PATIENT SAFETY

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WHAT IS PATIENT SAFETY?

It is the concept of minimizing the incidence and impact of adverse events, and maximizing recovery from them.

Hospital safety

People

- *Staff*
- *Visitor*
- *Patient*

Place

- *Infrastructure*
- *Fire*
- *Electrical*
- *Mechanical*

Property

- *Stores*
- *Assets, equipment*

- *When errors occur in the workplace the consequences can be a detrimental for the patient and society*

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

What is an error?

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

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

Reason

Human factors

- *The study of all the factors that make it easier to do the work in the right way*
- *Apply wherever humans work*
- *Also known as ergonomics;scientific study of people and their working conditions done to improve their effectiveness*
- *Design improvements in the workplace and the equipment to fit human capabilities and limitations*
- *Make it easier for the workers to get the work done the right way*
- *Decrease the likelihood of errors occurring*
- *Good human factors design in health care accommodates the entire range of workers*

What doctors can do

- Understand the multiple factors involved in failures
- Avoid blaming
- Practise evidenced-based care
- Maintain continuity of care for patients
- Be aware of the importance of self-care
- Act ethically everyday

Situations associated with an increased risk of error

- Unfamiliarity with the task*
- Inexperience *
- Shortage of time
- Inadequate checking
- Poor procedures
- Poor human equipment interface

Vincent

***** *Especially if combined with lack of supervision*

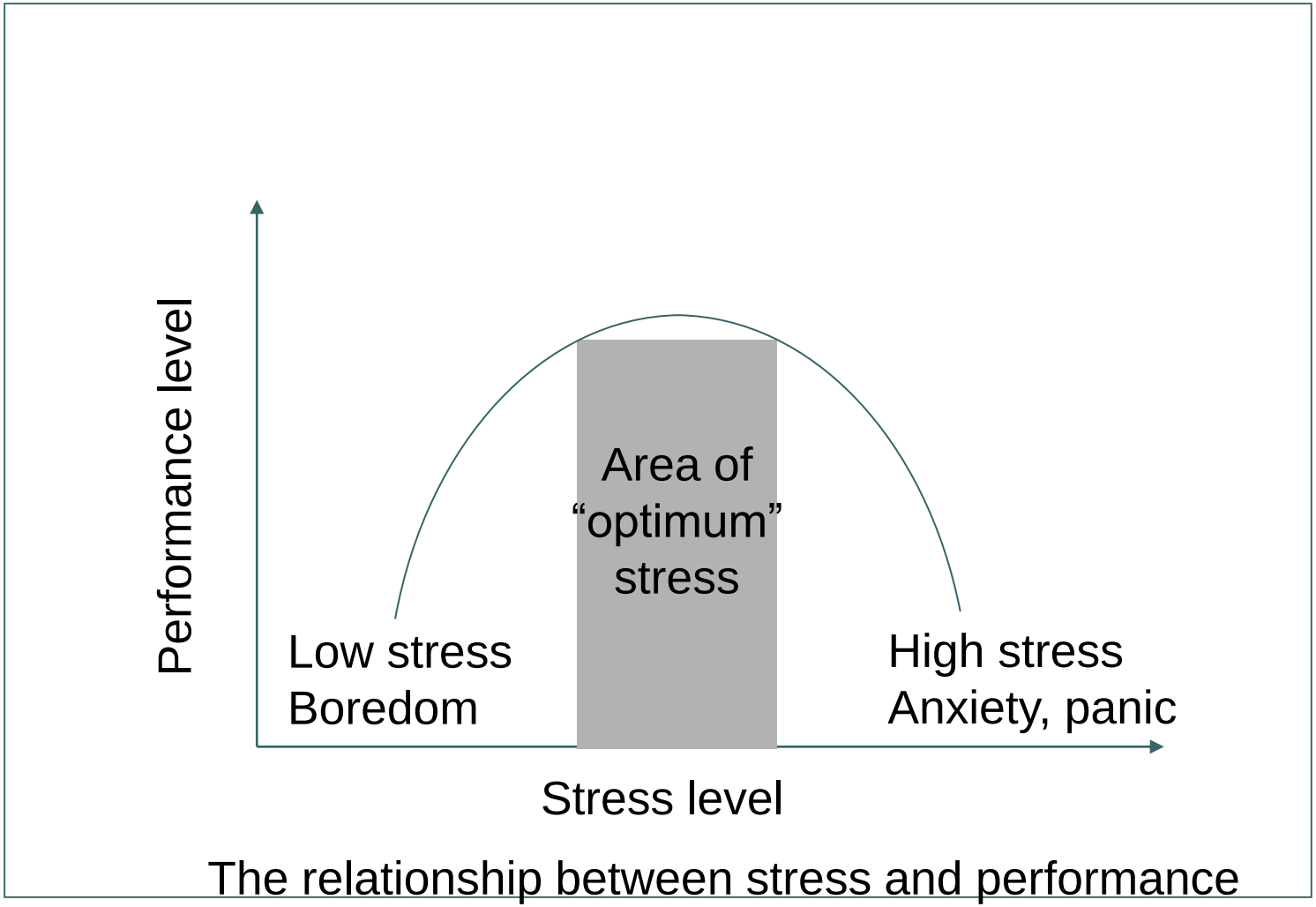
Individual factors predisposing to error

