

Quiet Time

A daily period without distractions benefits both patients and nurses.

By Heidi Boehm, MSN, RN, and Stacy Morast, RN, BSN, NE-BC

Patients on our busy, 28-bed medical-surgical unit at the University of Kansas Hospital in Kansas City (which is affiliated with the university's schools of medicine, nursing, and allied health) often complained about the noise level. They cited the noise generated by commonly used medical equipment, institutional equipment such as food carts, opening and closing doors, and construction. They also mentioned the noise staff made, including the nursing staff during shift changes, the environmental services staff during routine cleaning, and the large care team present on the unit at all times of the day and night. Our unit has 12 private rooms and eight semiprivate rooms, and the latter have their own set of additional noisy distractions produced by visitors and staff caring for two patients in the same room.

On several occasions we had considered designating a quiet time for patients. But we didn't think it would work, given the number of physicians, staff, and students working with patients, the patients' need for multiple therapies, and the average of 210 patients admitted and discharged per month.

In fall 2005 we revisited the idea of quiet time when the unit was chosen to participate in the Robert Wood Johnson Foundation and the Institute for Healthcare Improvement's collaborative Transforming Care at the Bedside (TCAB) initiative. Several other medical-surgical units participating in this nationwide collaborative were also trying to reduce noise levels by implementing a quiet time for their patients, and they were having varied levels of success depending on the amount of support they received from ancillary staff and physicians and other factors. We "stole shamelessly" the best approaches developed by the other units, with the goal of improving our own patient-centered care.

RESEARCH

As part of our planning, we reviewed the literature. Studies show that noise levels higher than 50 decibels cause physiologic changes that decrease healing and recovery and can increase length of stay.¹ Research

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**Please assist in
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The sign that we post on the doors of patients' rooms to announce when it is quiet time.

also indicates that disturbed sleep can affect a patient's ability to heal and can increase morbidity.² Excess noise can increase gastric acid secretion, stimulate the cardiovascular system, and impair the ability to fight infections.^{3,4}

According to Christensen, medical and nursing personnel produce between 30% and 60% of the noise on a hospital unit.⁵ This noise not only negatively affects patients, but it also may take a toll on staff. High levels of noise can increase the stress that staff feel when providing care, which could increase the risk of medical errors.⁶

We also assessed our own patient satisfaction surveys, which patients complete after they are discharged. Patient satisfaction related to the unit's noise level was in the 39th percentile for patients discharged from January to November 2005, before quiet time was implemented. Many patients also commented that they were frequently disturbed as they tried to rest. The increased attention we were giving to the concerns related to noise on the unit prompted us to take action.

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IMPLEMENTATION

In December 2005 we introduced quiet time using TCAB's performance improvement methodology of Plan-Do-Study-Act and the process of rapid-cycle testing. The goal of quiet time was to provide patients with an hour of uninterrupted rest during the day.

During the planning phase, we took the opportunity at TCAB meetings and through the TCAB e-mail group to consult with other units that had set up quiet time. Unit leaders and staff representatives also met with representatives of ancillary teams, including physical, occupational, and respiratory therapists and environmental and dietary services personnel, to determine what one-hour period during the day would least interfere with their work. Together we decided that 12:30 PM to 1:30 PM was best for the team.

During this time, staff were encouraged to stay out of patient rooms unless entering was absolutely

necessary. Before 12:30 PM patients were toileted, given fresh water, and made comfortable. Patient admissions, discharges, and essential tests and procedures were permitted during quiet time.

In accordance with the TCAB methodology of rapid-cycle testing, the intervention was initially tested on one day with one nurse and one patient. After the nurse explained the purpose of quiet time to the patient and her family, the family left so the patient could rest. Immediately after this test, the patient praised the innovation. She reported that she had been able to sleep and had enjoyed the peace and quiet.

The next day the same nurse tested the intervention with all of her patients, again with good results. A week later, the test spread to two nurses and their patients, with the same positive results. The next day, we implemented quiet time throughout the unit.

