The purpose of this study was to explore the experiences of nursing staff working in a patient room designed according to evidence-based design principles.

Intensive care unit nurses use technology and systems that may not have existed when their nursing units were constructed. Nurses often must work around machines and in narrow spaces to deliver complex care to critically ill patients. Research is needed to understand how best to create a supportive work environment.

In this exploratory study, data were collected through qualitative interviews and then analyzed using inductive content analysis. The setting was an eight-bed general ICU in Sweden where one of the patient rooms was renovated and furnished according to EBD principles. Eight critical care nurses and five assistant nurses were interviewed. Participants worked all shifts and there was not dedicated assignment to specific room or rooms.

Four categories with subcategories emerged from the data analysis. The first category was labeled *a room that stimulates alertness* and included the following subcategories: light as a support for caring, and a sound formation that offers harmony. Nurses felt alert with proper lighting and refreshed from working in a room that absorbed some of the noise. The second category was called *a room that promotes well-being* and included the subcategory of a comfortable environment. Nurses were refreshed from working in a comfortable environment. The third category was *a room that fosters caring behaviors* and its subcategories were a homely atmosphere that helps nurses individualize care to the patient and facilitates communication in that it is easier to communicate with soft-spoken patients when
rooms had lower noise levels. The fourth and final category was a room that challenges nursing activities and included the subcategories of a different room and limited accessibility. Overall, clinical staff enjoyed working in the EBD-designed room, with only two main reservations. First, there was an overall desire for equipment and furnishings to have been placed in the same way as the other rooms so the staff did not have to continuously re-orient themselves when assigned to the redesigned room. Secondly, pendulums for caregiving equipment hung from ceilings in the redesigned room were not efficient, as shorter nurses could not reach the equipment and taller nurses bumped their heads on them.

**Limitations**

Due to the single unit nature of this study, transferability is limited. Furthermore, this unit was designed to have two beds per room, which may have different results from open-ward units or single-patient rooms.

**Design Implications**

Participants indicated that they give better care to patients when they feel better. It is important to recognize that if the ICU environment is improved, it helps the staff to create a more supportive and caring atmosphere, which will lead to better patient outcomes. Additionally, this study noted that bed space can be varied according to the physical condition of the patient and may need to be adjusted for machinery or other care items. Finally, the study reinforces the importance of room uniformity within a unit. This study demonstrated that improvements in acoustics, lighting, interior design, and nature views positively impact the well-being and caring behaviors of the nursing staff and should be considered in future design projects.