

A Human Factors approach to medication errors

Why do we make errors?

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Learning objectives

- Define the concept of Human Factors
- Identify key Human Factors that influence how you work
- Applying situational awareness to everyday practice



What is an error?

A deviation between what was actually done and what should have been done



Human error

“We all make errors irrespective of how much training and experience we possess or how motivated we are to do it right.”

(Reducing error and influencing behaviour. HSE. 1999)

What is Human Factors?

The Clinical Human Factors Group:

“Human Factors encompass all those factors that can influence people and their behaviour. In a work context, human factors are the environmental, organisational and job factors, and individual characteristics which influence behaviour at work”.

What Human Factors affect how we work?

- System factors
 - culture of workplace
 - leadership culture, open/safe culture, reporting culture.
 - How does information flow?
 - Face to face, phone, e mail, access to information systems, debriefing/handover
 - Guidelines
 - conflicting/lack of/complex/ different version
 - unable to locate/choose to deviate- why?

- **Human Interaction**

- Team dynamics & conflict

- Personalities, unclear/preferred roles, accountability, different communication styles

- Hierarchy/leadership

- Leadership styles, lack of leadership/followership, hierarchy to steep/flat

- Behaviours

- Challenging negative behaviours, laziness, rudeness, unwillingness, lack of respect

- **Environment**

- Change in location/distance

- Interruptions- people/phones/bleeps

- Physical- temperature, smell, lighting, noise, cleanliness, size

- **Equipment**

- Reliability

- Availability/storage/fit for purpose.
 - Interaction with equipment- knowledge/skills, familiarity/frequency of use, ability to troubleshoot, ergonomic design layout- complex/easy to use

- Personal

- external influences

- Mood/confidence/self esteem/lack of motivation.
 - Life events- family/relationships.
 - Attitudes/behaviour/emotion- time pressure, time of day, lack of job satisfaction

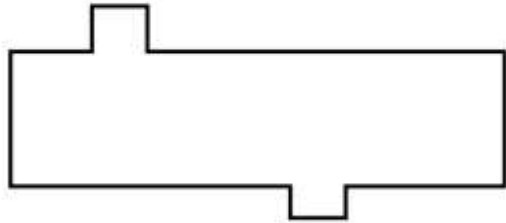
Table top scenarios

In your groups, read out the scenario and identify possible Human Factors affecting the character.

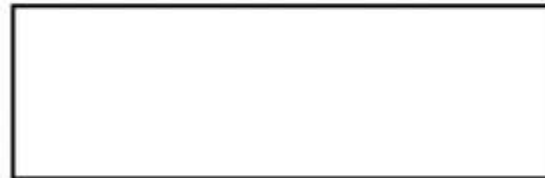
A
BIRD
IN THE
THE HAND

Green	Red	Orange
Blue	Yellow	Red
Orange	Green	Blue
Yellow	Red	Green

shape



SHAPE



Kevin Larson / The Science of Word Recognition
Advanced Reading Technology, Microsoft Corporation / July 2004