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

24 hours of sleep deprivation has performance effects ~ blood alcohol content of 0.1%

Dawson – *Nature, 1997*

Stress and performance



The relationship between stress and performance

Yerkes, R. M., & Dodson, J. D. (1908) The relation of strength of stimulus to rapidity of habit-formation.

***Journal of Comparative Neurology and Psychology, 18*, 459-482**

Iatrogenic injury approach

- Traditional or person approach
  - *The "old" culture*
  - *"Just try harder"*
- Systems approach
  - *The "new look"*

Person approach

Errors as the product of carelessness. Remedial measures directed primarily at the error-maker by means of :-

- *Naming*
- *Blaming*
- *Shaming*
- *Retraining*

Need of investigation

- The more we understand how and why these things occur, the more we can put checks in place to reduce recurrence

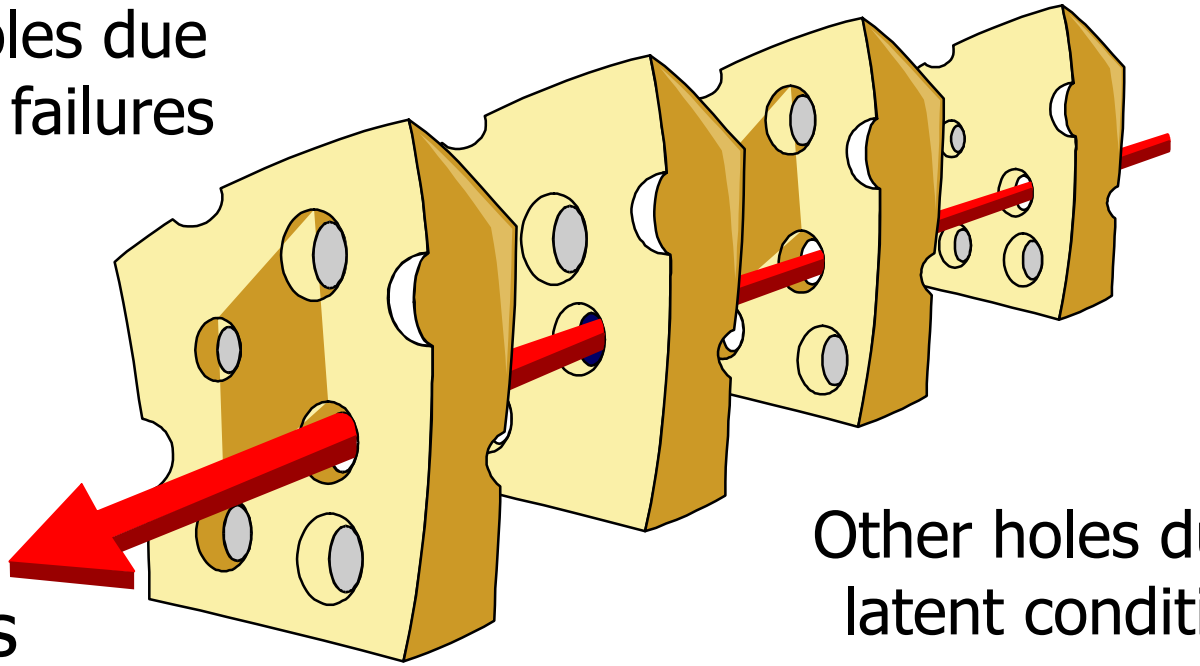
- Strategies might include:

