RCA – Analysing adverse incidents

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NEA
Nursing Education Association

Overview

- Risk and a just culture
- Some statistics
- Root Cause Analysis - one method to analyse adverse incidents

About risk and a just culture

RISK MATRIX

	CONSEQUENCE				
LIKELIHOOD	**Insignificant 1**	**Minor 2**	**Moderate 3**	**Major 4**	**Extreme 5**
Rare (1)	Low	Low	Low	Low	Low
Unlikely (2)	Low	Low	Low	Medium	Medium
Possible (3)	Low	Low	Medium	Medium	Medium
Likely (4)	Low	Medium	Medium	High	High
Almost certain (5)	Low	Medium	Medium	High	Extreme

An Introduction to Just Culture

The single greatest impediment to error prevention in the medical industry is "*that we punish people for making mistakes*"

Dr. Lucian Leape

Professor, Harvard School of Public Health

Testimony before Congress on Health Care Quality Improvement

An Introduction to Just Culture

"*People make errors, which lead to accidents. Accidents lead to deaths. The standard solution is to blame the people involved. If we find out who made the errors and punish them, we solve the problem, right? Wrong. The problem is seldom the fault of an individual; it is the fault of the system. Change the people without changing the system and the problems will continue*."

Don Norman

Author, the Design of Everyday Things

A Model that Focuses on Three Duties balanced against Organizational and Individual Values

The Three Duties

- The duty to avoid causing unjustified risk or harm
- The duty to produce an outcome
- The duty to follow a procedural rule

Organizational and Individual Values

- Safety
- Cost
- Effectiveness
- Compassion
- Dignity
- Respect
- Competence

The Behaviours we can expect

- Human error - inadvertent action; inadvertently doing other that what should have been done; slip, lapse, mistake

- At-risk behaviour – behavioural choice that increases risk where risk is not recognized or is mistakenly believed to be justified

- Reckless behaviour - behavioural choice to consciously disregard a substantial and unjustifiable risk

Accountability for our behaviours

HUMAN ERROR

Inadvertent action: slip, lapse, mistake

Manage through changes in:
- Processes
- Procedures
- Training
- Design

CONSOLE

AT-RISK BEHAVIOUR

A choice: risk not recognized or believed justified

Manage through:
- Removing incentives for At-Risk Behaviours
- Creating incentives for healthy behaviours
- Increasing situational awareness

COACH

RECKLESS BEHAVIOUR

Conscious disregard of unreasonable risk

Manage through:

