

# EVIDENCE-BASED DESIGN IN AN INTENSIVE CARE UNIT – A CARING AND SAFE ENVIRONMENT?

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## Background:

Healthcare environment in intensive care units (ICU) is proved to have physiological effects and it may worsen the already critical ill patients' status. Sounds and lights can increase the patients' stress levels, which can lead to serious consequences for the patients. Evidence-based design (EBD) is a concept of integrating knowledge from various research disciplines into healing environments. The technological developments have evolved enormously during the last decades, but the design of the ICU has not developed in the same pace.

## Overall aim:

The aim is to examine if and so how an ICU patient room, which has been designed according to the principles for evidence-based design, affects safety, well-being and functionality, for patients, loved ones and for staff.

## Importance of the thesis:

Research about high-tech environments, concerning how to promote wellbeing, safety and functionality are sparse. As intensive care is the most advanced and costly type of care, knowledge that may facilitate these aspects for patients, loved ones and staff is important to develop and make public for the future.

## The intervention room:

A research team at the University of Borås refurbished and furnished a special intervention room at an ICU in 2010. The room is a twin room, and has undergone a transformation by using the principles of EBD. It has been fitted with acoustic panels on walls and ceilings and new flooring. Circadian light has been installed and the medical and technical devices have been placed visible to the patients and not, as usual, behind the headboard. In order to put sustainability in focus the materials are chosen with great care, eco-labeled furnishings, textiles and furniture are selected into the intervention room. The walls are painted in soothing shades, organic textiles and decoration, and comfortable furniture for visitors have been installed. Outside the room is a patio with furniture and seasonal plants which is accessible for patients and their relatives.