  - Education
  - New protocols
  - New systems

Multiple factors usually involved

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

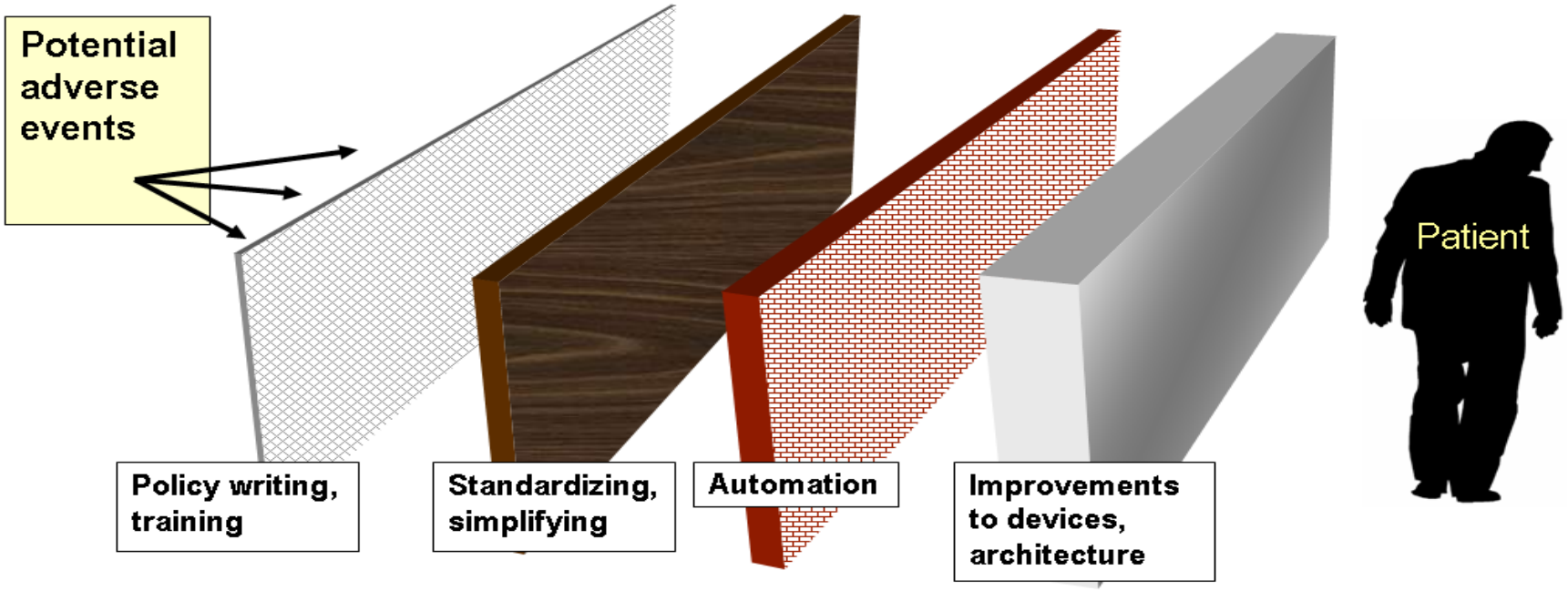
Reason's "Swiss cheese" model of accident causation



Successive layers of defences, barriers and safeguards

System defences

Reason's - Defences



VA NCPS

Being an effective team player

What is a team?