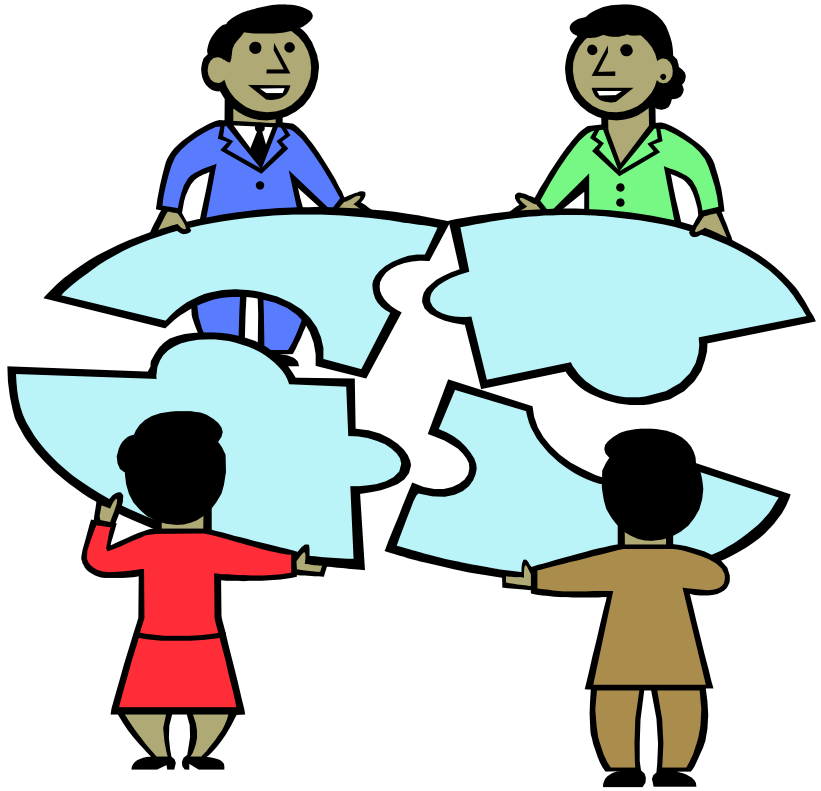
- Remedial action

- Punitive action

DISCIPLINE / PUNISH

Just Culture is about…

- Creating an open, fair, and just culture
- Creating a learning culture
- Designing safe systems
- Managing behavioural choices



Some statistics…

Increased litigation

- Medical Protection Society (MPS)*:
  - claims exceeding R1 million have increased by nearly 550% compared with those of 10 years ago
  - claims valued at over R5 million have increased by 900% in the past 5 years

- 2009/2010, Gauteng Department of Health and Social Development faced medical malpractice claims totalling R573 million with media reports of high damages awarded for malpractice

- Increase in cases reported to professional councils

*Malherbe, J. 2013. Counting the cost: The consequences of increased medical malpractice litigation in South Africa. S Afr Med J 2013;103(2):83-84. DOI:10.7196/SAMJ.6457

- In an industry where people work with people in need of healthcare, there will always be adverse incidents of some kind

- However, we have to consider avoidable incidents, learn from those and improve systems and behaviours

Example:

60.4% of all maternal deaths were thought to be possibly or probably avoidable indicating a poor quality of care

By improving systems and the **quality of care** there is the possibility or reducing maternal deaths*

* Department of Health. Saving Mothers 2011-2013: Sixth report on the Confidential Enquiries into Maternal Deaths in South Africa (http://www.kznhealth.gov.za/mcwh/Maternal/Saving-Mothers-2011-2013-short-report.pdf)

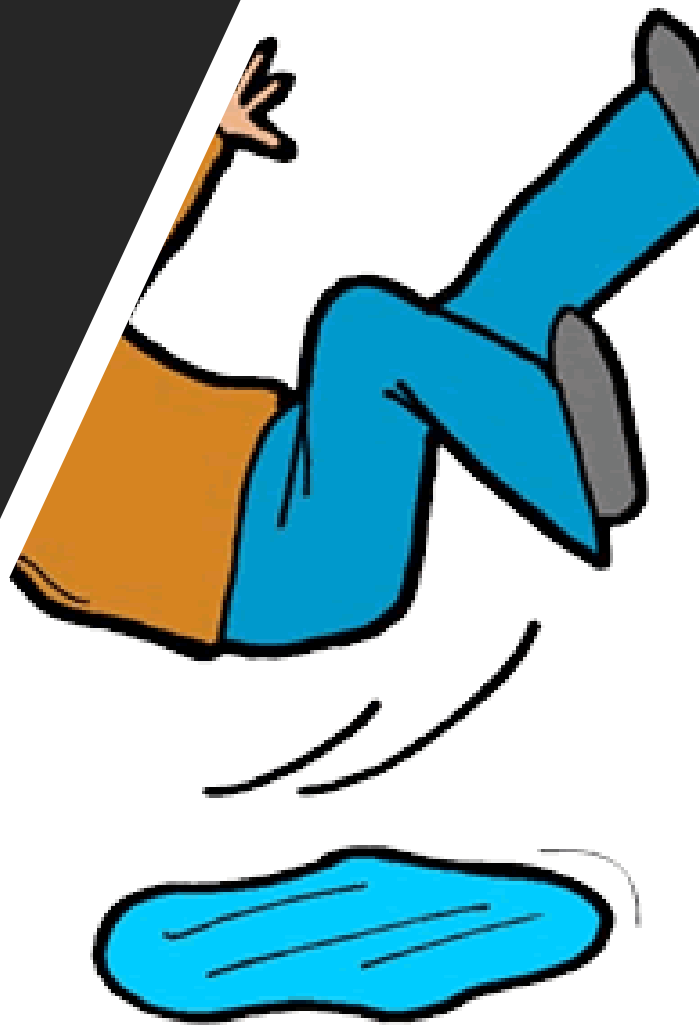
Impact of suboptimal care on maternal deaths

