

"The Anatomy Of An Error"

Medication Safety

Douglas Defty

PHARMACY

SHAPING THE FUTURE



The Anatomy of An Error

- Everyone makes dumb mistakes every day.



The Anatomy of An Error

- Everyone makes dumb mistakes every day.
- No-one makes an error on purpose.



The Anatomy of An Error

- Everyone makes dumb mistakes every day.
- No-one makes an error on purpose.
- Fear of punishment is not irrational.



The Anatomy of An Error

- Everyone makes dumb mistakes every day.
- No-one makes an error on purpose.
- Fear of punishment is not irrational.
- Nobody will admit a mistake if he/she is punished for it.



The Anatomy of An Error

- Everyone makes dumb mistakes every day.
- No-one makes an error on purpose.
- Fear of punishment is not irrational.
- Nobody will admit a mistake if he/she is punished for it.
- Medical accidents are usually the result of complex system failures.



The Anatomy of An Error

- Everyone makes dumb mistakes every day.
- No-one makes an error on purpose.
- Fear of punishment is not irrational.
- Nobody will admit a mistake if he/she is punished for it.
- Medical accidents are usually the result of complex system failures.
- Complex systems need to be re-designed.

The Anatomy of An Error

- Everyone makes dumb mistakes every day.
- No-one makes an error on purpose.
- Fear of punishment is not irrational.
- Nobody will admit a mistake if he/she is punished for it.
- Medical accidents are usually the result of complex system failures.
- Complex systems need to be re-designed.
- We need ***Non-Punitive*** measures (that is a system in which it's difficult to blame individuals for intangible system failures).

What This *Doesn't* Mean...



What This *Doesn't* Mean...

- Abandonment of professional accountability



What This *Doesn't* Mean...

- Abandonment of professional accountability
- Anonymity



What This *Doesn't* Mean...

- Abandonment of professional accountability
- Anonymity
- Lack of disciplinary action for **failure** to report incidents



What This *Doesn't* Mean...

- Abandonment of professional accountability
- Anonymity
- Lack of disciplinary action for **failure** to report incidents
- Turning the other cheek in the face of:

What This *Doesn't* Mean...

- Abandonment of professional accountability
- Anonymity
- Lack of disciplinary action for **failure** to report incidents
- Turning the other cheek in the face of:
 - ➔ gross incompetence

What This *Doesn't* Mean...

- Abandonment of professional accountability
- Anonymity
- Lack of disciplinary action for **failure** to report incidents
- Turning the other cheek in the face of:
 - ➔ gross incompetence
 - ➔ gross procedural violations

What This *Doesn't* Mean...

- Abandonment of professional accountability
- Anonymity
- Lack of disciplinary action for **failure** to report incidents
- Turning the other cheek in the face of:
 - ➔ gross incompetence
 - ➔ gross procedural violations
 - ➔ gross insubordination

What This *Doesn't* Mean...

- Abandonment of professional accountability
- Anonymity
- Lack of disciplinary action for **failure** to report incidents
- Turning the other cheek in the face of:
 - ➔ gross incompetence
 - ➔ gross procedural violations
 - ➔ gross insubordination
 - ➔ illegal activity

What This *Doesn't* Mean...

- Abandonment of professional accountability
- Anonymity
- Lack of disciplinary action for **failure** to report incidents
- Turning the other cheek in the face of:
 - ➔ gross incompetence
 - ➔ gross procedural violations
 - ➔ gross insubordination
 - ➔ illegal activity
 - ➔ practicing under the influence

Let's ask...

Let us rather ask **WHAT** caused the incident/error as opposed to **WHO** caused it.



What happens?

- Most errors occur as a result of “*a chain of events set in motion by faulty system design that either induces errors or makes them difficult to detect*”, rather than a lack of care and concern on the part of our staff.
- A system can be defined as “*an inter-dependent group of times, people or processes with a common purpose*”.

Reality Check

- 38% of medication errors are due to the **wrong dose**



Reality Check

- 38% of medication errors are due to the **wrong dose**
- 14% are due to the **wrong technique**



Reality Check

- 38% of medication errors are due to the **wrong dose**
- 14% are due to the **wrong technique**
- 12% are due to the **wrong drug**
-



Reality Check

- 38% of medication errors are due to the **wrong dose**
- 14% are due to the **wrong technique**
- 12% are due to the **wrong drug**
- 8% are due to a **missed dose**
-



Reality Check

- 38% of medication errors are due to the **wrong dose**
- 14% are due to the **wrong technique**
- 12% are due to the **wrong drug**
- 8% are due to a **missed dose**
- 7% are due to the **wrong time**
-



Reality Check

- 38% of medication errors are due to the **wrong dose**
- 14% are due to the **wrong technique**
- 12% are due to the **wrong drug**
- 8% are due to a **missed dose**
- 7% are due to the **wrong time**
- 6% are due to a **known allergy**



Proximal Causes of Errors

- Lack of knowledge of the drug



Proximal Causes of Errors

- Lack of knowledge of the drug
- Lack of information about the patient



Proximal Causes of Errors

- Lack of knowledge of the drug
- Lack of information about the patient
- Violation of rules



Proximal Causes of Errors

- Lack of knowledge of the drug
- Lack of information about the patient
- Violation of rules
- Slips and memory lapses



