

Music helps patients undergoing daily weaning from prolonged mechanical ventilation

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Credit: Wikipedia.

Patient-selected music during weaning from prolonged mechanical ventilation could benefit patients by decreasing their heart rate and anxiety, according to a study presented at the 2015 American Thoracic Society International Conference.

Patients on prolonged [mechanical ventilation](#) may feel stress or insecurity during daily [weaning](#) trials because they do not have support from the ventilator. "Having patients listen to music during these trials may help reduce stress and speed up extubation," said lead author Zhan Liang, a PhD candidate at the University of Pittsburgh in Pennsylvania.

The study's outcome measures were mean blood pressure, heart rate, respiratory rate, blood oxygen saturation level (SpO₂), anxiety, dyspnea, and weaning time (hours) during daily weaning trials.

Researchers recruited 28 subjects from a long-term acute care hospital and randomized subjects into two music intervention orders for 6 days during

their weaning trials. Both orders involved listening to music every other day via a headset, with the "off" days having no music.

Subjects included in the study were on mechanical ventilation for more than 4 days, were undergoing daily weaning trials, had no hearing impairment, were at least 21 years old, and had no evidence of delirium.

During weaning trials on music days, researchers began to track outcome measures for 30 minutes; after that, patients listened to their selected music for 60 minutes. On nonmusic days, data were collected for 90 minutes.

The mean patient age was 62.5 years old, and 79% were male. The mean Acute Physiology and Chronic Health Evaluation III score was 48.3, and the mean long-term [acute care hospital](#) length of stay was 38.9 days.

On music days, subjects had significant decreases in heart rate, respiratory rate, anxiety, and dyspnea pre- and post-music intervention. There were no significant decreases in SpO₂ or mean blood pressure. On nonmusic days, no significant changes occurred with the variables. When researchers compared the three [music](#) days with the three nonmusic days, there were significant decreases in respiratory rate, anxiety, dyspnea, and a significant increase in daily weaning time, but not [heart rate](#), SpO₂, or mean blood pressure.

"Further study is indicated to test benefits in a larger sample and earlier in the weaning process," the researchers concluded.

More information: Abstract 62728: Effect of Music Intervention During Daily Weaning Trials in Patients on Prolonged Mechanical Ventilation

Provided by American Thoracic Society

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