Managing Operating Room Distractions

In an operating room (OR), patient safety can be compromised when surgical team members are distracted. Diligent concentration, vigilance, and clear communication are paramount in completing the intricate and complex tasks required in surgery. However, noise — a significant distraction in the OR — is a given in this setting.

Sources of noise in an OR include medical equipment devices (e.g., monitors, clinical alarms, and other alerts), fixed communication devices (e.g., overhead announcements and landline telephones), environmental devices (e.g., HVAC systems and pneumatic tube systems), electronic activities by OR staff (e.g., texting, internet browsing, etc.), and healthcare personnel entering and leaving the room.

The most commonly cited distractions in the OR are conversations unrelated to the surgical procedure, telephone calls, technology use, and music.¹ These noises can might lead to ineffective communication; diminished signal and speech intelligibility; poor performance of complex tasks; poor cognitive function and concentration; and stress, fatigue, and anxiety.²

The concept of the “sterile cockpit,” which mandates elimination of nonessential activities during aircraft takeoffs and landings, can be applied in the OR. Protocols similar to the sterile cockpit can be created to ensure the least amount of noise and distractions occur during critical periods of the surgical procedure.³ Some examples of critical times during surgery include the induction and emergence of anesthesia, clipping of an intracranial aneurysm, and initiation of cardiopulmonary bypass.

To mitigate the effects that distractions in the OR may cause, this publication offers strategies to keep focused attention on the patient and maintain a safer surgical environment.
Use a sound level meter or a dosimeter to determine whether the OR has a noise problem. The Environmental Protection Agency’s recommended level for continuous background noise in hospitals is 45 decibels, which can still interfere with concentration. However, a study measuring noise levels in OR trauma found an average level of almost double the recommended level.4

Create a no-interruption zone where nonessential conversation and activities are prohibited during the critical phases of the surgical procedure.

Use fixed communication devices (such as overhead pages and announcements as well as landline telephones) only for essential communication, and ensure that they operate on the lowest volume available.

Control/limit the amount of healthcare personnel entering and exiting the OR during surgery to minimize interruptions.

Review and comply with the facility’s guidelines and/or policies regarding the use of personal electronic devices in the OR. If guidelines don’t exist, devise specific policies about technology use in the OR.

Require healthcare staff members to place personal communication and electronic music devices on vibrate or silent mode during surgery. If possible, have them turn off the devices or leave them in another room.
If staff do bring mobile communication devices into the OR, have them silence ring tones and forward calls to voicemail. Minimize tones on personal technology devices that sound similar to monitors and alarms in the OR.

Consider limiting OR internet access only to patient-care-related websites to avoid discretionary browsing.

Educate all surgical team members about the sources of noise in the OR and how they affect patient and staff safety.

Provide training to enhance OR staff members’ focused attention in the presence of noise — both continuous and intermittent — and other distractions.

Consider simulation training to model specific strategies for reducing noise (such as equipment use, communication techniques, and speaking up to reduce noise).

Foster a culture of safety in which staff feel empowered and comfortable to speak up and ask for silence.
Consider the OR’s physical environment and what can be done to lessen noise. For example, advise healthcare staff to place metal instruments onto trays as quietly as possible.

Avoid loud or distracting music in the OR.

Resources

- Distractions in the Operating Room: An Anesthesia Professional’s Liability? (Anesthesia Patient Safety Foundation)
- Minimizing Noise and Distractions in the OR and Procedural Units (The Joint Commission)
- Minimizing OR Noise and Distractions (OR Today)
- Statement on Distractions in the Operating Room (American College of Surgeons)
Endnotes


2 Ibid.

3 Ibid.

4 Ibid.