Proximal Causes of Errors

- Lack of knowledge of the drug
- Lack of information about the patient
- Violation of rules
- Slips and memory lapses
- Transcription errors



Proximal Causes of Errors

- Lack of knowledge of the drug
- Lack of information about the patient
- Violation of rules
- Slips and memory lapses
- Transcription errors
- Faulty identity checking



Proximal Causes of Errors

- Lack of knowledge of the drug
- Lack of information about the patient
- Violation of rules
- Slips and memory lapses
- Transcription errors
- Faulty identity checking
- Faulty interaction with other services/disciplines



Proximal Causes of Errors

- Lack of knowledge of the drug
- Lack of information about the patient
- Violation of rules
- Slips and memory lapses
- Transcription errors
- Faulty identity checking
- Faulty interaction with other services/disciplines
- Faulty dose checking

Proximal Causes of Errors

- Lack of knowledge of the drug
- Lack of information about the patient
- Violation of rules
- Slips and memory lapses
- Transcription errors
- Faulty identity checking
- Faulty interaction with other services/disciplines
- Faulty dose checking
- Infusion pumps and parental delivery problems

Proximal Causes of Errors (cont.)

- Inadequate monitoring



Proximal Causes of Errors (cont.)

- Inadequate monitoring
- Drug stocking and delivery problems



Proximal Causes of Errors (cont.)

- Inadequate monitoring
- Drug stocking and delivery problems
- Preparation errors



Proximal Causes of Errors (cont.)

- Inadequate monitoring
- Drug stocking and delivery problems
- Preparation errors
- Lack of standardisation (systems and products)



Culture of Safety

We need to promote a **Culture of Safety**



Culture of Safety

We need to promote a **Culture of Safety**

CULTURE:

The set of shared attitudes, values, goals and practices that characterises a company or corporation.



Culture of Safety

We need to promote a **Culture of Safety**

CULTURE:

The set of shared attitudes, values, goals and practices that characterises a company or corporation.

SAFETY:

The freedom from accidental injury.



Culture of safety means

- Non-punitive error reporting



Culture of safety means

- Non-punitive error reporting
- Error-reporting of new products, programs and services.



Culture of safety means

- Non-punitive error reporting
- Error-reporting of new products, programs and services.
- Training of and organising in teams



Culture of safety means

- Non-punitive error reporting
- Error-reporting of new products, programs and services.
- Training of and organising in teams
- Fatigue Management



Culture of safety means

- Non-punitive error reporting
- Error-reporting of new products, programs and services.
- Training of and organising in teams
- Fatigue Management
- Direct Communication



Culture of safety means

- Non-punitive error reporting
- Error-reporting of new products, programs and services.
- Training of and organising in teams
- Fatigue Management
- Direct Communication
- Ownership of responsibility for safety within the **entire** hospital/organisation

Vocabulary Changes

- human error → ***accident/failure***
- root cause → ***multi-causal***
- investigation → ***analysis/study***
- judgment → ***learning***
- blame/fault → ***accountable***
- routine → ***heedful procedure***
- isolated event → ***system***
- punitive/retaliatory → ***blameless***

Next Steps.....

- Review existing *Standard Operating Procedures* and develop new ones



Next Steps.....

- Review existing *Standard Operating Procedures* and develop new ones
 - ➔ Avoid reliance on memory

Next Steps.....

- Review existing *Standard Operating Procedures* and develop new ones
 - ➔ Avoid reliance on memory
 - ➔ Use protocols and checklists

Next Steps.....

- Review existing *Standard Operating Procedures* and develop new ones
 - ➔ Avoid reliance on memory
 - ➔ Use protocols and checklists
- Review existing *Information Technology Systems*

Next Steps.....

- Review existing *Standard Operating Procedures* and develop new ones
 - ➔ Avoid reliance on memory
 - ➔ Use protocols and checklists
- Review existing *Information Technology Systems*
 - ➔ Simplify

Next Steps.....

- Review existing *Standard Operating Procedures* and develop new ones
 - ➔ Avoid reliance on memory
 - ➔ Use protocols and checklists
- Review existing *Information Technology Systems*
 - ➔ Simplify
 - ➔ Standardise

Next Steps.....

- Review existing *Standard Operating Procedures* and develop new ones
 - ➔ Avoid reliance on memory
 - ➔ Use protocols and checklists
- Review existing *Information Technology Systems*
 - ➔ Simplify
 - ➔ Standardise
- Review the *Clinical Competence* of staff and address the short-comings

Next Steps.....

- Review existing *Standard Operating Procedures* and develop new ones
 - ➔ Avoid reliance on memory
 - ➔ Use protocols and checklists
- Review existing *Information Technology Systems*
 - ➔ Simplify
 - ➔ Standardise
- Review the *Clinical Competence* of staff and address the short-comings
- *Motivate* and develop staff

Next Steps.....

- Review existing *Standard Operating Procedures* and develop new ones
 - ➔ Avoid reliance on memory
 - ➔ Use protocols and checklists
- Review existing *Information Technology Systems*
 - ➔ Simplify
 - ➔ Standardise
- Review the *Clinical Competence* of staff and address the short-comings
- *Motivate* and develop staff
- Learn from errors and discuss the causes in order **to prevent** future errors of the same nature

Thank you for your attention.

