

Nurses Ease Pain in Cancer Center with Music

Valerie Coope, RN, OCN with Chris Brewer, MA, FAMI

Nurses at the Ella Milbanks Foshay Cancer Center in Jupiter, Florida feel they have a sound approach to pain management---musically sound that is. Based on a successful program at the National Institutes of Health (NIH), Foshay nurses experimented with an innovative technology called vibroacoustic music that uses music felt throughout the body as well as heard. The nursing staff found they could attain over 60% reduction of pain and anxiety using this novel technique. The vibroacoustic sound option is now a standard offering for all Foshay cancer patients.

Good Vibrations Relieve Pain and Anxiety

Patients at the cancer center can ease their discomfort during infusion treatment by relaxing in a comfortable recliner, closing their eyes, and allowing musical sound vibrations to help relieve any stress, pain or symptoms of their cancer and treatment. These good sound vibrations significantly reduce patients' experiences of anxiety, pain, fatigue, nausea, headache, tension, anger, and other miscellaneous symptoms.

In fact, a program evaluation of vibroacoustic music use at the NIH, headed by Dr. George Patrick, Chief of Recreation Therapy in the Rehabilitation Medicine Department revealed 49% to 61% reduction of pain and anxiety in patients with varying diagnosis at the Clinical Medical Center. Dr. Patrick published an article in the March 1999 IEEE Medical Journal entitled The Effects of Vibroacoustic Music on Symptom Reduction: Inducing the Relaxation Response through Good Vibrations. The NIH vibroacoustic pain management program began over six years ago and is ongoing.

Sound Science: How Vibroacoustics Reduces Pain

How does it work? Several elements are likely to contribute to the total effect. The vibrations of vibroacoustic therapy are solely the result of musical sound that creates a complex of vibrations, rather than a single vibration such as those produced by massage chairs, Dr. Patrick speculates that vibroacoustic therapy triggers the body's relaxation response reducing body tension, mental/emotional anxiety, and, apparently, illness symptoms and pain.

In addition to the effects of the vibrations, the music used in the NIH program is anxiolytic, or anxiety-reducing. A third contributing element is the configuration of the Somatron Clinical Motorized Recliner used at the NIH and Foshay. This equipment reclines patients into the Trendelenburg position, placing the body at 90-degree angles at the hips and knees. Physicians recommend this position because the patient's legs are above the heart, which reduces pressure on the spine, relieves full-body muscle tension and increases circulation. NASA uses this position for astronauts during lift-off because it distributes body weight in the least stressful position possible. Foshay nurses find that patients often comment on the comfort of the recliner itself.

Nurses Develop Musical Pain and Anxiety Management Program

The Foshay program began when Chris Brewer, music specialist, researched vibroacoustic music and teamed with Cancer Center Nursing Director Valerie Coope, who agreed to pilot a test program. The critical question was, Could busy nurses facilitate a vibroacoustic music program and achieve the same successful pain and symptom reduction results as the NIH?

The answer proved to be a resounding yes! The results of a six-week program evaluation revealed more than 60% reduction of pain, symptoms and anxiety. Nurses collected data from over 40 patients about pain intensity levels using a Visual Analog Scale (VAS). Tension levels were measured with the Poppin Seven-Point Self Report. Data was taken pre- and post-session and indicated the nature of patient symptoms and how symptom intensity and tension levels changed after a half-hour vibroacoustic music session. The NIH provided assistance in evaluation design and results computation.

Best yet, the majority of comments from patients were quite positive, reflecting that they appreciated the physical and mental relief experienced in the vibroacoustic music session and left feeling significantly better than when they arrived. In addition, the center's nurses reported feeling a sense of satisfaction at having improved their patients' treatment experience. Using the equipment proved to be easy and required little additional time. A number of nurses reflected that the music calmed them, also. The Somatron vibroacoustic pain, symptom and anxiety management program has also helped Foshay meet JHACO Pain Management requirements and has been found useful in a variety of other clinical settings.

Re-working the original program design somewhat, Valerie Coope has now implemented a vibroacoustic pain and symptom management program in the recently-remodelled cancer center. Somatron vibroacoustic music recliners have been installed in six of Foshay's infusion stations. Each of the vibroacoustic music stations are designed to create a relaxed atmosphere, with lighting that can be dimmed and curtains to provide seclusion if desired. A variety of music is used, including the anxiolytic, or anxiety-reducing, music used in the evaluation.

Patients' comments continue to be positive-they love the comfort of the chair itself as well as the effects of the vibroacoustic music. An evaluation of the new program design is planned for 2003 but Foshay Cancer Center nurses are pleased with the current results. At Foshay not only are patients' hearts blessed with the sound of music but also their minds and bodies.

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