

The Effects of Music Therapy and Quiet Twice Daily on Hemodynamic Parameters
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Problem: Mechanically ventilated Critical Care patients are under great stress. One adjunctive treatment that can be effective for allaying anxiety and promoting relaxation is music therapy. The study explored the effects of music on mechanically ventilated ICU patients.

Evidence: Multiple studies have shown that music can reduce heart rate, blood pressure, respiratory rates and induce relaxation (Burns, 2001; Byers, 1997; Chlan, 1998; Good, 1995; Gupta, 1999; White, 1999; Updike, 1990).

Strategy: The randomized controlled clinical trial utilized a repeated measures three-group design. A convenient sample of 45 mechanically ventilated ICU patients, matched for Apache II scores, were recruited after informed consent was obtained. The eligible participants were randomly assigned by permuted block method to one of three experimental groups (Classical, New Age, or no music). All groups wore foam-padded headphones for the 30 minutes of data collection.

Results: Data analysis of 43 patients revealed reductions in all clinical measures in trial arm B (New-Age) in the first and second sessions. Trial arm B had the largest reductions in all parameters, except heart rate, in the first session data. The largest changes in mean heart rate occurred in trial arm A (No Music, -5.6) in session one, but an increase in heart rate was seen in session two (+3.36). The largest reductions in blood pressure occurred in both of the music listening groups, trial arms A and B, in the second session.

Recommendations: The results may support the use of music for relaxation along with noise and stimulation reduction for patients in critical care. The different responses between the first and second sessions may be due to the true experimental nature of the first session.

Practice Change: The ICU implemented a music and relaxation program to offer patients a choice of relaxing music or “quiet time” with dim lighting, and reduced stimulation.

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