

The Potential of Music to Help Patients with Dyspnea and Anxiety, a brief report

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Since the summer of 1996 I have been involved in a pair of studies with professors in the Nursing Departments of Ryerson Polytechnic University and the University of Toronto. Both studies involve patients with COPD (Chronic Obstructive Pulmonary Disease) who have breathing difficulties. The results of our first study are being prepared for publication; the following is a brief summary for the Bulletin.

Our study had two objectives:

1. to examine the potential of music in helping patients with chronic shortness of breath (dyspnea) and anxiety;
2. to examine the effect of music on patients in their own homes.

Studies have shown there is evidence of a direct association between dyspnea and anxiety. Our study differs from previous studies in three ways; *first*, we examined music's effect on both shortness of breath and anxiety; *second*, we did not use a clinical setting, but rather the patients' own homes; *third*, we had a 5-week testing period rather than a one-time testing period. Previous medical and nursing studies examining the effects of music whether on cardiac patients, patients undergoing chemotherapy or patients with rheumatoid arthritis have been in a clinical setting with a one-time testing period. Our goal was to discover whether patients could benefit from listening to music in their own homes at specific times when they suffered shortness of breath and anxiety.

All of the twenty-four participants in the study had chronic bronchitis and/or emphysema. All used respiratory drugs, including inhalers. The mean age was 69 years. Each participant was given a tape of three types of music, identified only as categories 1, 2 and 3. Category 1 had excerpts of New Age music, category 2 was Classical music, and category 3, Easy Listening. Participants then chose which category appealed to them and received a longer tape of their chosen music. Most participants (16) chose Easy Listening, some (6) chose New Age, and a few (2) chose Classical. All of the recorded pieces had been cited in earlier studies or were based on criteria cited in earlier studies—i.e., they were instrumental, with a slow or moderate tempo, soft to medium dynamics and clear melodies. Classical selections included the *Largo* from Bach's Concerto for Two Violins; New Age selections included David Lanz's "Christofori's Dream";

Easy Listening included "Greensleeves" arranged by Mantovani.

Participants were also given a "music use and preference questionnaire" in order to determine their musical backgrounds. They were asked how often they listened to music, why they listened to music, whether they varied their music based on their mood, and whether music had an effect on them. During the following weeks, the participants rated their shortness of breath and anxiety on two separate scales developed in clinical literature. They were also asked to record their music use in a music diary. Each time they listened to the music, they were asked to indicate in the diary their level of shortness of breath on a scale of 0-100, both immediately prior to and after listening to the music. They also indicated the length of time they listened to the music and whether they used an inhaler or puffer. At the end of the study period, they were given a music effectiveness questionnaire in which they were asked about the music and the effects they experienced while listening.

Our findings showed that approximately 71% of the times music was used, patients did not need to use an inhaler. Thus music reduced their dependence on chemical interventions. In order to determine whether musical background had any effect on music use, cross tabulations were performed to examine the relationship between the previous use of music and the frequency and effectiveness of music reported in the diary. However, no significant relationship was found, indicating that benefits from listening to music are not restricted to those who already listen to music frequently.

Another rewarding aspect of the study was the commentary in the diaries regarding music. Several participants wrote that music made a difference in their ability to continue a task, such as vacuuming or working outside, or when trying to relax: "While sitting, the music was very relaxing after a tiring day ... the music also helped reduce the tightness in my chest so that my breathing became more normal ... while working, the music was very relaxing and made the work less strenuous...."

None of the participants in the study are musicians; many were surprised that music could affect their breathing and anxiety levels. While those of us who listen to music regularly for relaxation or other purposes may find these results obvious, nursing or clinical studies, if they are to be published in recognized journals, must have carefully documented evidence of music's effectiveness in reducing anxiety and/or shortness of breath.

Cette complainte ("Cordelia Viau") nous fut communiquée par Mme Angéline Paradis-Fraser de Cap-Chat en mars 1977. Elle conservait cette chanson à l'état manuscrit sur des pages de cahier brouillon et avoue ne jamais l'avoir chantée, la chansan étant par moments trop morbide.