What is a complex intervention?

- Number of and interactions between components that form the project
- Number and difficulty of behaviours among those who deliver and receive the intervention
- Number of groups or organisational levels that are involved
- Number and variability of outcomes
- Degree of flexibility or tailoring of the intervention

MRC complex intervention guidelines 2006; Craig et al. 2006 & 2008.

Six phases

1. The theoretical phase – caring science, health geography, healing environments and evidence-based design
2. Literature review – obtaining evidence
3. Modelling/building phase – creating the room
4. Methodological design – interviews, observations, sound and light measurement & questionnaires
5. Piloting/assessing feasibility
6. Evaluating and reporting – scientific journals and conferences

The intensive and critical care environment – a complex place to have access to as a researcher

- Acute need of life-saving measures
- Failure in vital organs – respiratory, circulatory and awareness failure
- Technological surveillance
- Advanced nursing, medical and pharmacological treatments
- Multi-professional teamwork, high workload and staffing ratio
- The most expensive form of care (~ 4000 €/24h)

A very closed area!

Aim

To evaluate if a specially designed ICU patient room can promote and accelerate patient health, recovery and well-being compared to an ordinary ICU patient room.

Components

- Sound absorbents
- Circadian light
- Interiors
- View to nature

Findings

- Patients are aware of the light and sound environment, sound levels are too high (Johansson et al. 2012).
- Staff need more theoretical knowledge about effects of disturbing sounds (Johansson et al. 2016).
- Patients’ circadian rhythm needs to be protected (Engwall et al. 2015).
- A cyclic light system is conducive to health for both patients and staff (Engwall, 2017; Sundberg et al. submitted).

Conclusion

As ICU care is costly and a healing environment conducive to health may shorten a patient’s length of stay and recovery time, further research from a humanistic and caring perspective is needed. A combination of methodological approaches, good contact with the clinical field, opportunities for exchange of information, and funding are all of vital importance for this to occur.