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## **Future Perspectives of Music Therapy**

### **Key Words**

Music therapy

Throughout the ages and across many cultures, the healing power of music has been well documented. The music therapy profession was established in 1950 as a result of work done using music with patients in a number of Veterans Hospitals. Today, in the US, over 5000 music therapists are employed in more than 50 different settings including hospitals, day-care facilities, nursing homes, hospices, and private practices. The profession is expanding at a remarkable pace in all nations of the world.<sup>1</sup>

Music therapy is the systematic and clinical use of music, musical elements, and activities to address physical, psychological, cognitive, and social needs of individuals, many with disabilities and illness. The aim is to promote, maintain, and restore all aspects of health for all ages. Music therapy is an established allied health profession delivered by a qualified music therapist who provides direct patient service, with consultation for staff, patients, and families. Music therapy is a valuable adjunct to occupational, physical, and speech therapies.<sup>2</sup>

Music therapy builds on the power of music in a focused way for healing and for change. It is also a humanistic, non-invasive medical treatment designed to prevent illness and disease; alleviate pain and stress; help people express feelings; promote physical rehabilitation; positively affect moods and emotional states; enhance memory recall; and provide unique opportunities for interaction and emotional intimacy. Music with its non-verbal, creative, structured, and emotional qualities can be used in the therapeutic relationship between the music therapist and client. Interaction, self-awareness, self-expression, learning, communication, and personal development are facilitated by music therapy.<sup>3,4</sup>

Much research in the past 50 years has shown that music therapy is a valid, non-pharmaceutical option for

effective patient care. The research supports the effectiveness of music therapy in many areas such as neurological impairment, neonatal care, pain management, and psychoneuroimmunology.

### **NEUROLOGY**

Dr. Michael H. Thaut, Professor of Neuroscience, Music and Biomedical Engineering, and Director of the Center for Biomedical Research at Colorado State University, and Dr. Gerald C. McIntosh, Co-Director of the Center for Biomedical Research, developed a new music therapy approach. Neurologic Music Therapy is based on models of scientific theory from psychological, physiological, and neurological foundations of music perception/music production. They developed standardized music therapy intervention techniques.

The application of rhythmic training to gait rehabilitation using rhythmic auditory stimulation (RAS) was recognized at the 1999 World Congress of Neurologic Rehabilitation as one of the current evidence-based therapies for motor rehabilitation. Therapeutic intervention using rhythmic stimulation to retrain gait and arm control can be used in patients with stroke, Parkinson disease, or traumatic brain damage.<sup>2</sup>

In a case report, after 5 weeks of daily RAS training with 8 traumatic brain injury patients, the mean velocity of 5 patients increased significantly by 51% (38.8 to 57.6 m/min;  $p < 0.05$ ), cadence increased by 16% ( $p = 0.012$ ), and stride length increased by 29% (0.89 to 1.13 m).<sup>5</sup> In another study of 31 patients with idiopathic Parkinson disease, RAS produced significant improvement ( $p < 0.05$ ) in mean gait velocity, cadence, and stride length in all