



Crew Resource Management in Major Trauma

10th European Congress on Emergency Medicine

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In memory
Of
Ian Rentell

1951 - 2016

Outline of session

- Describing Crew Resource Management (CRM) & Human Factors
- Putting CRM & Human factors into action
- Learning points to share

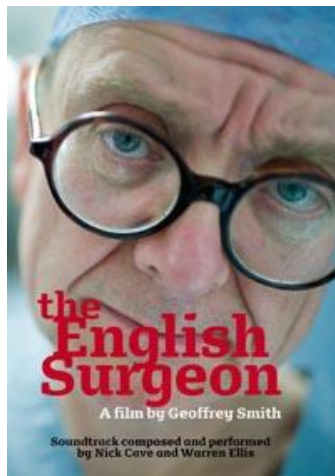
“Every surgeon carries within himself a small cemetery, where from time to time he goes to pray – a place of bitterness and regret, where he must look for an explanation for his failures.”

Rene Leriche

1951

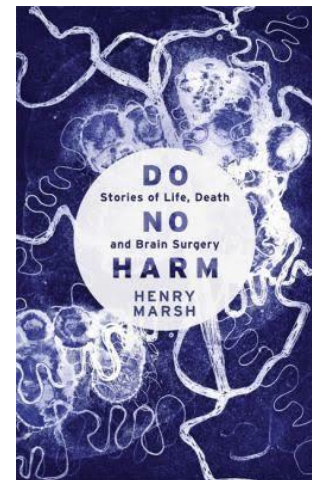
Hope is more important than anything else in life

What are we, if we don't try to help others?



We are nothing at all.

Henry Marsh CBE FRCS
Consultant Neurosurgeon
St. Georges, London.



Crew Resource Management (CRM)

- System promoting optimal use of all available resources:
 - people, equipment, and procedures to promote the best possible outcomes
- Depends on effective team leadership

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Sharing ideas on Risk, Human Performance, Teams and Leaders



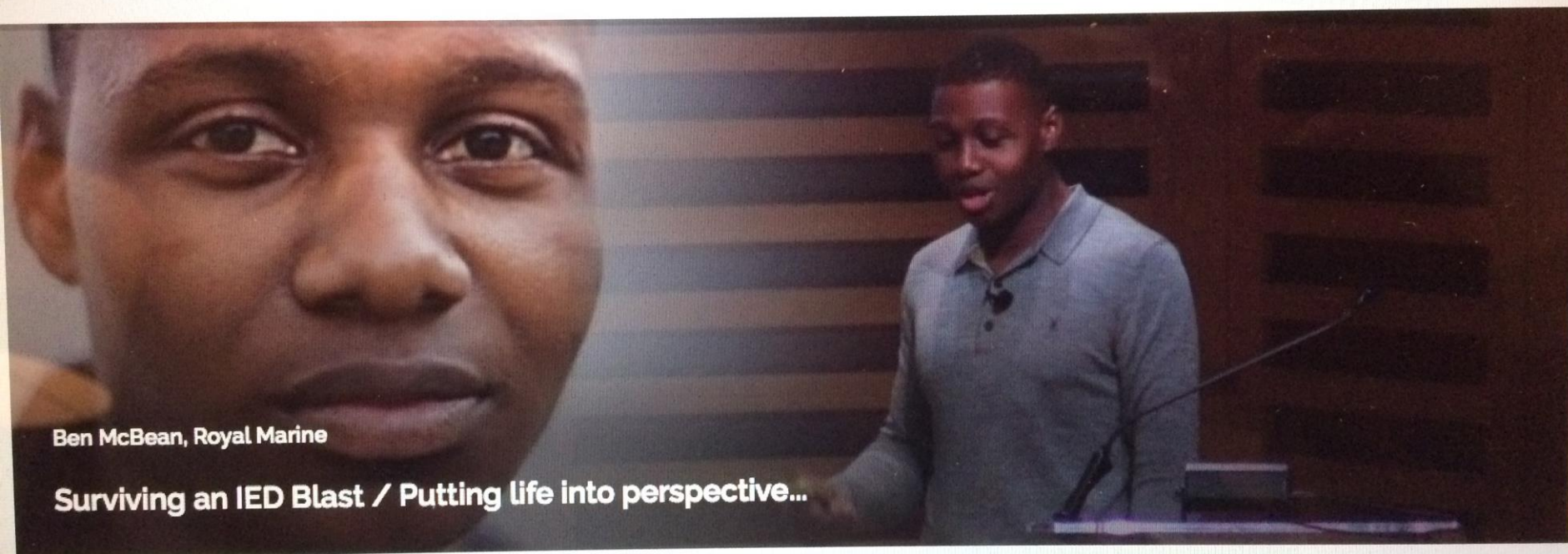
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Surviving an IED Blast / Putting life into perspective...