Sulfasalazine & Sulfadiazine

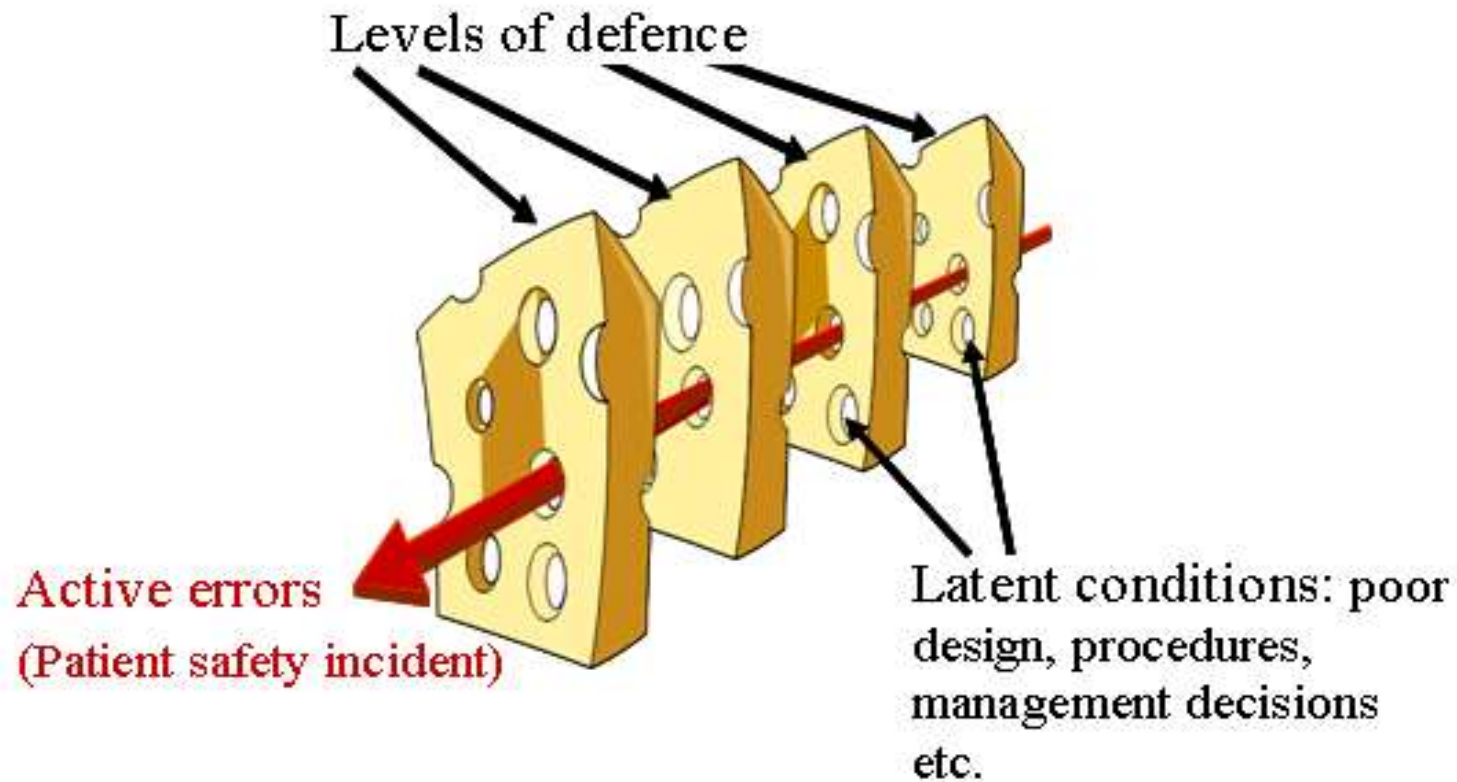
Loperamide & Lofepramine

SulfaSALazine & SulfaDIAzine

LoPERamide & LoFEpramine

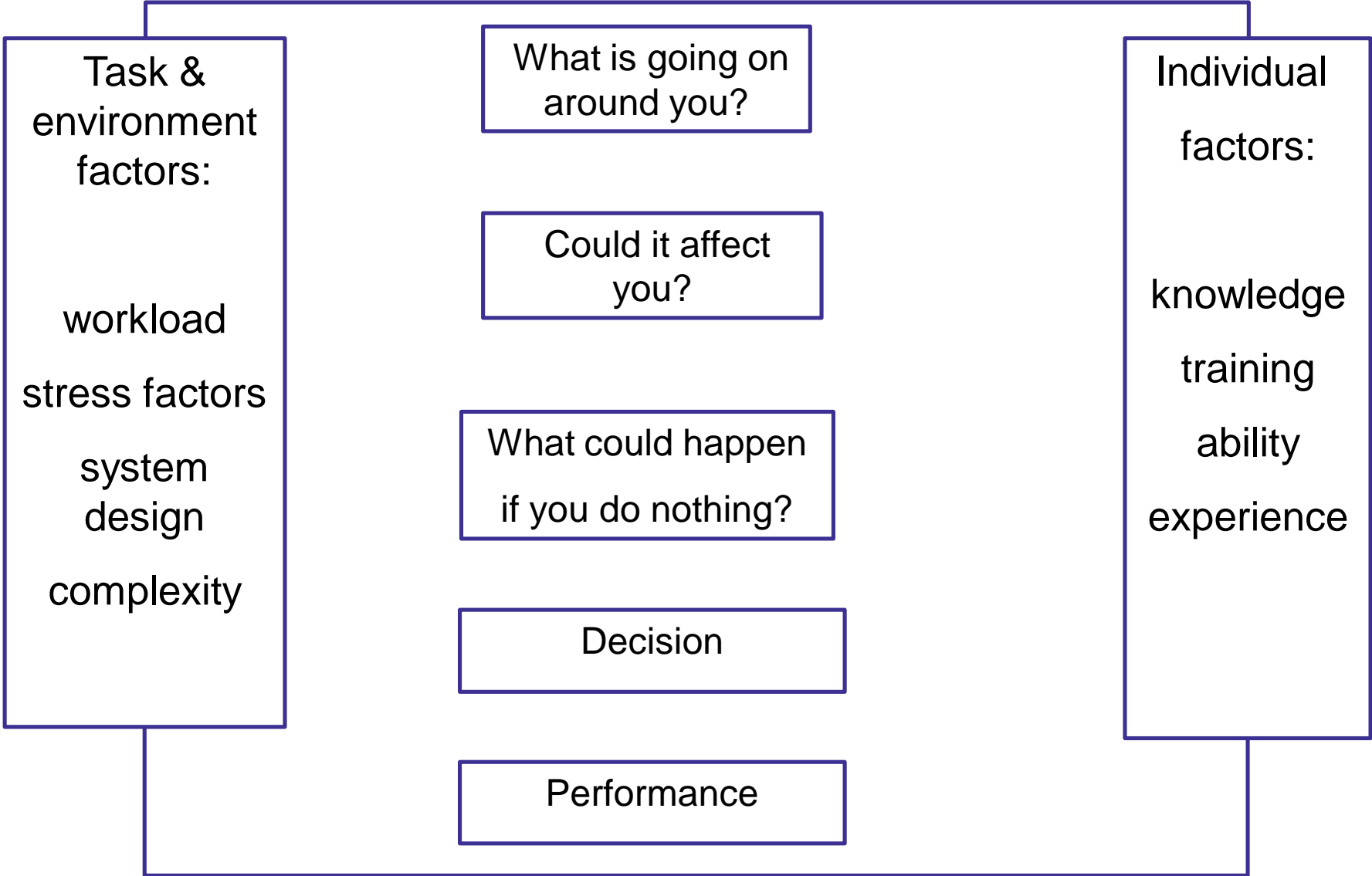


How does an error occur?



Situational awareness





“When anyone asks me how I can best describe my experience in nearly forty years at sea, I merely say, uneventful. Of course there have been winter gales, and storms and fog and the like. But in all my experience, I have never been in any accident.... or any sort worth speaking about. I have seen but one vessel in distress in all my years at sea. I never saw a wreck and never have been wrecked nor was I ever in any predicament that threatened to end in disaster of any sort.”

E.J.Smith, 1907, Captain, RMS Titanic

Any questions

