Operating rooms are dynamic environments that contain essential equipment to maintain life. A critical appraisal of evidence was done to examine the impact music has in the operating room on intraoperative errors and patient outcomes. Several different search engines (CINAHL Complete, PubMed, and Nursing and Allied Health Source) were used to gather recent articles that examined the effect of music in the operating room. Keywords used in searching for articles included different combinations of the following: operating room, nursing, errors, distractions, music, safety, and patient outcomes. Exclusions included pediatric surgeries and articles published prior to 2011. Critical phases during surgery were identified as induction and emergence of anesthesia, skin preparation, and wound closure. This critical appraisal of evidence includes cohort studies, survey studies, case studies, and systematic reviews. Several studies showed that added distractions, such as music, during this critical phase negatively impacted patients and increasing their risk for infection. 60% of the articles used in this critical appraisal found that music must be limited or not present during the critical phases. Results from a systematic review included in the critical appraisal discovered that the anesthesiologist surveyed found music present in the operating room hampers the ability to safely induce, reverse, and maintain anesthesia. Also, the noise level in the operating room frequently excess the World Health Organization’s (WHO) recommendations. Implications for practice include the need for “hard stops” and strict protocols that outline when music can/can’t be on in the operating room. After examining several studies that focused on the impact of noise and music on patient outcomes, a definitive conclusion could not be made. Generally, music does impact the patient and healthcare team members. Systematic reviews should be done on this topic to close the literature gap and determine the best practice guidelines/protocols in the operating room environment.

Title:
Impact of Music in the Operating Room: EBP

Keywords:
Intraoperative Errors, Music and Operating Room

References:


**Abstract Summary:**

Research shows that music is commonly played in the OR environment. A critical appraisal of evidence showed the effect music has in the OR has been found to cause errors, interfere with communication and the critical phases. OR protocols and ‘hard stops’ should be implemented to minimize controllable errors.

**Content Outline:**

- **Background/significance**
  1. WHO noise regulations
  2. Distraction lead to negative impact
  3. Music impact on the OR staff compared to surgeons

- **Clinical question**
  1. In healthcare team members in the operating room, how does music compared to no music present affect intraoperative errors?

- **Search strategy**
  1. Key terms
    1. Operating room, Nursing, Errors, Distractions, Music, Safety, Patient outcome
  2. Databases
    1. PubMed, CINAHL, ProQuest
  3. Exclusions
    1. Pediatric surgeries
    2. Articles prior to 2011

- **Evidence**
  1. Moris & Linos, 2013
    1. Systematic review, 28 studies, found the surgeons feel music benefits work but staff found it to interfere with communication
  2. Clark, 2013
    1. Case study, 20 RN’s, critical periods with distractions associated with negative outcomes, “hard stop” implemented
  3. Plaxton, 2017
    1. Case study, distractions prolong procedure = longer exposure to bacteria = increase risk for infection
  4. Shambo et al., 2015
    1. Systematic review, 24 studies including n=1,140, dB guidelines, errors occur with increased noise in critical periods
  5. Lee et al., 2013
    1. Survey study, 523 urologists, complications linked to music in OR, need for regulations on music in OR
  6. Weldon et al., 2015
    1. Cohort study, 20 operations, miscommunication, prolonged surgical time, and repeated requests all caused by music in OR
• Findings
  1. Music and external distractions linked with error and increased infection
  2. Studies were limited in size and lacked a control group
• Implications for practice
  1. Need for regulations in OR setting, possibly including “hard stop” during critical times
  2. Further research is needed
• Summary
  1. Negative impact on communication and performance in the OR with music present
  2. 3/6 articles identified need for decrease in distractions (music) during critical periods to prevent errors

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Author Summary: Samay Ersoff is a senior BSN student at the University of West Florida. She is excited to present her poster focusing on the effect music has on the operating room environment. Ersoff’s interest include the operating room environment and critical care nursing. She also holds a bachelor’s degree in Exercise Physiology from Florida State University. During her time at FSU, she was involved in behavioral genetic research in the Hughes Lab.