Welcome to Risky Business Conference Talks

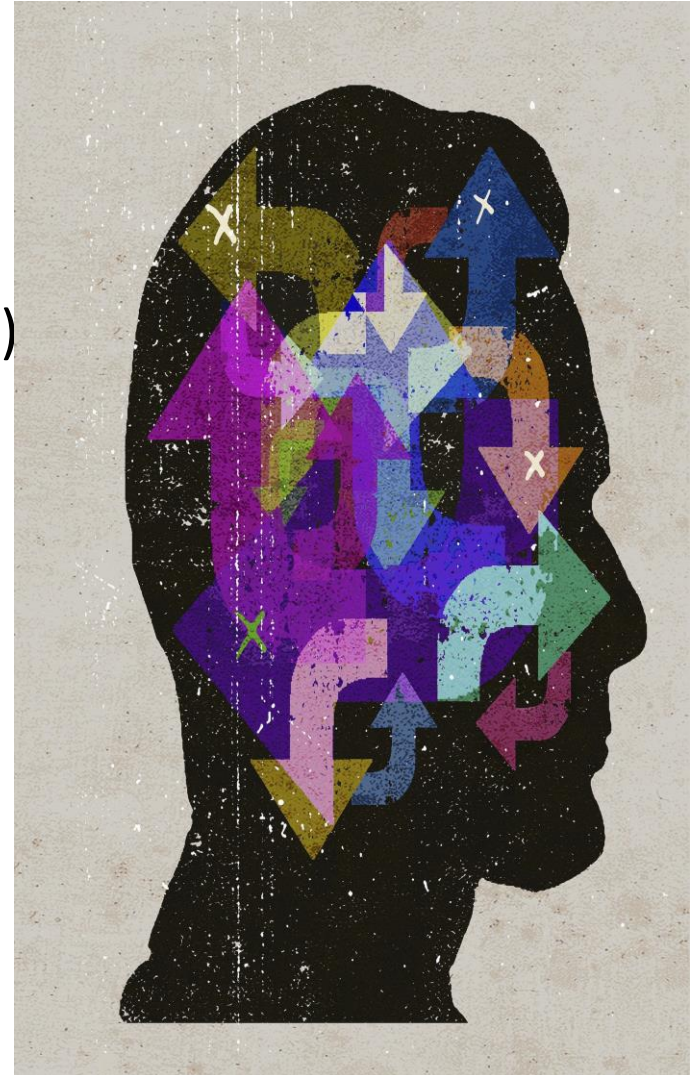
Evolution of CRM



- NASA 1979
- Improving air safety
- Primary cause of “accidents” due to human error

Non-Technical Human Factors that influence high performing teams

- **A**ttitudes
- **B**andwidth
- **C**ommunication (Verbal & Non Verbal)
- **D**efuse conflict
- **E**valuating & Learning
- **F**ailure to be situational aware
- **G**radients of power



“Dirty Dozen” – Error promoting conditions

Sqn Leader John Franklin MBE RAF S02 Eng FW

Lack of:

- Communication
- Resources
- Assertiveness
- Situational Awareness
- Teamwork
- Knowledge

Abundance of:

- Pressure
- Stress
- Norms
- Fatigue
- Distraction
- Complacency

Major Trauma CRM & human factors in challenging pre-hospital cases

Health warning!

At the start of every shift on HM56

- HEMS Qualification: In date?
- Had enough rest 12 Hrs since finish of last shift?
- Had something to eat & drink?
- Physically well to fly?



RAINBOW CLOSE





6th November 2013

08:10 Hrs

**South West Ambulance Service requesting support
on the B3075 Road in Dorset.**

Car v Fire Engine

Multiple Casualties



How did this effect me?

Sadness

- for deaths and injuries

Guilt

- for not having or could have done more

Anger

- at what has happened
- at whoever caused it or let it happen - at the injustice of it all
- at the lack of understanding of others

Shame

- for not having reacted as you would have wished - for having appeared 'needy'

Fear

- of 'breaking down' or 'losing control' - at or on a similar event happening again

Memories

- of past, similar events
- of feelings of loss or of concern for others in your life

Trauma Risk Management (TRiM)

don't bottle up your feelings, tell someone

don't avoid talking about what happened

don't be too hard on yourself

don't expect the memories to go away immediately- time!

do try to re-establish your normal social and work routines

do drive with greater care, your concentration may be impaired

do be more careful in general

Thank you, Ian Mew & Clive Stevens!



“Taking care of yourself is NOT a luxury

It’s the first priority in ensuring you do all other important things well”.

Liz Crowe

02 10 2016

I believe that.....

- Crew Resource Management & Human Factors **MUST** be a compulsory part of any trauma care curriculum.
- Understanding yourself, your strengths and weakness' are Human Factors that will enable you to be a better clinician.
- You never think it will happen to you – take care of yourself and each other. It's a marathon not a sprint!

Thanks & Take care !

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