	n	%
No suboptimal care	1259	29.1
Suboptimal care, different management would have made no difference to the outcome	470	10.8
Suboptimal care, different management might have made a difference to the outcome	1424	32.9
Suboptimal care, different management would reasonably have been expected to have made a difference to the outcome	1180	27.2

** Department of Health: Saving Mothers 2011-2013: Sixth report on the Confidential Enquiries into Maternal Deaths in South Africa*

Summary: an adverse incident is….

any event that causes, or has the potential to cause, unexpected or unwanted effects involving the health and safety of patients, users or others such as the visitors of patients



So when it happens….

- We identify the problem…
- There are many was do it…
- Of which root cause analysis is one
- Unfortunately what usually happens…….

The difference:

- **Causal factor**

  something that contributes to a problem, but is not a root cause

- **Communication challenge**

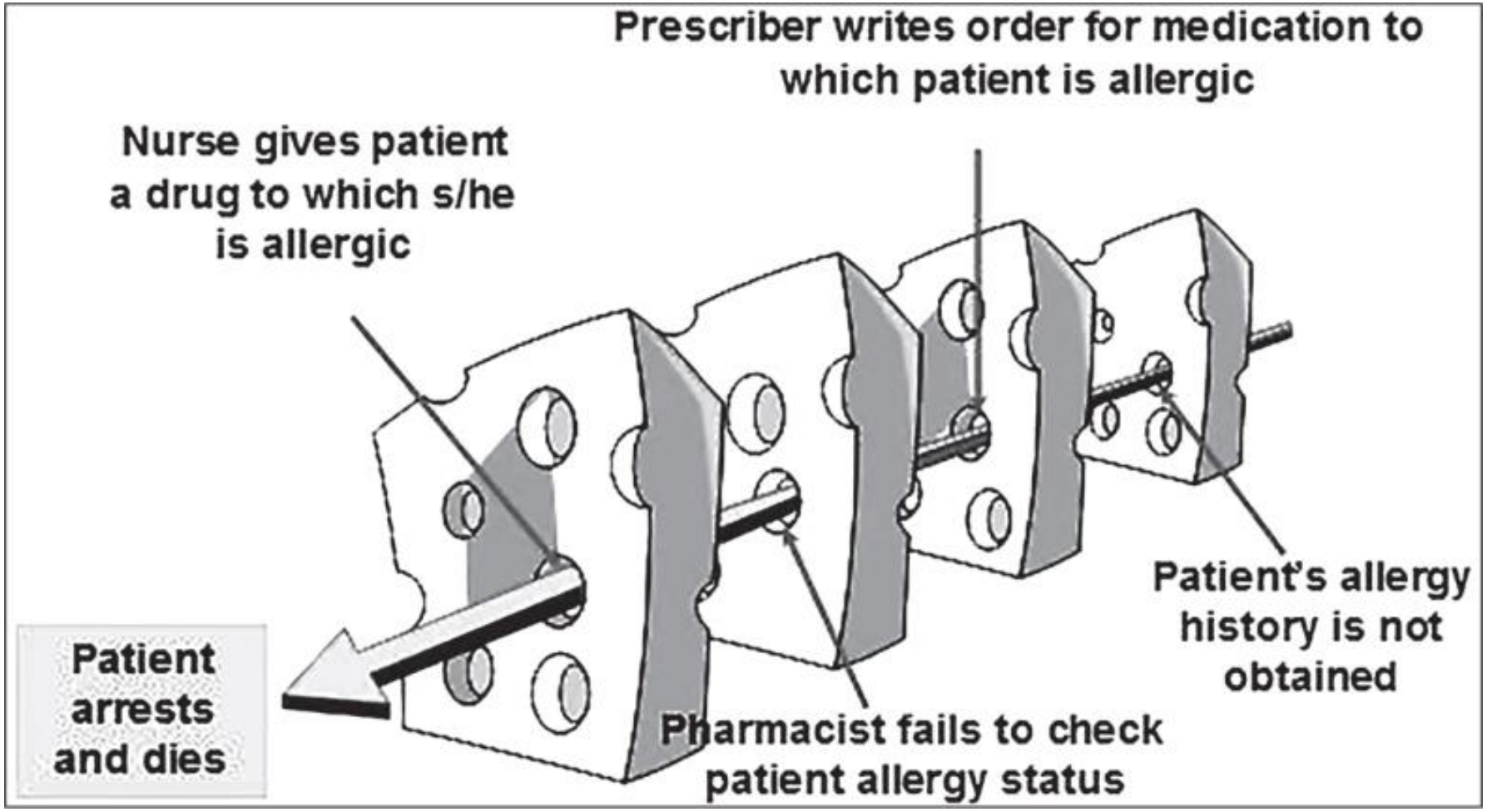
  a root cause that communication can address

