

Human factors in Health Care 2018

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Definition

- Human factors was first recognised 40 years ago in aviation; they look at personal, equipment and communication.
- Health care recognised Human Factors several years ago.
- It encompasses risk assessment but looks at enhancing clinical performance through an understanding of the impact of teamwork, tasks, equipment, workspace, culture and human behaviour and abilities.

Comparison to aviation.

Aviation	Health care.
Strict criteria to work.	Support in learning.
Use of a safety huddle.	Use of a safety huddle.
Strict flying hours.	Hours worked. (gov.uk)
Strict rules regarding high risk task between 0300-0500, WOCL.	Perform emergency high risk tasks at any time.

Impact of human factors on staff and patients.

- A human factors approach to safety differs from traditional safety training as it focuses less on the technical knowledge and skills required to perform a task but rather with the cognitive and interpersonal skills needed to effectively manage a high risk activity.
- One model of assessing impact of human factors on staff and patients is through Du Ponts Dirty dozen (Du Ponts 2009); this works two fold as it helps identify and mitigate mistakes and errors, whilst complimenting a framework for a Root Cause Analysis.

Human factors within critical care.

High risk tasks with high risk patients.

Du Ponts Dirty Dozen.

- Lack of communication ; leadership, can lead to never events.
- Compliancy; means having the knowledge and choosing to follow a different clinical path.
- Lack of knowledge; within patient safety incidences proving a member of staff does not have the knowledge is sometimes a challenge.
- Distractions; multitasking.
- Team work.
- Fatigue/circadian rhythm.
- Resources.
- Pressure.
- Lack of assertiveness.
- Stress.
- Lack of awareness.
- Norm.

How to change practices?

- Learn from clinical incidents Martin Bromiley (www.chfg.org)
- Perform in situ simulation around never events (Hellaby 2013).
- Support MDT with PACE and instil checklist for high risk tasks e.g. B@EASE.
- Daily huddles.
- Dealing with stress... take a leaf out of Australians book.

References.

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Any questions?

- to err is human, to over up is inexcusable and to fail to learn is unforgivable (Sir Liam Donaldson)