

## KEY POINT SUMMARY

## OBJECTIVES

The purpose of this study was to compare the effect of a sacred space environment in the perioperative area on surgical patients' perceptions of sacred space, nurse caring behaviors, and patient satisfaction. This study also developed a Sacred Space Assessment Instrument (SSAI).

# Effect of Sacred Space Environment on Surgical Patient Outcomes: A Pilot Study

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## Key Concepts/Context

With the growing trend to patient-centered care, nurses are often tasked to evaluate how care is delivered. The perioperative environment is highly technical in nature and is often perceived as cold, while creating a sense of fear in patients This study's purpose was to create an alternative healing environment (termed a sacred space and comprised of both environmental and nurse behavioral factors) compared to the traditional environment for surgical patients in the operating room (OR). The sacred space environment combined soft lighting, warmth, selected music, and an art mural in an OR.

## Methods

A post test only design with comparison group was employed. Data were collected on 50 patients in the comparison group and 50 patients in the experimental group using a 25-item Sacred Space Assessment Instrument (SSAI). The sacred space environment was created after control group data were collected and before the nursing staff were exposed to the sacred space education sessions. One OR was used for the pilot study with room modifications including dimmed lights with only peripheral lighting, selective music for surgical patients, room temperature between 68 and 75 degrees (F), warm blankets, and an art mural with soothing colors of nature. Caring behaviors and actions cited in the paper included attentive listening, patient teaching, patient advocacy, therapeutic touch, and technical competency.

Subjects in the experimental (n = 50) and comparison (n = 50) groups were adult patients admitted to either gynecologic (OB GYN) oncology or genitourinary (GU) surgical services. Part I, the Sacred Space Evaluation of 18 items was developed by one investigator and measured perceived sacred space. It was supplemented by

Part II, the Caring Behaviors Inventory 5 (CBI-5). Both the SSE and CBI-5 items used a 6-point Likert scale. An additional section (Part III) included two items (also a 6point scale) to evaluate overall patient satisfaction with the perioperative experience. Test-retest reliability, convergent validity, and internal consistency reliability were tested on each section of the SSAI, with analysis showing acceptable statistics for a newly developed psychosocial instrument. Eleven core nurses who had volunteered for the study completed the patient profile of the SSAI for patients. A sacred space perioperative team member administered the instrument near the end of the patients' recovery time (two to three hours following surgery) for both comparison and experimental groups.

#### Findings

Results of t-tests showed that a statistically significant difference existed when perception of sacred space and perception of nurse caring were compared by group. However, no statistically significant difference resulted on patient satisfaction by group.

## Limitations

Author-identified limitations include:

- The 25-item SSAI instrument was administered for the first time and was in the early stages of instrument development, requiring further validation.
- Only two patients completed the SSAI.
- A convenience sample was used and restricted to OB-GYN oncology patients and GU patients with an unequal distribution of male and female subjects.
- Data collection occurred during recovery when patients were still under sedation for pain; timing was due to logistical constraints and nurse availability.

Additionally, there was no evaluation to understand the relative importance of the physical environment compared to the caring behaviors. There was no also no evaluation of the individual components incorporated in the environment to understand if specific design features were more effective compared to others. Specifics about when the patient was exposed to the environment relative to their sedation period for the surgery were not provided, nor was it clear whether patients underwent complete or partial sedation.

#### **Design Implications**

Consistent with other studies, the use of positive distractions (both visual and auditory) can have an effect on patient outcomes. According to this study, the design of the environment may have an effect on perceived care, even when patients are under some forms of sedation. Considerations for the OR suite might







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