

Study Explores Effects of Harp Music on ICU Patients

By Sarah Burton, The University of Arizona Medical Center | July 30, 2012

Patients' physiological function, blood pressure and self-reported pain scores were measured before and after hearing a live, 10-minute harp performance.

A new study at The University of Arizona Medical Center is measuring the effects of music on patients in the intensive care unit.

In June, 100 patients in the ICU at [The University of Arizona Medical Center-](#)

[University Campus](#) participated in a study on the possible healing properties of music, specifically harp music. Renowned harpist Carrol McLaughlin, a professor in the UA [School of Music](#) for 33 years, teamed up with Dr. Ann Marie Chiasson from the [Arizona Center for Integrative Medicine](#) and Anne Baldwin, a research professor of [physiology](#), to conduct the study.

"The more I perform and work with people, the more I find that the harp has a unique healing property," McLaughlin said. "I wanted precise, scientific data to prove these healing capabilities."

Out of the 100 patients participating in the study, mostly middle aged or elderly, 50 received a private 10-minute live harp performance on the floor of the intensive care unit. The other 50 functioned as control patients, who simply spent 10 minutes relaxing, without harp music.

Baldwin, who was responsible for measuring the patient's physiological function, blood pressure and self-reported pain scores before and after the harp was played, began noticing blood pressure levels adjusting.

"If a patient's blood pressure was low, which is most of the patients we see here, it increased after the harp music. And for a few with high blood pressure, it's gone down after. It appears the harp music is bringing this back into balance, back into the normal range, which is ideal for healing," she said.

Chiasson said she is looking forward to analyzing the information collected to see the measurable results of the music on patients: "Harp music is very relaxing, but I am excited to see what our data shows with regards to heart rate variability and oxygen saturation."



A study at The University of Arizona Medical Center is measuring the physical effects of harp music on patients in the intensive care unit.



Renowned harpist Carrol McLaughlin, from the UA School of Music, wanted to see how harp

Of course the study is not suggesting that intensive care patients could be healed with harp music alone. Baldwin said harp music's potential healing ability is something to be considered in addition to medical intervention.

... music might contribute to healing for ICU patients. (Photo by Shelley Shelton/University Communications)

"What they do here is wonderful; we couldn't do without intensive care," she said.

"But we need to help patients in additional ways if possible, with alternative therapies to help them relax and heal in a different way, to complement the care they receive here."

Chiasson echoed that sentiment, adding: "This research has been kindly supported by all the staff in the ICU, which ultimately made our research run very smoothly."

McLaughlin's music may be beneficial to staff too, said Angela Muzzy, clinical nurse specialist in The University of Arizona Medical Center's ICU.

"Music has been well-established as therapeutic in numerous ways and in a variety of health-care settings," Muzzy said. "In the high-tech environment here our patients are subjected to alarms ringing and machinery attached to their bodies, but the sound of Carrol McLaughlin's harp provided a soothing and healing environment – not only for patients and their families, but our staff as well."

Tucson resident Karen Lytle, who has experienced the balancing effects of McLaughlin's harp music herself, felt so strongly about the subject she agreed to fund the study, as well as go through research assistant training so she could aid in the study.

"Carroll McLaughlin's music has helped me personally, which is why I agreed to fund the project as well as volunteer," Lytle said. "It really was an honor to be a part of. What took place here with these patients was nothing short of amazing."

Lytle said the response she witnessed from study participants was overwhelmingly positive.

"Everyone was very receptive and thankful about the study; some patients actually cried because the music touched them so deeply," she said. "We noticed patients' family members feeling the relaxing effects as well, and when the harp was on the floor everything in intensive care quieted down and seemed to balance out a bit."

Regarding the actual role music played in altering the patient's system, McLaughlin says she adjusted the key in which she played for each patient.

"The body kind of vibrates, which means there's sound associated with it. Each of us has a certain pitch, which there's been a lot of research on to back that up," she explained. "When I played, it was as if the part of their system that was out of sync had a little different pitch. The harp music brought it back in harmony with the rest of the body."