- **Root cause**

  something [a source] that, if removed, will eliminate the problem

Stop and think….

Discuss what caused this incident



- Multiple errors and system flaws often must intersect for a critical incident to reach the patient

- Labelling one or even several of these factors as "causes" may place undue emphasis on specific "holes in the cheese" and obscure the overall relationships between different layers and other aspects of system design

Root cause analysis

Analysing adverse incidents

Do not jump to conclusions

Essential not to blame one person before all processes and events leading up to the incident have been analysed

Root cause analysis (RCA) is one way of analyzing incidents

What is root cause analysis?

- A structured method used to analyse serious adverse events or near misses
- Uses the systems approach to identify active* and latent** errors
- Facilitate system evaluation, analysis of need for corrective action, and tracking and trending
- Identify underlying errors and causal factors that increase likelihood of errors while avoiding the trap of focusing on the mistakes of individuals
- Capture both the big-picture perspective and the details

**errors occurring at the point of interface between humans and a complex system*

***hidden problems within health care systems that contribute to adverse events*

Root cause analysis process is:

- Inter-disciplinary, involving experts from frontline services
- Involving of those who are the most familiar with the situation
- Continually digging deeper by asking why, why, why at each level of cause and effect
- A process that identifies changes that need to be made to systems
- A process that is as impartial as possible

Thorough root cause analysis requires:

- Determination of human and other factors
- Determination of related processes and systems
- Analysis of underlying cause and effect systems through a series of ***why*** questions
- Identification of risks and their potential contributions
- Determination of potential improvement in processes or systems

Credible root cause analysis must:

- Include participation by the leadership of the organisation and those most closely involved in the processes and systems
- Be internally consistent
- Include consideration of relevant literature

