

The Confluence of Three Major Influences in the Field of Music and the Delivery of Medical Care

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“The practice of the therapeutic musician is to use the intrinsic healing elements of live music and sound to provide an environment conducive to the human healing process.”¹

A confluence refers to the point where a tributary joins a larger river, or where two (or more) streams meet to become the source of a river of a new name.² This metaphor can be applied to the analogy of the confluence of three streams of influence in the field of music and medical care. These influences are forming a powerful river carving a new path through the landscape of music and patient-centered care in the medical field. These three streams include: the growing profession of live therapeutic music, the changing medical care environment and the expanding opportunities for harpists and musicians working in this field.

The First Stream: The Growing Profession of Live Therapeutic Music

The field of “live therapeutic music” began in the early 1980s with the Chalice of Repose, founded by Therese Schroeder-Sheker. In 1994, The Music for Healing and Transition Program (MHTP), the leading training organization for live therapeutic music with over 675 graduates, was started by Laurie Riley, Martha Lewis and Mary Radspinner. The objectives of MHTP are charitable and educational and include “serving the ill and dying with live music to facilitate and promote healing or assist in the life/death transition.”³ Graduates of the MHTP programs become Certified Music Practitioners (CMP)[®].



The National Standards Board for Live Therapeutic Musicians, or NSBTM, is the organization which defines the course of study, scope of practice, and rules of conduct for certified therapeutic musicians. It gives accreditation for training programs, known as Certification Programs. Therapeutic musicians, not to be confused with music therapists, are trained to play for patients one-on-one

by the bedside in a health care setting. The intent of the musician is to serve the patient by playing music in a therapeutic style in order to enhance the healing environment for the patient. The patient usually is a passive listener/receiver of the music whose nervous system sympathetically responds to the music. In contrast, a music therapist is someone who has earned a bachelors or masters degree in music therapy from an accredited college. The therapist uses music to actively engage the patient with specific identified outcomes, much as an occupational therapist uses his/her occupational interventions to help the patient improve.

RESEARCH SHOWS THAT LIVE MUSIC CAN BE BENEFICIAL IN THE FOLLOWING WAYS:

- Reduce Blood Pressure
- Stabilize Heart Rate
- Affect Respiration
- Decrease Muscular Tension
- Improve Body Movement and Tension
- Reduce need for Pain Killers
- Relieve Anxiety and Stress
- Increase Endorphin Levels
- Boost the Immune System
- Slow Down and Equalize Brain Waves
- Accelerate Surgical Recovery and Physical Healing
- Elicit Emotional Catharsis
- Induce Mental Imaging
- Foster a Sense of Safety and Well-Being
- Sharpen Mental Focus
- Provide Distraction
- Provide Companionship

In research studies, the word “music therapy” sometimes is used loosely to mean “live therapeutic music.” However, when looking at a research study, one may determine the intent of the use of the term “music therapy” by reading the abstract and noticing if live or recorded music is being utilized and if the role of the patient is more of a passive listener/receiver, or, instead, is actively involved in the actual music making.

Research on the Effects of Live Therapeutic Music

With the ever increasing sophistication of medical technology, more and more research is being devoted to the positive effects of music for patients. With the advent of functional MRIs (a medical imaging technique used in radiology to visualize internal structures of the body in detail), the response of the brain to music can be easily measured.^{4,5}

There are a myriad of research articles available regarding the positive influence of music, with patients of all ages, from infants to senior citizens.

Regarding the positive effect on infants, on April 25, 2013 the *New York Times* published an article “Live Music’s Charms, Soothing Premature Hearts” by Pam Belluck. Beth Israel Medical Center in New York City led the research, conducted in 11 hospitals, which found that live music can be beneficial to premature babies. Though this study was carried out by music therapists, because live

music was used, the results are applicable here. “The researchers concluded that live music, played or sung, helped to slow infants’ heartbeats, calm their breathing, improve sucking behaviors important for feeding, aid sleep and promote states of quiet alertness. Doctors and researchers say that by reducing stress and stabilizing vital signs, music can allow infants to devote more energy to normal development.”⁶

Another research study that was reported in 2006 regarding babies was conducted in Israel, “Live Music is Beneficial to Preterm Infants in the Neonatal Intensive Care Unit Environment.”