We tell patients and family members about quiet time upon admission. Visitors don't have to leave during quiet time, but they are asked to remain quiet. The doors to all the rooms are closed (except those occupied by patients with a high fall risk) and the lights in the corridors are dimmed. We designed a sign that is posted on the door of every patient's room to increase staff and visitor awareness of quiet time. We also posted a sign at the entrance to the unit that alerts arriving team members when it is quiet time.

OUTCOMES

Feedback from patients and staff has been overwhelmingly positive.

Patients have made many positive comments, both during their stays and on patient satisfaction surveys. One patient wrote, "I really liked the quiet hour. It gave time for my husband to go eat without fear of missing the doctor. It also gave me the quiet I needed to rest."

Since we implemented quiet time, patient satisfaction with noise levels in and around the room increased to the 55th percentile from the 39th percentile.

Nurses. We surveyed the entire nursing staff—RNs, unit secretaries, and unlicensed patient care staff—to evaluate their perceptions about the effects of quiet time. Twenty-four staff members (38% of the unit nursing staff on all shifts) responded to the survey. All agreed that quiet time decreased noise levels on the unit. Eighty-three percent of respondents believed that patients benefited from quiet time, and 67% said it helped them to catch up on documentation.

Besides appreciating the opportunity to do paperwork, nurses also enjoyed being able to eat lunch together as a team. One member of the nursing staff stated, "It is nice to have a break from the constant activity." Another said, "Our patients get to rest, and we are happier with our jobs. It is a win-win for everyone."

Physicians. In the beginning, physicians still came to see their patients during quiet time. They asked why the lights were low and wanted to know more about the idea. After the nursing staff explained the rationale, most physicians and residents thought quiet time was a good idea and supported the change by not conducting rounds during that time.

Activity level. Patients may still use their call lights for assistance during quiet time, but anecdotal evidence indicates that they do so less frequently than they did during this hour before the innovation.

After about a year and a half of quiet time, the hospital's environmental services department used a noise dosimeter to measure noise levels on the unit over a 48-hour period. During quiet time the decibel level decreased to less than 60, whereas at other times of the day it ranged between 70 and 80. Even during quiet time, however, the unit is louder than the 35 to 40 decibels the U.S. Environmental Protection Agency recommends for the hospital setting.⁷

To remedy this, the staff identified sources of noise on the unit, such as equipment and machines. We are addressing these to try to reduce noise to an acceptable level. For example, we put felt on our metal wall units so they would close more quietly and secured a grant that allowed us to buy quieter carts for our blood pressure machines. We also have made environmental changes, including introducing a noise-level stoplight that glows red when the noise level is unacceptable and green when it is optimal. In addition, when the unit was renovated, we had dim lighting installed at the nurses' station so we could turn off all the other lights on the unit and still have sufficient light to work by at the nurses' station.

SUSTAINING THE INNOVATION

The unit has been able to maintain quiet time for more than three years now. Along the way, we have made some modifications to improve compliance.

We developed a unit standard to guide staff in preserving quiet time. The standard states the purpose of quiet time and gives examples of activities that can and cannot take place during it. Prohibited activities include routine tests and therapies, routine housekeeping services, public address system announcements and pages, and deliveries from the gift shop or flower shop. However, essential tests and therapies, emergency housekeeping services and public address system announcements, and dietary tray deliveries are permitted.

Upon admission to the unit, patients receive a welcome letter that describes quiet time. As the hour approaches, the unit secretary announces over the public address system: "Attention friends, family, and

staff. The time is now 12:20 PM. In 10 minutes we will begin one hour of quiet time for our patients to rest. We appreciate your assistance in maintaining a peaceful environment during this time. We hope to see you in an hour. Have a great day!"

Challenges to sustaining quiet time continue to arise. In spring 2007, for example, ancillary hospital staff and physicians began to come on the unit more frequently during quiet time. In response, we launched a campaign reminding them about the hour and introduced brighter signs at the front of the unit and on the doors of patient rooms. We also sent e-mail reminders to the care team and ancillary departments.