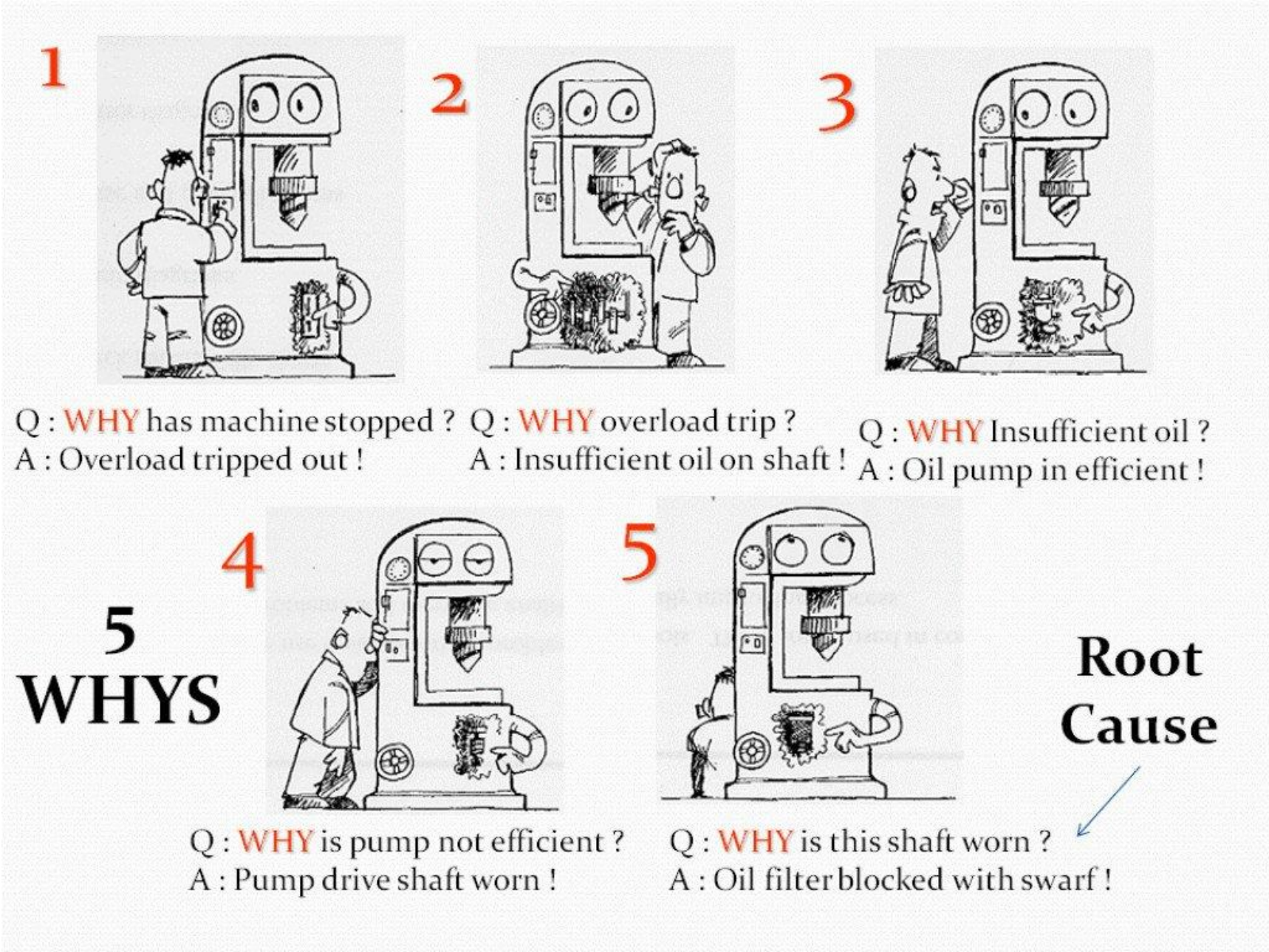
What RCA is not

A tool to blame any one person or a group

When he got the wrong medication, no one would own up to it. They were real good at covering their own butts.

