Music in the Operating Room: “Can You Hear Me Now?”

Foad Nahai, MD, FACS

I can remember a time when chiefs of service or operating room (OR) supervisors would not allow music in the operating room. Today, if any such restrictions still exist, they are the exception rather than the rule. As Drs Lies and Zhang point out in their excellent article, “Prospective Randomized Study of the Effect of Music on the Efficiency of Surgical Closures,” music in the OR has become ubiquitous, and there is wide belief in its actual benefits. Yet there are concerns that merit our attention with respect to patient comfort, the OR team, and even issues of medical liability.

I am comfortable with listening to music while performing surgery and have done so throughout my surgical career, though initially my mentor and chief, Dr Josh Jurkiewicz, did not approve. I believe it was my penchant for Mozart that eventually won him over. While I still love Mozart, I sometimes choose popular music rather than classical. In fact, I am particularly fond of the Beatles and get a kick out of remembering myself as a schoolboy listening to their music, never imagining that 50 years hence I would be performing a facelift to the familiar strains of “Love Me Do.”

Clearly, taste in music is a personal matter but the type of music played in the OR, as well as who selected it, may have an impact. In a 1994 study published in the *Journal of the American Medical Association* (JAMA), it was shown that autonomic reactivity in a number of key physiological measures relevant to performing surgery, as well as speed and accuracy of task performance, were significantly higher with music vs without, particularly when surgeons listened to self-selected music as opposed to experimenter-selected music. This is to say that, when it comes to music, one man’s (or woman’s) meat may be another’s poison.

**WHO IS IN CHARGE?**

Achieving a consensus from the team on what music to play in the OR may or may not be easy. And, as mentioned above, there is at least some evidence to suggest that a surgeon may perform measurably better if he or she is in control of the music selection. Regarding surgeon preferences, in a United Kingdom study cited by Lies and Zhang, it was found that half of the surgeon respondents who reported listening to music in the OR favored up-tempo rock, 17% pop, and 11% classical. But is the surgeon’s preference all that matters?

In responding to a Letter to the Editor from a Certified Registered Nurse Anesthetist (CRNA) who reported that her complaint of loud music in the OR led to her involuntary transfer to another facility, the Executive Director of the American College of Surgeons (ACS) reminded members that “surgeons can no longer view themselves as the ‘captains of their ships,’ with the rest of the crew on hand simply to carry out their demands.” He recommended a team approach to optimizing the operative environment, including consideration of background noise, which can impair a team member’s ability to hear monitors or audible alarms, in addition to potentially affecting communication during surgery.

**GENRE VS DECIBELS**

Intuitively, one might imagine that rock music poses the greatest risk for noise distraction in the OR, but it probably has more to do with decibels than genre. In a University of Kentucky study published in the *Journal of the American College of Surgeons*, 15 surgeons were subjected to varying noise levels from conversations, machinery, and other OR sounds. When music was added to the mix, the surgeons’ auditory processing functions became less accurate than in conditions of quiet or ordinary OR noise. If they were simultaneously performing tasks, these functions declined even further. The music, a Beatles tune played at 74.2 decibels (db), was louder than normal conversation (usually about 60 db). Researchers concluded that operating noise, particularly in the presence of music, can contribute to

Dr Nahai is Editor-in-Chief of Aesthetic Surgery Journal.
miscues among OR staff and raise the risk of medical errors, particularly when conversations carry information that is unpredictable.5

PREFERENCE AND FAMILIARITY

The volume of music is a key element in determining its distracting effects and whether it impairs communication among the operating team, but there can be other factors. A study by the anesthesia department at Glasgow’s Western Infirmary, which surveyed 200 anesthetists, found that 72% worked in ORs where music was regularly played. More than a quarter of respondents (26%) felt that music, especially music that they didn’t know and like, might “reduce vigilance and impair communication.”6 This finding underscores the need for surgeons to be aware that the selection of OR music is more than personal and needs to take into account the needs and preferences of supporting staff.

A POTENTIAL SMOKING GUN?

With the increased intrusion of technology into every aspect of our lives, surgeons must be cognizant of myriad opportunities for distraction in the OR. When I started out, the sources for OR music were originally radio stations or tape players, then CDs. Now it’s the smartphone with virtually infinite choices via Pandora, iRadio, and so on. It is worth noting that smartphone distraction in the OR appears to be a burgeoning topic of discussion among malpractice attorneys. One malpractice firm’s Web site reports that, in a 2010 study of more than 400 perfusionists, the majority admitted to using their cell phone in the middle of an operation.7 While such abuses are not directly related to music in the OR, the Western Journal of Medicine points out in an article entitled “Anatomy of a Medical Accident” that “intrusions like music, pages, and telephone calls that are permitted in the operating room are not permitted in other ‘dangerous’ environments.”8 In this same vein, a roundtable discussion published by the American Academy of Orthopaedic Surgeons and the American Association of Orthopaedic Surgeons made comparisons to the aviation industry, suggesting that operating rooms should, similarly, maintain a “sterile cockpit” environment during critical phases of operations.9,10 It seems like common sense that at times when heightened communication is essential, such as when the patient is being set up for monitoring or is being intubated, music should be turned down or, if necessary, eliminated.

While smartphones and computers are currently the main focus of concern, it may be only a matter of time before the inventive malpractice attorney starts looking for every possible mode of distraction in the OR. Piping music into the OR is widely practiced and accepted. A strong case can be made for its positive effects such as stress reduction and increased efficiency. However, if proper limits on volume are not observed, or if certain members of the OR team are negatively affected, either due to the limitations of individual hearing loss or by the very nature of their responsibilities (such as monitoring audible alarms), then questions about safety might legitimately be raised.

And let us not forget the patient! Not many of my patients would be comfortable listening to Freddie Mercury belt out “Another One Bites the Dust” while they undergo an elective aesthetic procedure under local anesthetic. If a patient is under general anesthetic, of course, his or her musical preference is of little or no concern (although I still would exercise reasonable judgment in my selection). When a patient is under local anesthetic or sedation, however, I will always ask if he or she has a preference for music or no music, and if music is desired then I ask if there is a preferred type. If the patient expresses no preference, I simply try to select something soothing.

Lies and Zhang conclude, under the appropriate circumstances, that music in the OR can have positive effects, improving both efficiency and quality of tasks. When there is less familiarity with tasks, or the content of communication between surgeon and staff is less predictable, music can, at least theoretically, present a distraction, particularly if played at a higher-decibel volume than normal conversation. In addition, if the type of music selected is uncomfortable for a team member, it can present an obstacle to smooth functioning in the operative environment. For all these reasons, it behooves the surgeon to remain sensitive to the preferences of the OR team, as well as the patient, when playing music in a surgical setting. A little extra consideration can go a long way toward increasing cooperation and, ultimately, patient safety and satisfaction.

Disclosures

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REFERENCES