A team is a group of two or more individuals who:

- Interact dynamically
- Have a common goal/mission
- Have been assigned specific tasks
- Possess specialized and complementary skills

Performance requirements

Using the following teamwork principles to promote effective health care:

- *Using communication techniques*
- *Resolving conflicts*
- *Using mutual support techniques*
- *Changing and observing behaviors*

How do teams improve patient care?

Teams represent a pragmatic way to improve patient care. These can improve care at the level of:

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

How do teams form and develop?

Tuckmann identified four stages of team formation and development:

- *Forming*
- *Storming*
- *Norming*
- *Performing*

*Tuckmann 1965

What makes for a successful team?

Effective teams possess the following features:

- A common purpose
- Measurable goals
- Effective leadership and conflict resolution
- Good communication
- Good cohesion and mutual respect
- Situation monitoring
- self-monitoring
- Flexibility

Error and outcome

Error and outcome 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

Incident monitoring

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

RCA model

Root cause analysis is a rigorous approach to answer :-

- *What happened?*
- *Why did it happen?*
- *What are we going to do to prevent it from happening again?*
- *How will we know that our actions improved patient safety?*

ENGAGING WITH PATIENTS AND CARE TAKERS

Performance requirements

- Shows empathy, honesty and respect for patients and carers
- Communicates effectively
- Obtaining informed consent
- Shows respect for each patient's differences, religious and cultural beliefs, and individual needs
- Describes and understands the basic steps in an open disclosure process
- Apply patient engagement thinking in all clinical activities
- Demonstrates ability to recognize the place of patient and carer engagement in good clinical management

SEGUE framework

(Northwestern University)

- Set the stage
- Elicit information
- Give information
- Understand the patient’s perspective
- End the encounter

Open disclosure

Informing patients and their families of bad outcomes of medical treatment, as distinguished from bad outcomes that are expected from the disease or injury being treated

Minimizing infection through improved infection control

Main causes of infection

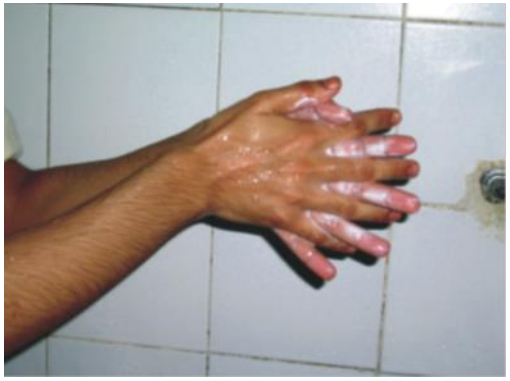
- Person -person via hands of health-care providers patients and visitors
- Personal equipment (e.g. stethoscopes, personal digital assistants) and clothing
- Environmental contamination
- Airborne transmission
- Carriers on the hospital staff
- Rare common-source outbreaks

Main types of infections

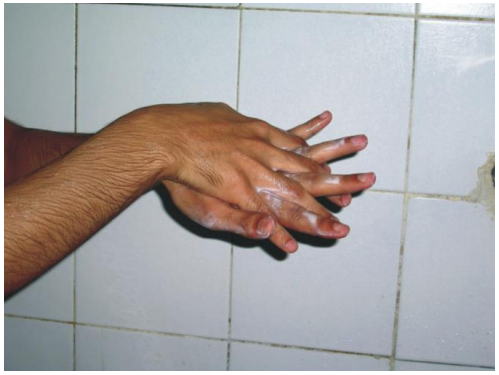
- Urinary track infections usually associated with catheters
- Surgical infections
- Blood stream infections associated with the use of an intravascular device
- Pneumonia associated with ventilators

Hand washing for 2 complete minutes before entering NICU & before any procedure. Wash hands for at least 20 seconds before and after touching each baby

