# Crisis Resource Management (CRM) training by simulation to improve safety in an intensive care unit

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CRM teaches principles of managing critical situations and preventing errors in patient care.

Key principles are leadership, effective communication skills and teamwork.



In september 2010 all nurses at the postoperative / intensive care unit, Oslo University Hospital, Ullevål were trained in CRM principles. The training consisted of theoretical and practical sections including simulation case-scenarios with video-assisted debriefing.

Aim: To improve teamwork, coordination and communication skills. Learning objectives of the course were defined according to the key points of Gaba's CRM concept.



Simulation- based education has been used regularly to train spesific skills such as advanced cardiopulmonal resuscitation and endotracheal intubation. Apart from these disciplines, there has been no systematic instruction to enhance teamwork efficiency.



### CRM KEY POINTS

- 1. Know the environment
- 2. Anticipate and plan
- 3. Call for help early
- 4. Exercise leadership and followership
- 5. Distribute the workload
- 6. Mobilize all available rescources
- 7. Communicate effectively
- 8. Use all available information
- 9. Prevent and manage fixation
- 10. Cross (double) check
- 11. Use cognitive aids
- 12. Re-evaluate repeatedly
- 13. Use good teamwork
- 14. Allocate attention wisely
- 15. Set priorities dynamically

(from Rall M, Gaba DM: Human performance and patient safety, in Miller 6th edition 2005)

## **RESULTS**

Preliminary results from the survey indicates improved skills of leadership, communication and teamwork.

## **IMPLICATIONS FOR PRACTICE**

Non-technical skills training need to take place on a regular basis for all staff. Simulation based training in CRM motivated the staff to develop and practice the skills in their daily work.

#### REFERENCES

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