The background to this study was that, “music stimulation has been shown to provide significant benefits to preterm infants.” Their hypothesis was that live music would be more beneficial than recorded music. As a result of their research, the conclusion was that “compared with recorded music or no music therapy, live music therapy is associated with a reduced heart rate and a deeper sleep at 30 minutes after therapy in stable preterm infants. Both recorded and no music therapies had no significant effect on the tested physiological and behavioral parameters.” Sunita Staneslow was the harpist for this study.⁷

On the other end of the age spectrum, there are many articles and research studies regarding the positive effect of music with dementia patients. One such research report, “The contribution of intimate live music performances to the quality of life for persons of dementia,” was published in 2012. The results of the study are that the intimate live music did have “a positive effect on human contact, care relationships, positive emotions and negative emotions,



especially for the mild dementia group. They lead to improved human contact, better communication, more positive and less negative emotions, and an improved relationship between caregiver and receiver.” Their conclusion was that live music performances are an “inexpensive, non-invasive, feasible way to improve a deteriorating quality of life for persons suffering from dementia.... Nursing homes should make more use of intimate live music performances as forms of complementary care.”⁸

Why Live Music is Preferable

There are many reasons why live therapeutic music is preferable to recorded music. The musician is a presence in the room and

is there intentionally to “serve” and not entertain. The musician can meet the needs of the patient IN-THE-MOMENT with live acoustic music and can adjust accordingly. Acoustic (live) music is not compressed and digitized like recorded music, therefore it contains a much richer spectrum of vibrations and harmonics. There is research that demonstrates that cells respond to live music, its overtones and harmonics.⁹

In addition, the musician can personalize the concepts of resonance and entrainment for the patient. Resonance is the impact of one vibration on another.¹⁰ Entrainment, in the context of psychoacoustics, concerns synchronization of the rate of brainwaves, breaths or heartbeats from one speed to another, largely achieved by rhythm and tempo. The concept is that any two vibrating bodies will try to synchronize with each other.¹¹ Resonance and entrainment are strategies a therapeutic musician applies to help stabilize a patient and create a healing environment.

The Second Stream: The Changing Medical Care Environment

Recent changes to the federal healthcare laws, as well as clinicians providing medical care wanting to make the health care experience for the patient as positive as possible, has led to many changes in the delivery of the medical care environment. As a result of these changes, complementary interventions, such as live music, are being recognized and utilized as a treatment option. This contributes to a growing profession of musicians being employed in the medical care field.

Putting patients and their specific wishes and needs at the forefront of a clinical treatment plan allows therapeutic musicians a role in the health care setting and is the reason behind a growing and respected field for expanding this Certificate Program.

Quality Care, Health Care Improvement, and Patient Centered Care

As far back as 1999, the Institute of Medicine (IOM) in Washington, DC, was doing thoughtful research on how to give patients a more “patient-centered experience.” Based on their research they released *To Err Is Human: Building a Safer Health System*, a report that brought public attention to the issue of patient safety in the United States. In 2001, the IOM issued a second report, *Crossing the Quality Chasm: a New Health System for the 21st Century*, which outlined six “Aims for Improvement” for care providers in the overall health care delivery system. Up until this time, there was not a clear systemic approach to this issue of safety and “patient centeredness.” This approach emphasizes the recognition that a medical care plan should focus on the needs of the specific individual, not just one approach for all patients with the same illness or disease.

These aims and the recognition by providers that individuals need to be involved to actively take a role in improving their own health, contributed to the recently enacted, Affordable Care Act, the signature health care initiative of President Obama’s administration which focuses on three healthcare goals, called The Triple Aim. The concept of the Triple Aim is defined as “delivering health care

that improves the individual patient experience, improves the health of populations and reduces the per-capita costs of care for populations.”

Don Berwick, MD, perhaps the foremost expert in the field of quality-based health care and the initiator of the Triple Aim concept, in his recent keynote address May 9, 2013 during Christiana Care Health System’s 2nd Annual Value Symposium: “Transforming Health Care in America: Making the Triple Aim a Reality,” spoke to how important these transformations are to the health care delivery system.¹²

Dr. Berwick said the U.S. health care system must endure the growing pains of change in order to transform into a system that provides for its citizens affordable, accessible, high-quality care. If the Triple Aim is achieved, health care will become more integrated, improving outcomes and reducing waste. The new and improved system will put patients first, Dr. Berwick said.

Patients in hospitals are able to express their opinion about the service they receive in a hospital through a national survey known as the HCAHPS: Patient Perspective of Care Survey. The HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems) survey is the first national, standardized, publicly reported survey of patients’ perspectives of hospital care. It is a national survey instrument and data collection methodology for measuring patients’ perceptions of their hospital. It publicly reports information about patient experience of care which allows valid comparisons to be made across hospitals locally, regionally and nationally.