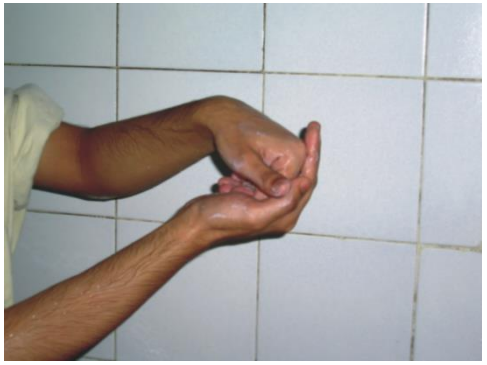
- Remove all jewelry and watch before hand washing. Roll the shirt to above elbow level.
- Wet and apply soap on hands and forearm up to elbow level.
- A normal, non-medicated soap is good enough.
- Dry hands either in air or by single-use sterile towel or sterile paper. Multiple-use cloth towels are not recommended
- Alcohol-based hand rub solutions may be used as an alternative. The 5 ml solution should be spread on all parts of the hands; follow
- Above steps; rub hands to dry.



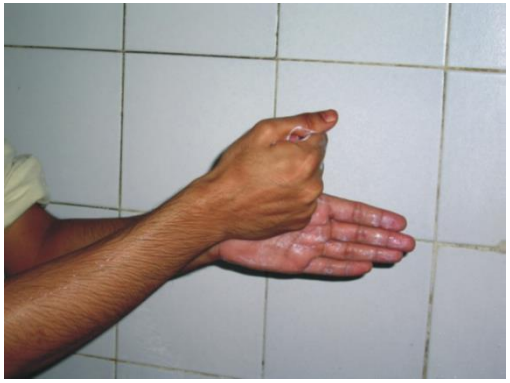
Palm and fingers



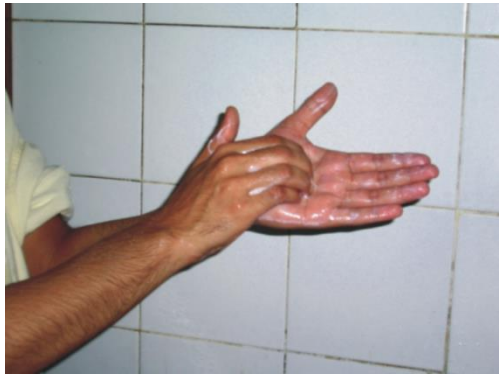
Back of hands



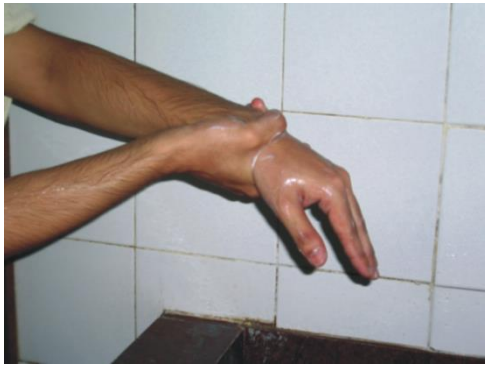
Knuckles



Thumbs



Finer tips



Wrists and forearms

Act to minimize spread of infection

- Clean hands before touching a patient
- Clean hands before an aseptic task
- Clean hands after exposure to body fluids
- Clean hands after patient contact

Protective equipment

Medication safety

- Use generic names where appropriate
- Individualize prescription
- Communicate clearly
- Check well
- Report and learn from medication errors
- Looking for reference when unsure is a marker of safe practice and NOT incompetence.
- Ensure that5 Rs of drug administration are followed

i. *Right drug*
ii. *Right dose*
iii. *Right time*
iv. *Right route*
v. *Right patient*

Safe disposal of sharps

- Keep handling to a minimum
- Do not recap needles; bend or break after use
- Discard each needle into a sharps container at the point of use
- Do not overload a bin if it is full
- Do not leave a sharp bin in the reach of children

Biomedical waste disposal

Take home message

- In today's scenario, patient safety has to be taken seriously
- It is necessary for doctors, medical students, nurses and hospital staff members
- Efforts should be taken to reduce errors, improve teamwork and maintain effective communication.
- Infection risks should be minimized
- Patient should be given the top priority


THANKYOU
THE WALK TO CURE DIABETES
JDRF 2005
We're on Track For a Cure