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SPREADING THE INNOVATION

Quiet time was so successful on the day shift that it was expanded to the night shift on our unit. At 8:30 PM, the unit secretary announces: "Attention, friends and family. The time is now 8:30 PM. Visiting hours are now over. We appreciate your respect to our patients and letting them rest. We hope to see you again tomorrow during visiting hours. Have a safe evening." Before the evening unit secretary goes home, he places the quiet time signs on the doors and closes the doors of all the rooms except those of high fall risk patients. The nursing staff try to take care of all of the patients' immediate needs before 11:00 PM, when we dim the lights in the corridors and the night quiet time begins.

Other units in this hospital have implemented or are exploring the idea of having a quiet time. The pediatrics unit has a two-hour afternoon quiet time. The trauma unit has "Shhh!" signs to remind patients, staff, and visitors that a quiet environment promotes healing.

Newsletters and a local news station have reported on this initiative. As a result, other hospitals—both TCAB participants and others—have contacted us for information about how we implemented quiet time.

LESSONS LEARNED

Collaboration among all hospital staff is vital to the success of quiet time. By partnering with ancillary teams to determine the best hour for quiet time, we secured their cooperation and compliance with our new unit standard. Including the front-line staff in the planning of this intervention also helped to ensure their buy-in.

However, not all the physicians immediately cooperated. Some continued to conduct rounds during quiet time and made comments about how silly it was. To improve this, we now meet with new residents and physicians to educate them on this initiative, and it seems to help. For example, after we explained quiet time to one trauma surgeon who rarely has patients on the unit but had dropped in to see a patient during quiet time, he quietly obtained the chart, then waited until after quiet time to see the patient.

The nursing staff initially found it challenging to stay out of the patients' rooms during quiet time. They had to modify their work flow to comply with the quiet hour. But as the survey demonstrated, most of the nurses recognize the value of quiet time for their patients and themselves.

And as the patient satisfaction surveys show, quiet time hasn't eliminated concerns about noise on the unit. We continue to improve patient satisfaction

related to noise by making environmental changes and constantly reinforce the importance of quiet with staff and families. Overall, patient, family, and staff feedback has been positive. The noise levels are lower and patients are better able to rest during their stays. ▼

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Physicians Embrace TCAB, Too

Benefits include rapid-cycle testing by physicians and improved teamwork

As a hospitalist at Kaiser Roseville Medical Center in California, one of the three facilities selected for phase 1 of the Transforming Care at the Bedside (TCAB) initiative, Kurt Swartout, MD, has been involved in TCAB since its inception. He's also a member of the local team, which meets weekly.

Some of the local team's rapid-cycle testing involves physicians, and he helps to coordinate that. They have a staff of 50 physicians who work at the hospital. When the TCAB team has an idea that involves physicians, Swartout brings it to the hospitalist group and makes sure the test is implemented. Improved outcomes resulted in rapid buy-in from the physicians early in their TCAB experience.

Rapid-cycle testing had changed the culture at the hospital, making problems testing opportunities. Physicians as well as nurses are encouraged to develop ideas for rapid-cycle testing. This has changed the way they approach their jobs. They identify a problem, think of a possible solution, try it out on a small scale, and see if it works.

Swartout says they had good physician-nurse communication before, but TCAB has definitely improved communication and fostered teamwork. As a result, they have seen patient care improve.

For example, they now do bedside physician-nurse-patient and family rounding together. This has helped shorten the length of stay. One postoperative patient who had undergone a complicated bowel resection had been expected to be hospitalized for 10 days to two weeks. But with the nurses and physicians working closely together, the patient was discharged after only four days.

To improve communication, they now have white boards in every patient room throughout the hospital and its sister hospital, Kaiser Sacramento. This came about as a direct result of a rapid-cycle test of a physician's idea. They tested this first in one patient room, then rolled it out to the rest of the floor, then to the rest of the hospital, and then to the sister hospital. Physicians, nurses, and patients and their family members can write messages to each other on the white boards.

Swartout views health care as a team effort. Only through really good communication, he says, can the team deliver the best care. Because nurses are with patients far more than physicians are, Swartout and his team have enabled both nurses and physicians to provide better care.—*Laurie Lewis, freelance medical writer, New York City* ▼