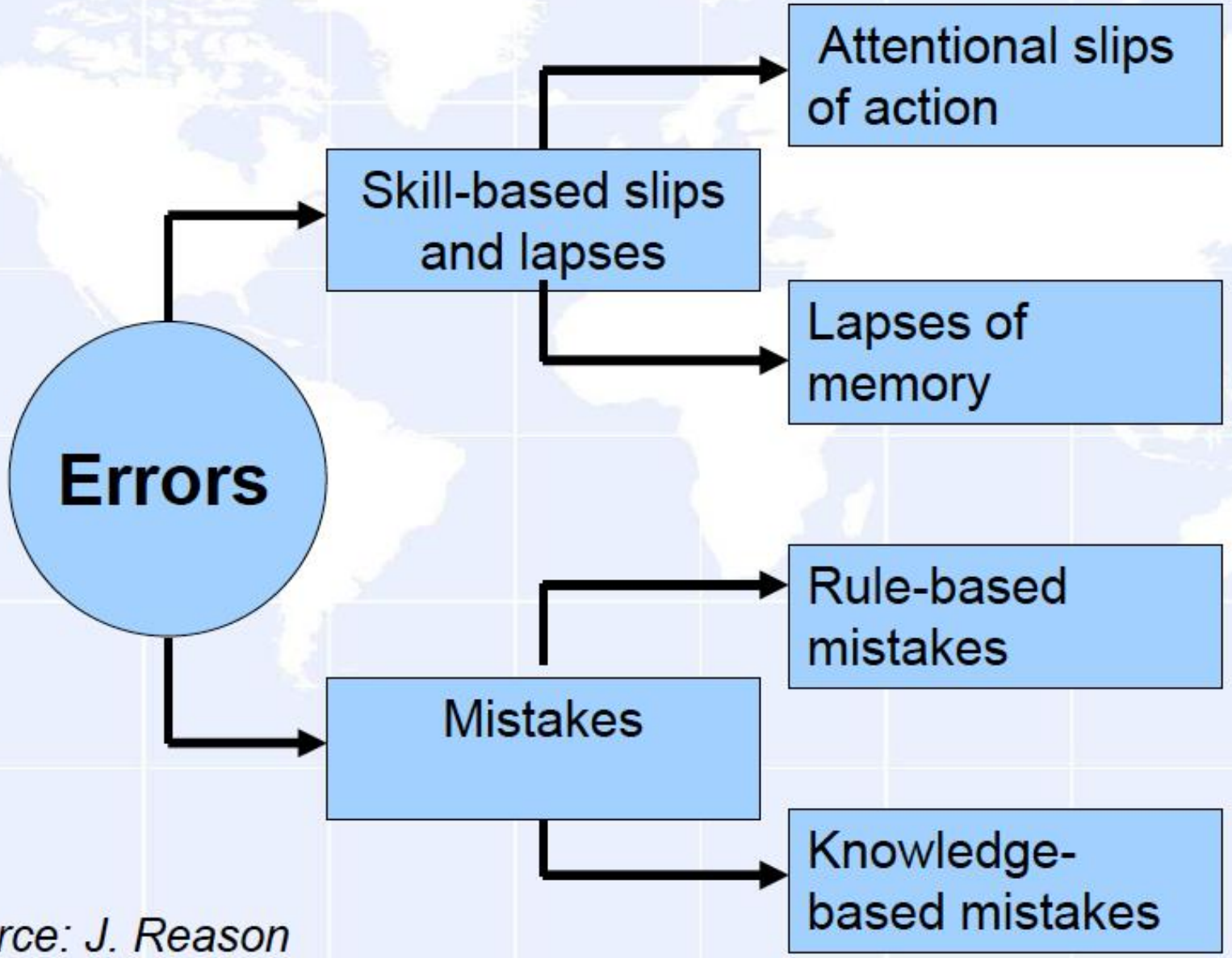
Note: violation
A deliberate deviation from an accepted protocol or standard of care