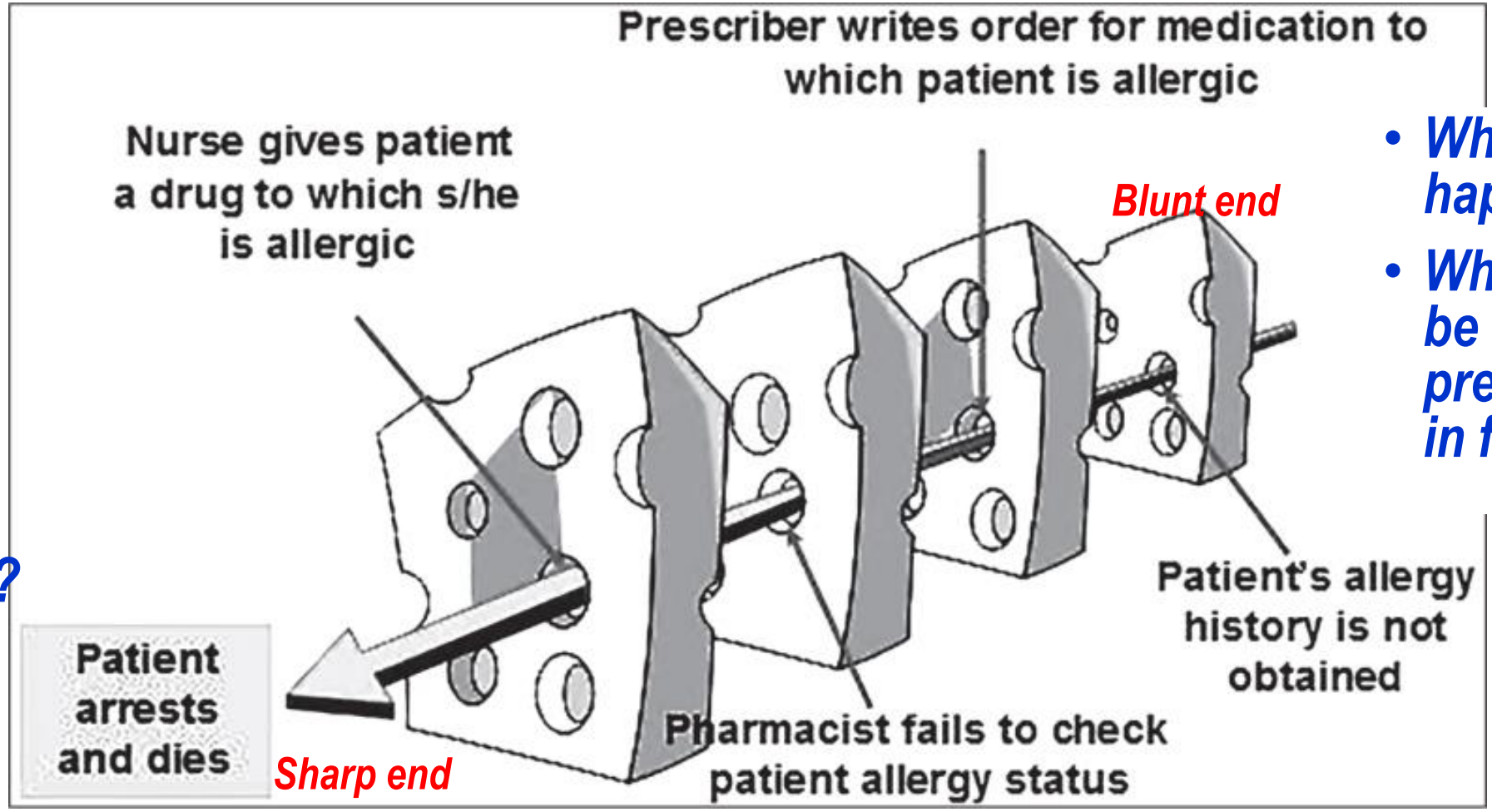
Why?

- It may very well require more than 5 why's!



Swiss Cheese Model – a tool to understand:

- *What happened?*
- *How did it happen?*

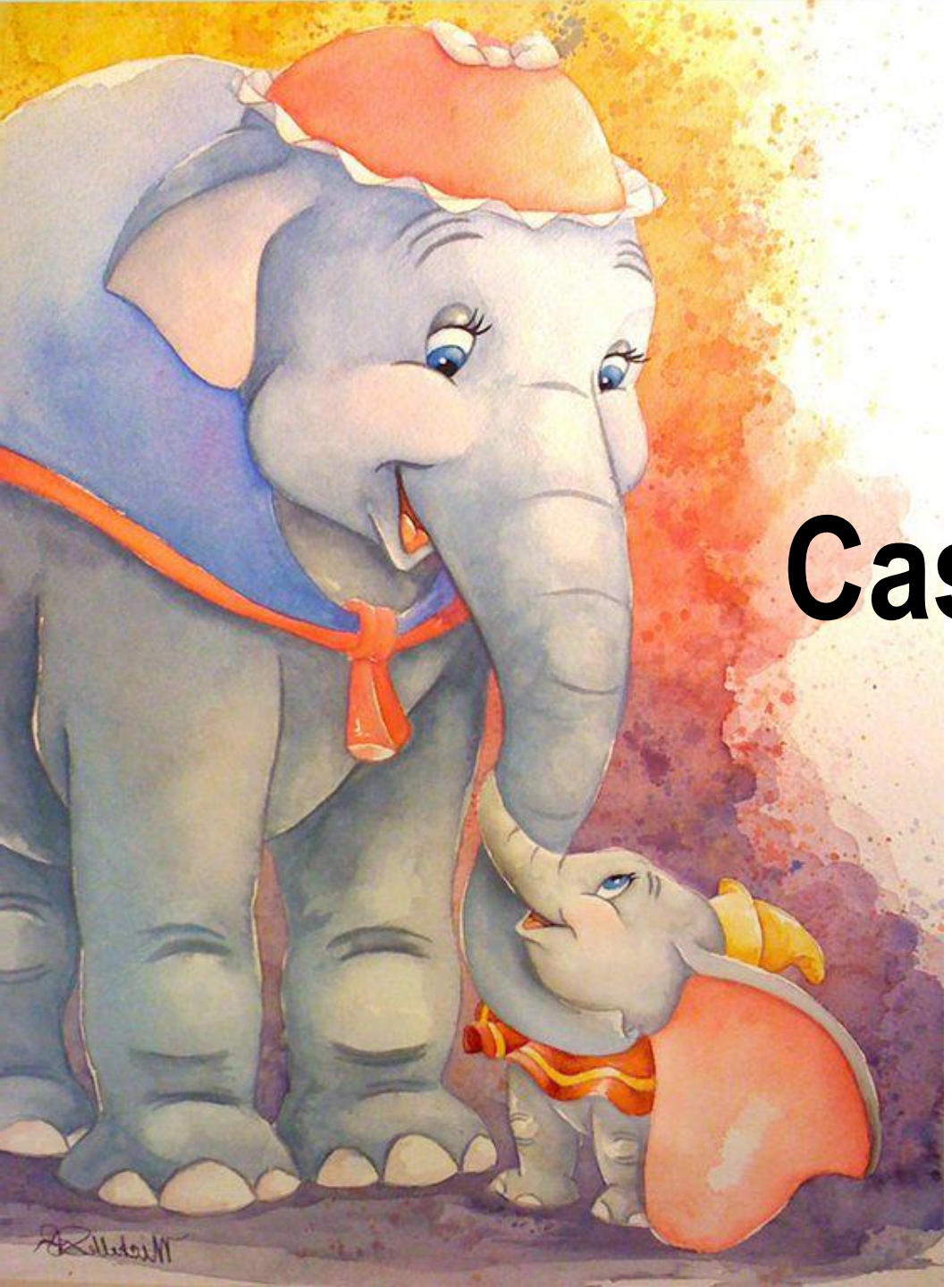


- *Why did it happen?*
- *What can be done to prevent it in future?*

Process

- Goal – to prevent future harm by eliminating latent errors that often underlie adverse events

- Getting started - ASAP
- Gathering and mapping information through interviews and determining a time line (incident report, patient file, customer/employee complaint, near misses, medication errors, policies, etc)
- Identifying care and service delivery problems
- Analysing the information – identifying contributory factors and root causes
- Generating recommendations and solutions to reduce risk and harm
- Implementing solutions
- Writing a report



Case studies

With a focus on mother & child health

Analyse the case studies

Using the tools provided, analyse the cases:

- Who are you including in the investigative team?
- Who are you going to interview?
- What documents are you analysing?
- What is the root cause(s)?
- Which recommendations are you making?

"To address this mistake we must use root-cause analysis. I'll begin by saying it's not my fault."


Thank you for your time and attention!

References

- Department of Health. Saving Mothers 2011-2013: Sixth report on the Confidential Enquiries into Maternal Deaths in South Africa (http://www.kznhealth.gov.za/mcwh/Maternal/Saving-Mothers-2011-2013-short-report.pdf)
- *Don Norman, Author, the Design of Everyday Things*
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- The Health Compass. How-to-Guides: How to conduct a Root Cause Analysis. Available at thehealthcompass.org/how-to-guides/how-conduct-root-cause-analysis