Minimisation of anxiety via music therapy can be seen to promote patient comfort, holistic care and improved surgical outcomes. Much of the research reviewed identified music as a positive nursing intervention against preoperative anxiety, and suggest patient care could indeed be enhanced with its presence.

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References

The preoperative surgical environment, with its unfamiliar sights, smells and sounds, is said to be one of the most stressful and frightening experiences for any patient1. More specifically, patient anxiety levels are said to be at their highest in the hour directly preceding their surgical procedure2. A recent literature review on this topic has found a promising place for music as a nursing intervention in minimising such a stress response. This review, incorporating fifteen articles of primary research found listening to music preoperatively can act to significantly reduce patient anxiety, 1, 3-5, 10-17, 20-21.

Effects of Preoperative Anxiety
Preoperative anxiety is common amongst surgical patients, and may even be accepted as ‘normal’ by some. However, anxiety has the potential to cause a patient a range of uncomfortable and potentially detrimental physiological and emotional distress. A higher level of preoperative patient anxiety has been linked with:

1. enhanced feelings of tension, worry, nervousness, irritability and apprehension 1,2
2. distraction, a loss of concentration and lowered mood 2,12
3. physiological changes such as increased heart rate, blood pressure and respiratory rate, as well as nausea, diarrhoea and diarrhoea 1,12

extra demand on the cardiovascular system, particularly in ‘at risk’ patients with a cardiac history 1, an increased likelihood of surgical risk, postoperative complications and lengthened hospital stay 1, increased need for intra-operative sedation and anaesthetic requirements 1,12.

How Does Music Act to Reduce Anxiety?
Music is a complementary intervention capable of decreasing anxiety with fewer side effects than more traditional pharmacological means. The way in which music acts to cause such a physiological response remains a subject of research. Based on current knowledge, the sensory input of music has been found to impact upon the central and autonomic nervous systems via neural impulses 1,12. Ultimately, it influences the way in which we respond to stressful situations.

Overall, the literature presented promising results. Playing music to patients preoperatively was found to decrease the physiological or emotional parameters of anxiety levels in thirteen of the fifteen studies reviewed. Patients who listened to music preoperatively experienced:

1. improved feelings of comfort, relaxation and wellbeing 1, 4, 6, 10, 16, 18, 20, 21
2. reduced preoperative blood pressure 1, 4, 10, 20
3. reduced preoperative heart rate 1, 4, 16, 20
4. reduced preoperative respiratory rate 1, 9
5. decreased release of adrenaline 3

Comparatively, patients who did not listen to music in the same period demonstrated increased blood pressure and heart rate measurements 15, 20-21. There is no evidence that listening to music caused the patient any discomfort or negative effects in these studies.

Will Any Music Do?
It is common belief musical genres such as classical, instrumental, slow rhythm and nature sounds are naturally more calming than others. However, these types of music were not shown to be more relaxing than any other 6, 9, 15, 21.

A greater decrease in preoperative anxiety was found where some patient self-selection of music were possible. Interestingly, those two studies that allowed patients to bring in their own compact disks from home demonstrated the greatest impact on patient anxiety 1,12.

This demonstrates it is not only the act of listening to music that potentially decreases anxiety, but how much the listener enjoys it. Musical likes and dislikes can be seen to stem from individual experiences, cultures, language, age and other socio-cultural variables. It is important to be mindful of this when implementing a preoperative music program, and to invite patients to listen to their own compact disks or iPods where possible.

Recorded music may be played overhead or via headphones from a portable player. Both listening methods reported positive results, allowing music to disguise and distract the patient from the surgical environment. However, headphones offer greater listener choice in music type, volume and desire to listen to music.

When Should My Patient Listen to Music?
The preoperative time between admission and moving into theatre has been shown to be ideal. This may be in holding bay, the day surgery suite or other preoperative waiting area. However, the findings arising within this review suggest a minimum of twenty minutes of undisturbed listening time is required for music to have been specified as best practice.

This review highlighted some gaps in the literature regarding optimal duration of music listening time. At this point, no specific length of time has likely to decrease with an increased time frame to listen to music preoperatively.

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