SYNOPSIS

KEY POINT SUMMARY

OBJECTIVES

The objective of this study was to determine whether family members in a patient- and family-centered ICU spend more time in the patient room with their loved ones than in more traditionally designed units, and whether family members in the patient- and family-centered spaces interact more with their loved ones and with caregivers than family members do in more traditional units.

Environmental Affordances: Designing for Family Presence and Involvement in Patient Care

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Key Concepts/Context

One of the ways that hospitals strive to provide patient-centered care is by altering the physical facility to incorporate larger visitor and family space within patient rooms. It is believed that this space increases comfort and allows family members to spend more time with and better support their loved one in the hospital, impacting patient care. As few rigorous empirical studies have been conducted to measure the impact of this design feature on family members' behavior as well as their degree of presence in the room, the authors sought to study this in more depth.

Methods

Presence of family members, as well as family-patient and family-caregiver interactions, was studied in two intensive care units at Tampa General Hospital. The two units were very similar in terms of patient characteristics and operation, but one unit was designed to be more patient-centered with a family area, while the other unit was older and had a more traditional layout in the patient room. Patient rooms within the patient-centered unit have more comfortable and accommodating furniture, a privacy curtain, a larger area dedicated to visitors, and are 40% larger than those in the other ICU. Through a behavior-mapping method, the team directly observed family presence and interaction in the rooms and recorded peoples' specific locations, as well as their physical and verbal interactions, on floor plans. The observer walked the unit and recorded activities and locations every 15 minutes for 12-hour periods on 10 weekdays over the course of five weeks. Additionally, informal interviews with nurses allowed the researchers to collect data on patients and ensure that there were no confounding variables or issues that might impact family presence and interaction on the two units. 81 patients and their families were included in the analysis. Patient characteristics were evaluated, and

DESIGN IMPLICATIONS

This study presents evidence in support of patient- and family-centered design of patient rooms, which incorporate designated family zones to accommodate a few family members. The results indicate that this increases family presence, providing patients with increased emotional and physical support during their hospital stay.

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then a two-step process involving a Pearson correlation analysis and an independent samples t-test was conducted to identify statistically significant associations and find differences between the two different unit designs.

Findings

Family presence was found to be significantly higher in patient- and family-centered units than in traditional units, meaning that families spent much more time with their loved ones in the family-centered patient rooms than in traditional rooms. As for interaction, there was a marginally significant difference between family-patient interaction in the two units; families in family-centered patient rooms interacted with their hospitalized family member somewhat more often than families in traditional patient rooms, but this was only marginally different. That being said, there were significant and strong correlations between family presence and family interactions with patients and staff, which indicates that increased presence may provide family members with additional opportunities for interaction. Finally, there was an insignificant difference between the two types of units for family-staff interactions. Thus, family-staff interactions do not necessarily increase within a more family-centered patient room.

Limitations

One limitation mentioned by the authors was the fact that information was not gathered from family members to learn their perspectives about the design of the unit they experienced. This may have allowed for a better understanding of the impact. Another limitation was the manner of obtaining patient data; informal interviews were conducted with nurses, rather than a formal review of patient medical records. This was believed to add a degree of subjectivity that should be avoided in future studies on the topic.