Sound of music—or is it noise in OR?

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Dr. Evan O'Neill Kane from Pennsylvania, a notable, albeit an idiosyncratic surgeon—having operated upon himself twice, once to remove his appendix and later to repair an inguinal hernia—is hailed as the first to haul in the phonograph in to the operating room (OR) with a view to relaxing the patient prior to anesthesia. This was probably the first of the early exploits into the use of “music” as a therapy. But lately, it is being used by a number of surgeons as a balm to heal themselves in the OR. There however is a raging debate as to, is it a distraction with a potential for consequences for patient harm or does it calm a fidgety and timorous “scalpel wielding hand?”

Currently, most operations are becoming high tech with a lot of electronic gadgetry and their attendant alarms and clatter of moving parts. Further, most surgeries have a plethora of technicians involved, therefore adding to the rush of human personnels in the OR, all contributing to a clamorous caterwauling, which can exceed 120 decibels—louder than a busy highway [1]. Music thus can be construed as adding to this cacophony.

It is not just the music but also the type of music, which is equally, or may be even more important. If one were to play hard rock music, metallica bands, or the modern day bollywood rap, then sure to most ears, that can be considered a noise. However, if one were to play hymns and sacred texts of Ramayana, Quran, Shabad Kirtans, Bhajans, and soothing instrumental and classical music, then it may help the surgeon to transcend the distracting clamor and be cool and calm while performing surgery. In a study in 2011 conducted in India, 87% of surgeons, anesthetists, and nurses were comfortable with music being played in OR as “Music helped in reducing the autonomic reactivity of (Operating) theatre personnel in stressful surgeries, allowing them to approach their surgeries in a more thoughtful and relaxed manner” [2]. To this group, not only playing music in the OR was neutral, but in fact, it

improved the speed as well as the quality of the surgery and may even lower the health care costs [3]. Con votaries however point to the evidence available to the contrary that music can impair communication, hinder surgeon's performance, especially of the trainees and the junior surgeons, and may even produce tachycardia in response to “Rap” and fast beat music, besides increasing the incidence of surgical site infection [4], plausibly due to drop-let contamination.

However, there is less discord in the value of music during the initial pre-induction phase of anesthesia, where music, if played to the selection of the patients, may help to not only relax them, but also reduce the intraoperative sedation requirements [5, 6], as pain perception may reduce with music therapy [7]. Surgical music therapy thus seems to be on a firm footing, at least in the perioperative realm [8].

With pros and cons and countervailing arguments flying fast and furious, nullifying each other, this issue of music in the OR should best be left to the operating team. It should be a consensus between the surgeons, anesthetists, nurses, and the technicians to decide whether to play music or not, what to play, and to what decibel level. There can also be phased music in which the music may be played at some stages of operation and turned off at others. Votaries of Indian classical may even decide the “Raga” according to the time of the day and that indeed may have plenty of science behind it, which the modern science, in its present state of ignorance, may be totally incognizant of. After all, haven't circadian rhythm been demonstrated to transcriptionally orchestrate perioperative myocardial injury and exert its influence through Rev-Erba on perioperative mortality, with afternoon surgeries doing better than morning ones! [9].

Like everything else in life, extremes in all responses bring sorrow to humanity. It would thus behoove the medical fraternity to probably resort to the middle path of low pitch, soothing music played at noncritical times of surgery and keeping in mind the preferences and sensitivities of all the stake holders, including the patient. In fact, patients can be asked to bring in their own preferences and be their own “Disc Jockey.”

It's been far too long that patients have danced to our music, the winds have reversed, let us dance to theirs!

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