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

Summary of the principal error types



Source: J. Reason

Person approach to errors

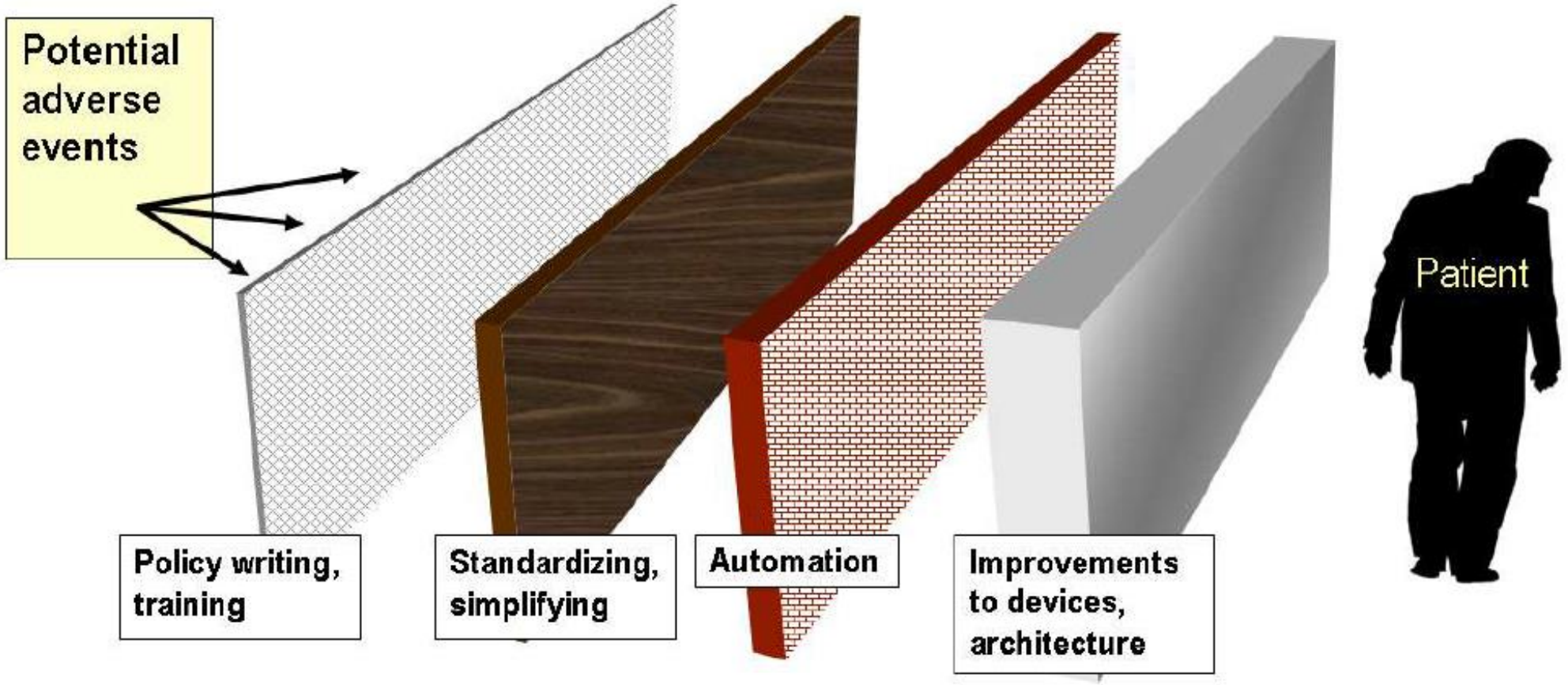
- See errors as the product of carelessness
- Remedial measures directed primarily at the error-maker
  - Naming
  - Blaming
  - Shaming
  - Retraining

The new approach to errors

Multiple factors :

- Patient factors
- Provider factors
- Task factors
- Technology and tool factors
- Team factors
- Environmental factors
- Organizational factors

Reason's - Defences



Source: Veteran Affairs (US) National Center for Patient Safety

Why applying human factors is important for patient safety

Human factors

Importance of human factors has been recognized for a long time in:

- Aviation
- Manufacturing
- Military

Human factors: importance in health care

- Human factors only recently acknowledged as an essential part of patient safety
- A major contributor to adverse events in health care
- All health-care workers need to have a basic understanding of human factors principles

Human factors

- Acknowledges:
  - The universal nature of human fallibility
  - The inevitability of error
- Assumes that errors will occur
- Designs things in the workplace to try to minimize th likelihood of error or its consequences

Individual factors that predispose to error

1. Limited memory capacity
2. Further reduced by:

- Fatigue (24 hrs of sleep deprivation has performance effects ~ blood alcohol content of 0.1%

Source: D. Dawson, Nature, 1997

  - Stress
  - Hunger
  - Illness
  - Language or cultural factors
  - Hazardous attitudes

Situations associated with an increased risk of error

- unfamiliarity with the task* (Especially if combined with lack of supervision)
- inexperience* (Especially if combined with lack of supervision)
- shortage of time
- inadequate checking
- poor procedures
- poor human equipment interface

Human beings make “silly” mistakes

Activity

Think about any “silly” mistakes you have made recently when you were not in your place of work or study - and why you think they happened.

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

Putting knowledge of human factors into practice

1. Apply human factors thinking to your work environment
2. Avoid reliance on memory
3. Make things visible
4. Review and simplify processes
5. Standardize common processes and procedures
6. Routinely use checklists
7. Decrease reliance on vigilance

Examples adversely affect patient safety

- Prescribing and dispensing
- Hand-over/hand-off information
- Move patients
- Order medications electronically
- Prepare medication

If all of these tasks become easier for the health-care provider, then patient safety can improve

https://youtu.be/BJP2rvBchnE


Medication
Safety

Improving medication safety

Medications can greatly improve health when used wisely and correctly

- Yet, medication error is common and is causing preventable human suffering and financial cost
- Remember that using medications to help patients is not a risk-free activity
- Know your responsibilities and work hard to make medication use safe for your patients

Rationale

- Medication use has become increasingly complex in recent times
- Medication error is a major cause of preventable patient harm
- As future health-care workers, you will have an important role in making medication use safe

How can prescribing go wrong?

- Inadequate knowledge about drug indications and contraindications
- Not considering individual patient factors, such as allergies, pregnancy, co-morbidities, other medications
- Wrong patient, wrong dose, wrong time, wrong drug, wrong route
- Inadequate communication (written, verbal)
- Documentation - illegible, incomplete, ambiguous
- Mathematical error when calculating dosage
- Incorrect data entry when using computerized prescribing e.g. duplication, omission, wrong number

Look-a-like and sound-a-like medications

Avanza (mirtazapine, antidepressant);	Avandia (rosiglitazone, diabetes medicine)
 	 
Celebrex (celecoxib, anti-inflammatory);	Cerebryx (fosphenytoin, anticonvulsant);
 	 
Celexa (Citalpram, antidepressant)	

Ambiguous nomenclature

Tegretol 100mg	Tegreto 1100 mg
S/C	S/L
1.0 mg	10 mg
.1 mg	1 mg

Avoiding ambiguous nomenclature

- Avoid trailing zeros e.g. write 1 not 1.0
- Use leading zeros e.g. write 0.1 not .1
- Know accepted local terminology
- Write neatly, print if necessary

Administration involves …

- Obtaining the medication in a ready-to-use form; may involve counting, calculating, mixing, labeling or preparing in some way
- Checking for allergies
- Giving the Right Medication to the Right Patient, in the Right Dose, via the Right Route, at the Right Time
- Documentation

Ways to make medication use safer

What you can do to make medication use safer:

1. Use generic names
2. Tailor prescribing for individual patients
3. Learn and practice collecting complete medication histories
4. Know the high-risk medications and take precautions
5. Be very familiar with the medications you prescribe
6. Use memory aids
7. Remember the 5 Rs
8. Communicate clearly
9. Develop checking habits
10. Encourage patients to be actively involved
11. Report and learn from errors

Encourage patients to be actively involved in the process

1. When prescribing a new medication provide patients with the following information:
   - Name, purpose and action of the medication
   - Dose, route and administration schedule
   - Special instructions, directions and precautions
   - Common side-effects and interactions
   - How the medication will be monitored
2. Encourage patients to keep a written record of their medications and allergies
3. Encourage patients to present this information whenever they consult a doctor

How can drug administration go wrong?