Although this survey currently does not specifically have a question regarding live therapeutic music or complementary modalities, patients may comment regarding their overall care. There is a growing trend amongst hospitals to hire therapeutic musicians and other practitioners of complementary modalities to contribute to the overall experience of the patient because of the “healing care environment” they help to create. Many hospitals are finding that this additional intervention can be a differentiator in the public’s perception of their care.

Nursing homes are also recognizing that they may want to use Certified Music Practitioners® in their setting, as well. One specific reason for this is that providers and the government are looking at medication treatments in nursing homes. The Center for Medicare and Medicaid Services (CMS) has a new policy (F Tag 329) which states that, “Each resident’s drug regimen must be free from unnecessary drugs.” Patients can no longer be given anti-psychotic drugs just to keep them calm, unless there are clinically based specific selective criteria. Therefore, nursing home clinicians are looking for various ways to keep their patients calm. Administrators are starting to become aware of the field of live therapeutic music and how this modality could become an important part of a complementary care plan.

“Music making makes the elderly healthier.... There were significant decreases in anxiety, depression, and loneliness following keyboard lessons. These are factors that are critical in coping with stress, stimulating the immune system, and in improved health. Results also show significant increases in human growth hormones following the same group keyboard lessons.” (“Human

growth hormone is implicated in aches and pains,” Dr. Frederick Tims, reported in *AMC Music News*, June 2, 1999).

The Third Stream: The Expanding Opportunities for Harpists and Musicians Who Choose to Work in this Field

Harpists and other musicians have been playing for patients, probably since the first instrument was developed in prehistoric times. Blowing into a whistle made of bone or beating a pattern on a drum made of animal skin, can be soothing and comforting. One of the most famous examples from Biblical times is when King Saul was soothed by David, playing his harp (I Samuel 16:23).

Based on research and anecdotal evidence, musicians who are vocalists or play acoustic instruments appear to be very effective in this kind of work. However, the tone and timbre of the harp, seems to be desired by many patients and healthcare administrators. Harpists are often in demand to play for patients because of the beautiful sound and resonance of the harp.

In hospitals and other healthcare facilities, many volunteer musicians play in lobbies or public spaces. At the University of Virginia, there is a “three –tiered” approach for utilizing musicians. In the lobby, music volunteers are utilized, mostly for providing entertainment. The second tier is also made up of volunteer musicians with special training to play for families in the waiting rooms. The “top” tier is made up of paid Certified Music Practitioners®, graduates of MHTP, who play by the bedside for patients.

In this current medical environment, the medical profession is recognizing and often requiring that the musician, who is planning to play in patient rooms, one-on-one, become certified to play by the bedside for patients. This ensures that the musician has been professionally trained to play appropriately for a variety of patient conditions. Entering a patient room, knowing the medical protocol, assessing the patient and then playing or singing therapeutically for that patient’s in-the-moment condition, takes training.

Many therapeutic musicians are working individually in various healthcare settings, which could include hospice, nursing homes, infusion centers and hospitals. On the MHTP website there is a list of hospitals and hospices where CMP®s are working.¹³ Several of these facilities have been employing them for over ten years.

Some of the more well-known and developed programs are: The Moffitt Cancer Center in Tampa, Florida: Arts in Medicine Program¹⁴; the R. Adams Cowley Shock Trauma Center at the University of Maryland¹⁵; The University of Michigan Health System Gifts of Arts Program¹⁶; the Integrative Healing Services Department¹⁷ and the Healing Arts Department¹⁸ within Centura Health, Colorado; and Children’s Hospital Colorado¹⁹. Kaiser Permanente in Roseville, California has a Healing Music Program which utilizes the services of CMP®s. In addition, Music Partners in Integrative Healing provides services at Sutter Roseville Hospital and Eskaton Skilled Nursing Center in Sacramento.²⁰

The reasons why musicians are drawn to this work are many and varied. Some may have experienced a loss in their own life and through music found comfort. They now want to share that com-

fort with others. Some may have come to a place in their career where they want to “give back” and be of service. Others appreciate the “holistic” emphasis of the mind, body, and spirit and the notion that music can help the healing process in these areas. Some freelance musicians may want to add another dimension to their current career and help increase their income. Many are “called” to this work and love the interaction with the patients. They find inspiration and fulfillment in acknowledging that a “moment of beauty” for the patient contributes to the body’s ability to relax. This contributes to the healing process.

