

Effects of Music on Operating Room Environment

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Abstract

Music is commonly played in operation theatres and has shown to diminish stress of the surgical team along with reducing the patient's anxiety before surgery. Music during surgical procedures can prevent distraction, minimize annoyance, reduce stress and diminish the anxiety of patients, staff and users. Most Surgeons like to play soft, low volume, instrumental music to combat long hours of standing while performing complex, skillful and dexterous surgical procedures. They probably want to keep their cool and make the patient undergoing surgery at ease by playing their favorite music in the highly tensed and perplexing operating room environment. Music also must be having a role to play in making the long, routine, planned, monotonous surgical procedures interesting and enthralling.

Keywords: Operating Room; Surgeon; Music; Surgical Procedure; Surgery

Introduction

Music is commonly played in operation theatres and was first introduced in operating rooms in 1914 to relieve the anxiety of patients planned for surgery. Music has shown to diminish stress of the surgical team along with reducing the patient's anxiety before surgery. Conversely, music may lead to distraction in surgical routines leading to disruption in communication between the surgical team members. The matron might struggle to hear the surgeon's instructions or she may find it hard to keep the correct swab count. It is not uncommon for doctors to put on music while in the operating room - many of those surveyed said it helps them relax. Music, which is generally chosen by the lead surgeon, is played roughly 62 - 72 percent of the time in the operating room, according to a new report published in *The BMJ*. The genre most often chosen is classical music. According to several doctors surveyed, listening to music in the operating room is calming, breaks tension and helps improve focus. It can prevent distraction, minimize annoyance, reduce stress and diminish the anxiety of patients and staff. The resting heart rate, pain relief and sleep of the patient improve significantly with music.

Discussion

When solicited scientifically the magic of sound has proved to allay human suffering [1]. Music has been utilized to derive physical, emotional and spiritual well being of human beings [2]. In operating rooms, soft music reduces stress, cheers up the staff making the working environment gratifying and pleasurable [3]. In addition to diminishing anxiety, tolerance to pain is also augmented for patients when music is played thus reducing the intra-operative sedative and analgesic needs [4]. Music masks the unpleasant sounds of sophisticated medical equipment, alarms and beeps of patient monitoring systems and staff conversation during procedures [4]. The pace and precision of the surgeon is amplified by soft, classical, melodious and familiar music [5].

Effects: Ulmann in his study found that 63% of the participants listened to music on a regular basis in operation rooms [6]. Hawksworth in a study established that 26% of his study population felt music hampered their communication with other staff in the operating

room [7]. A study by Allen, *et al.* revealed that 59% of respondents thought that music helped in reducing their autonomic reactivity in stressful surgeries thus calming them down and allowing them to approach their surgeries in a more thoughtful and relaxed manner [8]. Cooke, *et al.* found that music significantly reduced anxiety levels [9]. Britton, *et al.* proposed that music curtails pain and discomfort in patients probably by activation of auditory pathway inhibiting the central transmission of nociceptive stimuli [10]. Ferrer in his study proved that music brought significant improvement in the levels of anxiety, fear, fatigue, relaxation, heart rate, respiratory rate and blood pressure [11].

Type of music: Various studies suggested that instrumental music was the most sought after type of music; followed by FM radio, Hindi ghazal, English country, English classical and Hindi classical in that order. Ullmann, *et al.* found classical music as the most preferred type of music [6].

Volume: The volume of the music played also had a tremendous effect on the mood of the OT staff. George, *et al.* in his study found that 59% of the respondents preferred medium volume while 41% preferred low volume of music in the operating room [12].

Disadvantages: Music with loud beats and high tone and volume may interfere with patient care and can interrupt smooth functioning of operating room of providing highly specialized surgical and intra-operative care. It can restrict communication between staff members, the operating surgeon and the assisting matron and may distract the Anesthesiologist thereby interfering with hearing patient's breathing and important alarms [7]. It could also lead to avoidable wastage of time in the form of time spent on selecting songs and adjusting volume.

Conclusion

Music seems to be an essential part of surgical culture. Most Surgeons like to play soft, low volume, instrumental music to combat long hours of standing while performing complex, skillful and dexterous surgical procedures. They probably want to keep their cool and make the patient undergoing surgery at ease by playing their favorite music in the highly tensed and perplexing operating room environment. Music also must be having a role to play in making the long, routine, planned, monotonous surgical procedures interesting and enthralling. There may be some points in some surgeries by some surgeons at which the surgeon might request that the volume be turned down or the music be stopped altogether when more concentration is required or when communication among team members is critical.

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