1. Wrong patient
2. Wrong route
3. Wrong time
4. Wrong dose
5. Wrong drug
6. Omission, failure to administer
7. Inadequate documentation

Which patients are most at risk of medication error?

1. Patients on multiple medications
2. Patients with another condition, e.g. renal impairment, pregnancy
3. Patients who cannot communicate well
4. Patients who have more than one doctor
5. Patients who do not take an active role in their own medication use
6. Children and babies (dose calculations required)

In what situations are staff most likely to contribute to a medication error?

1. Inexperience
2. Rushing
3. Doing two things at once
4. Interruptions
5. Fatigue, boredom, being on “automatic pilot” leading to failure to check and double-check
6. Lack of checking and double checking habits
7. Poor teamwork and/or communication between colleagues
8. Reluctance to use memory aids

Calculation errors

A 12 kg, 2-year-old boy requires 15 mg/kg of a medication that comes as a syrup with a concentration of 120 mg/5mls. How many mls do you prescribe?


.. AND THAT IS WHY WE LIFT ON THREE...
COMMUNICATION

How do teams improve patient care?

Teams represent a pragmatic way to improve patient care

Teams can improve care at the level of:

- The organization
- The patient – outcomes and safety
- The team as a whole
- The individual team member

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

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

Engaging with patients and caregivers

Patients and caregivers can be involved as partners in health care, both in preventing harm and learning from an adverse event

Gaining an informed consent

- The diagnosis
- The degree of uncertainty in the diagnosis
- Risks involved in the treatment
- The benefits of the treatment and the risks of not having the treatment
- Information on recovery time
- Name, position, qualifications and experience of health workers who are providing the care and treatment
- Availability and costs of any service required after discharge from hospital

Cultural competence

- Understand cultural differences
- Know one’s own cultural values
- Understand that people have different ways of interpreting the world
- Know that cultural beliefs impact on health
- Be willing to fit in with the patient’s cultural or ethnic background

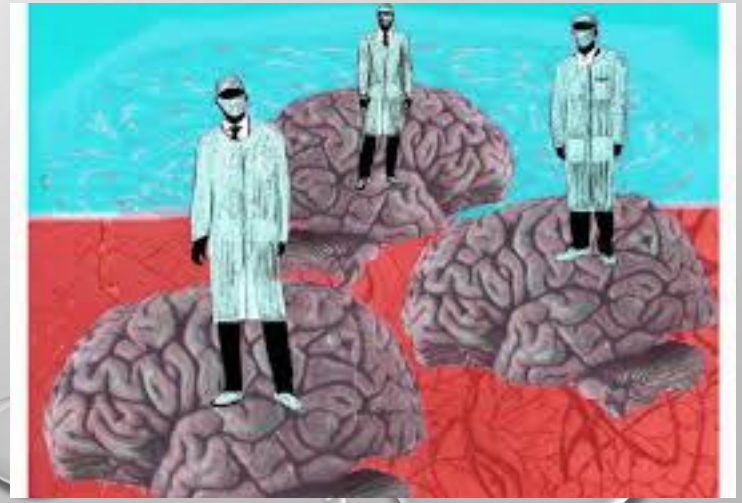
Patient role in minimizing adverse events

Patients want to be involved in their health care (depending on which tasks)

- 85% of patients were comfortable asking about a medication's purpose
- 46% were very uncomfortable about asking health-care workers whether they had washed their hands

Summary

- Errors are inevitable - even for experienced health professionals!
- There are situations that can increase the likelihood of error
- Recognize them for your patient’s sake - and yours!
- Attention to human factors principles can lead to a reduction in error or its consequences

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