Simulation & Patient Safety
The Human Factor in health care

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That's me…

Simulation & Patient Safety
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…so why talking about
Human Factors?

Come join us!

www.sesam-web.org
USA 2000 Institute of Medicine Report

Top 10 list “causes of death”

- Sepsis: 100,000–200,000
- Mammal Ca: 42,000
- HIV: 16,000

To Err Is Human, Building a Safer Health System
Linda T. Kohn, Janet M. Corrigan, and Molla S. Donaldson, Editors
Committee on Quality of Health Care in America
INSTITUTE OF MEDICINE
2000

Conclusions

- New safety culture
- Introduction of simulation training as often as possible
- Crisis Resource Management (CRM)

Crisis Resource Management (CRM)

Definition

“The ability to translate the knowledge of what needs to be done into effective team activity in the complex and ill-structured real world of medical treatment.”

David Gaba, Stanford

Human Factors – more than communication...

Causes of incidences in healthcare

70% due to “Human Factors”

- no lack of knowledge
- rather a problem with the knowledge transfer into reality
- Teamwork / Communication

M.Rall

INSTITUTE OF MEDICINE
2000
Human Factors – more than communication...

- Team management
- Individual elements
- Fatigue
- Time pressure
- External distractions
- Personal issues

- Decision making
- Situation awareness
- Cognitive aids
- Anticipation & plan ahead
- Fixation error
Human Factors – more than communication...

- individual elements
- leadership / followership
- "effective" communication
- distribute the workload
-...

safety culture

training culture

Simulation in Health Care

Simulation: One word...

Laparoscopic tasktraining

CRM teamtraining

Anesthesia simulation - ADAM simulatengroup, VUmc Amsterdam
Anesthesia simulation – ADAM simulation group, VUmc Amsterdam

In-situ simulation

Team simulation – ADAM simulation group, VUmc Amsterdam

Train the teams who work together!

Does simulation work?

CRM key principles

- Know the environment
- Anticipate and plan
- Call for help early
- Exercise leadership
- Distribute the workload
- Mobilize all resources
- Communicate effectively
- Use all available aids

- Prevent/manage fixation error
- Cross (double) check
- Use cognitive aids
- Allocate attention wisely
- Set priorities dynamically

Leadership

Communication

Decision making

Situation awareness
Does it (simulation) work?

Simulation improves
team performance!!!

Simulation-Team-Training

"...no industry in which human lives depend on the skilled performance of responsible operators has waited for unequivocal proof of the benefits of simulation (or CRM) before embracing it... Neither should anesthesiology (health care)"

David Gaba, Anesthesiology 76:491-494, 1992

Medical Team Simulation – to improve patient safety!

• Human Factor issues (still) play an important role in health care / patient safety

• ... and can / should be trained (training culture!!)

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• ... and it improves team performances!

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We can’t wait any longer!

"Medical Team Simulation – to improve patient safety!"

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• Team Simulation is a very powerful teaching tool

• ... and it improves team performances!
Let's wake up!
…to Human Factors in medicine

To register visit https://ssih.org

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