The Confluence of These Three Streams

The confluence of these three streams is creating a new path through the landscape of music and patient centered care in the medical field. It is a “win-win” situation for both the musician and the medical community.

The use of live therapeutic music is considered a complementary modality in the healthcare system. “Complementary medicine in general is a group of diagnostic and therapeutic disciplines that are used together with conventional medicine.”²¹ With the growing use of complementary modalities, the confluence creates numerous opportunities for paid employment for trained therapeutic musicians, such as Certified Music Practitioners[®].

The Triple Aim and “Patient-Centered” care are part of the changing medical environment. Patient centered care’s goal is to honor the individual and respect choice. In the context of this article, music would be one complementary modality directed specifically for a patient.

In the case of hospitals, as mentioned earlier in the article, HCAHPS, the Patient Satisfaction Survey, is one of the important factors contributing to how hospitals are being rated by the Federal Government. The government looks at Patient Satisfaction scores as a key contributor in the formula the government uses, to compensate hospitals. Hospital staff and care professionals are additionally motivated to have patients be happy with their services. Patients respond positively to the live therapeutic music. Therapeutic music is known to create a healing environment by helping to reduce pain, anxiety and stress. This allows the body to focus its energy on healing itself. The profession of therapeutic music is growing to meet this need.



In the case of nursing homes, administrators and clinicians are trying to figure out non-invasive, drug-free ways, to reduce patient anxiety. Live music can be a key way to help create a more soothing environment.

The confluence of these three streams have indeed created opportunities for trained harpists and musicians to work in the health-care field. To quote Victor Hugo, “Nothing is more powerful than an idea whose time has come.” The time has come when these three streams are creating a powerful new river in the music and medical care fields.

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In 2009, Barbara expanded her interests and became a Certified Music Practitioner (CMP)[®] through the Music for Healing and Transition Program (MHTP). She currently serves on their Advisory Board, is the Colorado Area Coordinator. Barbara works as a CMP[®] at Children’s Hospital Colorado and in several Centura Health hospitals in the Denver area. Her latest CD, “Music for the Heart...from the Heart...Soothing Melodies to Comfort your Soul” features music played in a therapeutic style (www.barbaratheharpist.com).

¹ <http://www.therapeuticmusician.com>

² <http://www.merriam-webster.com/dictionary/confluence>

³ <http://www.mhtp.org>

⁴ Leeds, Joshua, *The Power of Sound, How to be Healthy and Productive Using Music and Sound*, Healing Arts Press, Rochester, Vermont, 2010, pp.90-92

⁵ PBS Documentary 2009, *The Music Instinct: Science and Song*, Director, Elena Mannes.

⁶ www.nytimes.com/2013/04/15/health/live-music-soothes-premature-babies-a-new-study-finds

⁷ <http://www.ncbi.nlm.nih.gov/pubmed/16732778>; Birth. 2006 Jun;33(2):131-6; Department of Neonatology, Meir Medical Center, Kfar-Saba, Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel.

⁸ <http://www.ncbi.nlm.nih.gov/pubmed/22742983>; *Patient Educ Couns.* 2012 Dec; 89(3): 484-8. doi:10.1016/j.pec.2012.05.012. Epub 2012 Jun 27.

⁹ Maman, Fabien, *The Tao of Sound, Acoustic Sound Healing for the 21st Century*, The Academy of Sound, Malibu, California, 2008, pp. 91-93.

¹⁰ Leeds, Joshua, *The Power of Sound, How to be Healthy and Productive Using Music and Sound*, Healing Arts Press, Rochester, Vermont, 2010, pp. 40-45.

¹¹ *Ibid.* pp. 40-45.

¹² Christiana Care Health System’s 2nd Annual Value Symposium: “Transforming Health Care in America: Make the Triple Aim a Reality.”

¹³ <http://www.mhtp.org>

¹⁴ <http://www.moffit.org>

¹⁵ <http://www.umm.edu/shocktrauma/>

¹⁶ <http://www.med.umich.edu/goa/programs.html>

¹⁷ <http://www.stanthonyhosp.org/body.cfm?id=27>

¹⁸ <https://www.rmahf.org/index.cfm?page=Staff#Keller>

¹⁹ <http://www.childrenscolorado.org/about/news/2012/harpist-brings-calm-to-hospital>

²⁰ <http://www.mpih.org/>

²¹ <http://www.medterms.com>

²² <http://www.mhtp.org>